

# THE ARCHITECTS' JOURNAL



## standard contents

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

## NEWS and COMMENT

*Astragal's Notes and Topics*

*Letters*

*News*

*Diary*

*Societies and Institutions*

## TECHNICAL SECTION

*Information Sheets*

*Information Centre*

*Current Technique*

*Working Details*

*Questions and Answers*

*Prices*

*The Industry*

## CURRENT BUILDINGS

*Major Buildings described :  
Details of Planning, Construction,  
Finishes and Costs*

*Buildings in the News*

*Building Costs Analysed*

*Architectural Appointments  
Wanted and Vacant*

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

- 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
- ILA Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783
- I of Arb Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand W.C.2. Temple Bar 4071
- IOB Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197
- IQS Institute of Quantity Surveyors, 98, Gloucester Place, W.1. Welbeck 1859
- IR Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851
- IRA Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
- ISE Institute of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128
- LDA Lead Development Association. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
- LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891
- LSPC Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
- MAFF Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1. Trafalgar 7711
- MARS Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, A.R.I.B.A., 71, Blandford Street, W.1. Welbeck 4713
- MOE Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400
- MOH Ministry of Health. 23, Savile Row, W.1. Regent 8411
- MOHLG Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300
- MOLNS Ministry of Labour and National Service. 8, St. James' Square, S.W.1. Whitehall 6200
- MOS Ministry of Supply. Shell Mex House, W.C.2. Gerrard 6933
- MOT Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Mayfair 9494
- MOW Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611
- NAMMC Natural Asphalt Mine Owners and Manufacturers Council. 94/98, Petty France, S.W.1. Abbey 1010
- NAS National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 4813
- NBR National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619
- NCBMP National Council of Building Material Producers. 10 Storey's Gate, S.W.1. Abbey 5111
- NEFMAI National Employers Federation of the Mastic Asphalt Industry. 21, John Adam Street, Adelphi, W.C.2. Trafalgar 3927
- NFBTE National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054
- NFBTO National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451
- NFHS National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 1693
- NHBRC National House Builders Registration Council. 82, New Cavendish Street, W.1. Langham 4341
- NPL National Physical Laboratory. Head Office, Teddington. Molesey 1380
- NRDB Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3. Mansion House 9383
- NSAS National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1. Trafalgar 6838
- NT National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211
- PEP Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245
- RCA Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504
- RIAS Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Fountainbridge 7631
- RIBA Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721
- RICS Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322/9242
- RFAC Royal Fine Art Commission. 5, Old Palace Yard, S.W.1. Whitehall 3935
- RS Royal Society. Burlington House, Piccadilly, W.1. Regent 3335
- RSA Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366
- RSH Royal Society of Health. 90, Buckingham Palace Road, S.W.1. Sloane 5134
- RIB Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101
- SBPM Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186
- SE Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244
- SFMA School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House 3921
- SIA Society of Industrial Artists. 7, Woburn Square, London, W.C.1. Langham 1984/5
- SIA Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616
- SNHTPC Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen. Holborn 2646
- SPAB Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.2. Temple Bar 5006
- TCPA Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. City 4771
- TDA Timber Development Association. 21, College Hill, E.C.4. Victoria 8815
- TPI Town Planning Institute. 18, Ashley Place, S.W.1. City 5040
- TTF Timber Trades Federation. 75, Cannon Street, E.C.4. Whitehall 4341
- WDC War Damage Commission. 6, Carlton House Terrace, S.W.1. Grosvenor 6636
- ZDA Zinc Development Association. 34, Berkeley Square, W.1.

No. 3194]

[Vol. 123

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.



# YOU'VE GOT TO HAND IT TO MILLS

**MILLS SCAFFOLD CO. LTD., (A Subsidiary of Guest, Keen & Nettlefolds Ltd.)**  
**Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON W.6 • RIVERSIDE 3011 (TEN LINES)**

*Agents & Depots:* BELFAST • BIRMINGHAM • BOURNEMOUTH • BRADFORD • BRIGHTON • BRISTOL • CANTERBURY • CARDIFF  
COVENTRY • CROYDON • DUBLIN • GLASGOW • HULL • ILFORD • LIVERPOOL • LOWESTOFT • MANCHESTER • MIDDLESBROUGH  
NEWCASTLE • NORWICH • PLYMOUTH • PORTSMOUTH • PRESTON • READING • SHIPLEY • SOUTHAMPTON • SWANSEA • YARMOUTH

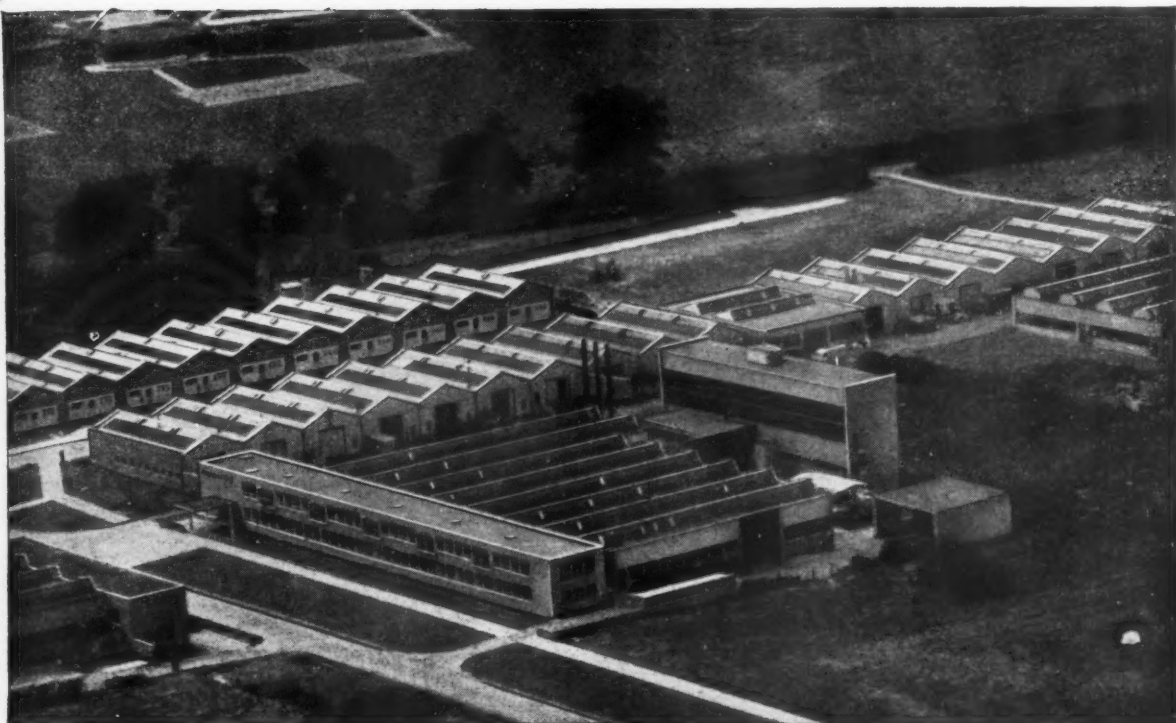


(INES)  
RDIFF  
ROUGH  
OUTH



# 44 factories at HARLOW New Town all ventilated by COLT

FREDERICK GIBBERD ESQ. F.R.I.B.A., M.T.P.I.,  
ARCHITECT PLANNER, THE HARLOW DEVELOPMENT CORPORATION.



This is one of several National industrial developments where COLT Ventilation equipment has been used. Others have been the Silicosis, Advance and Standard Factory Programmes and the Ex-Wartime Factories involving 96 Factories under Sir Percy Thomas & Son, F/A.R.I.B.A., The Wales and Monmouthshire Industrial Estates where for twenty-six factories COLT Ventilation equipment was specified by Jonah Arnold & Smith. The Remploy Factory Programme under the Ministry of Works where nearly one hundred factories were ventilated by COLT.

COLT Ventilation equipment has also been specified for many further contracts on Industrial Estates at Slough, Stevenage, Crawley, Trafford Park; for the Northern Ireland Advance Factory Programme, Scottish Industrial Estates, The Ministry of Supply Factories and Irish Estates Ltd.



PLEASE WRITE FOR FREE MANUAL, containing full specifications  
of Colt Ventilators, to Dept. S42/173

## VENTILATION



COLT VENTILATION · SURBITON · SURREY

Telephone: Elmbridge 6511/5

Branches at Birmingham, Bradford, Bridgend (Glam.), Bristol, Coventry, Dublin, Edinburgh, Liverpool, London, Manchester, Newcastle-upon-Tyne, Sheffield and Warwick.

Agents in Australia, Belgian Congo, Canada, Cyprus, India, Indonesia, Madagascar, Malaya, Mauritius, New Zealand, Pakistan, Portugal, North and South Rhodesia and South Africa.

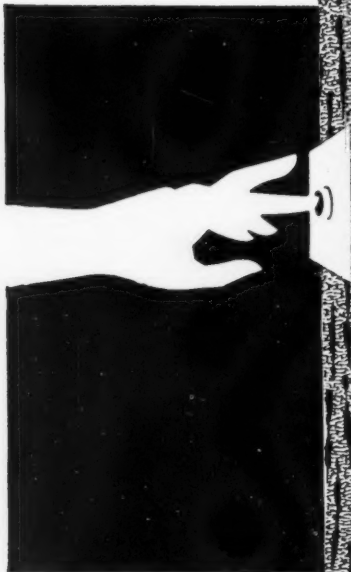




... koalas use claws



squirrels use paws



but lucky people use J & E Hall  
lifts and escalators

**J & E Hall Ltd.**

DARTFORD KENT Tel. Dartford 3456

10 St. Swithun's Lane London EC4 Tel. Mansion House 9811



Photograph by courtesy of the Moka Bar, London, W.1

## "Now we'll have two coffees, miss"...

"Coming right up, gentlemen. You deserve it, too. You know, yesterday when I saw the bare walls I couldn't see how you were going to have this place ready for the opening to-day. But you've done it . . . I'm beginning to think it's 'espresso' panelling you two do!"

The young lady's description is apt—panelling with 'Evo-Stik' 528 is 'espresso' in the sense that it's fast! This new synthetic impact adhesive speeds up the installation of vertical and horizontal panels to an unbelievable extent. If you are called upon to apply hardboard, 'Laconite,' 'Masonite,' acoustical tiles and similar materials to plaster, concrete or plywood walls, we shall be glad to send you our technical pamphlet giving precise details of how and why 'Evo-Stik' Impact Adhesives cut labour and material costs.



*joining in modern décor*

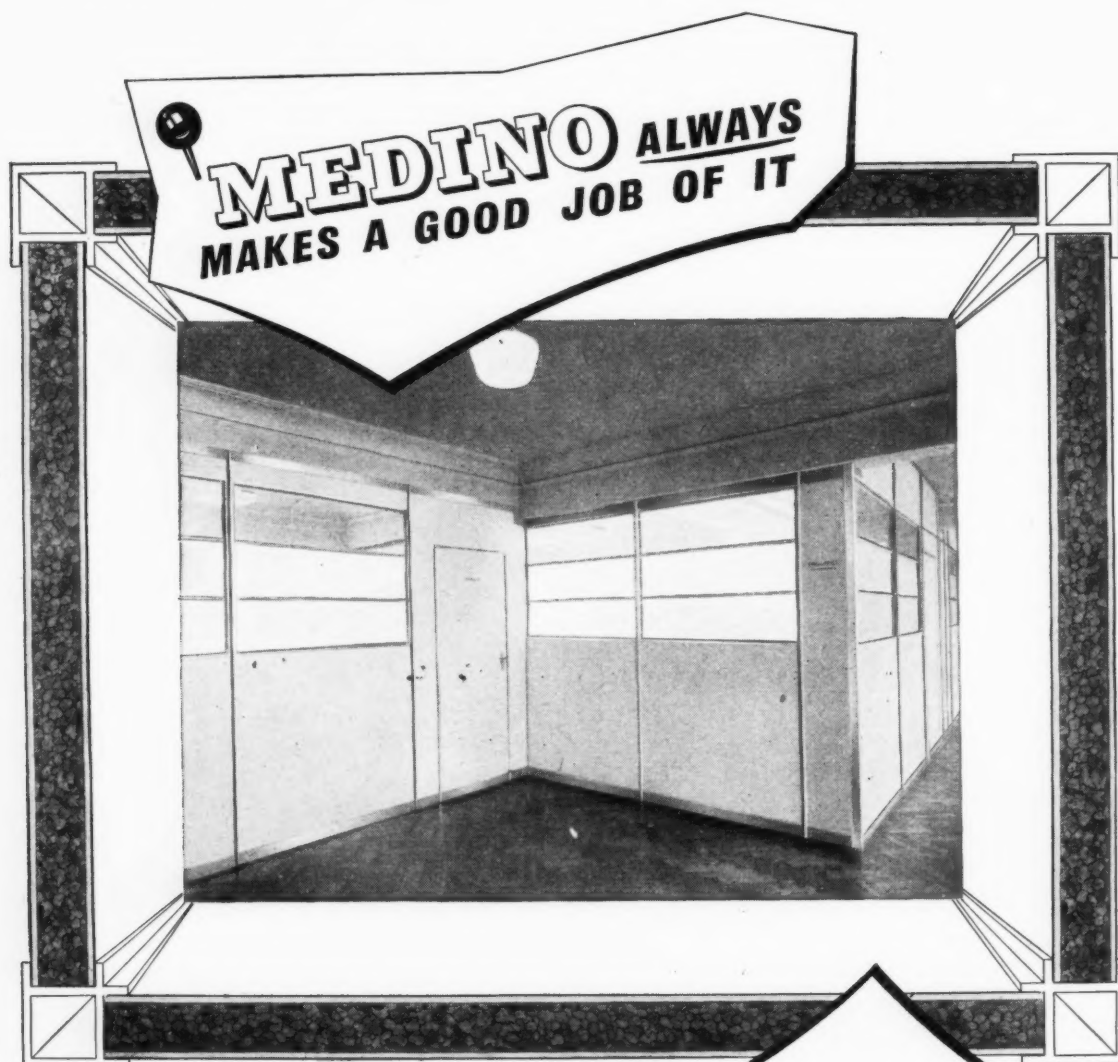


Please write to:—

**Evo-de Ltd. (Industrial Adhesives Division - A.2.), Glover Street, Stafford**

TELEPHONE : 1590/1/2 TELEGRAMS : EVO-DE

**LONDON OFFICE:**  
1, VICTORIA STREET  
LONDON, S.W.1  
Telephone : ABBey 4622/3



- Medium price—high quality contemporary style
- Speed of erection and dismantling with complete adaptability to unusual layouts and high recovery value
- Tough, consistent, infra-red dried SaR-Rez plastic surface, factory finished in standard colours
- Excellent heat and sound insulation from thick, continuous cork core which eliminates drumming
- Many optional features such as double glazing, concealed wiring or decorative wood veneer faces
- Rigidity with light weight

SECTION OF  
MEDINO PARTITIONING  
SHOWING COMPRESSED  
GRANULAR CORK FILLING FACED BY  
HIGH DENSITY HARDBOARD AND  
ASSEMBLED WITH CORROSION  
RESISTANT, STANDARD LIGHT  
ALLOY EXTRUSIONS.

## MEDINO PARTITIONING

*Please write for technical data, samples and literature to :*

**SARO LAMINATED WOOD PRODUCTS LTD.**  
**EAST COWES, ISLE OF WIGHT. Tel: Cowes 704/8**  
London Representatives: William Verry Ltd., 11, Hart Street,  
London, E.C.3 Tel. ROYal 3323







## Painting Building Surfaces?

The increasing use of colour on externals of modern buildings brings its own problems. Certain surfaces—new concrete, cement renderings and asbestos cement—often require painting, but their alkalinity prevents the use of conventional coatings. For this work, Tretolin Paint is the most reliable choice—it is applied direct to alkaline surfaces and gives years of good-looking service even in the most polluted atmospheres. Tretolin is available in a modern colour range based upon the new B.S.2660/1955 colour series. Can we send our descriptive folder A/T?

### *Tretolin Paint*

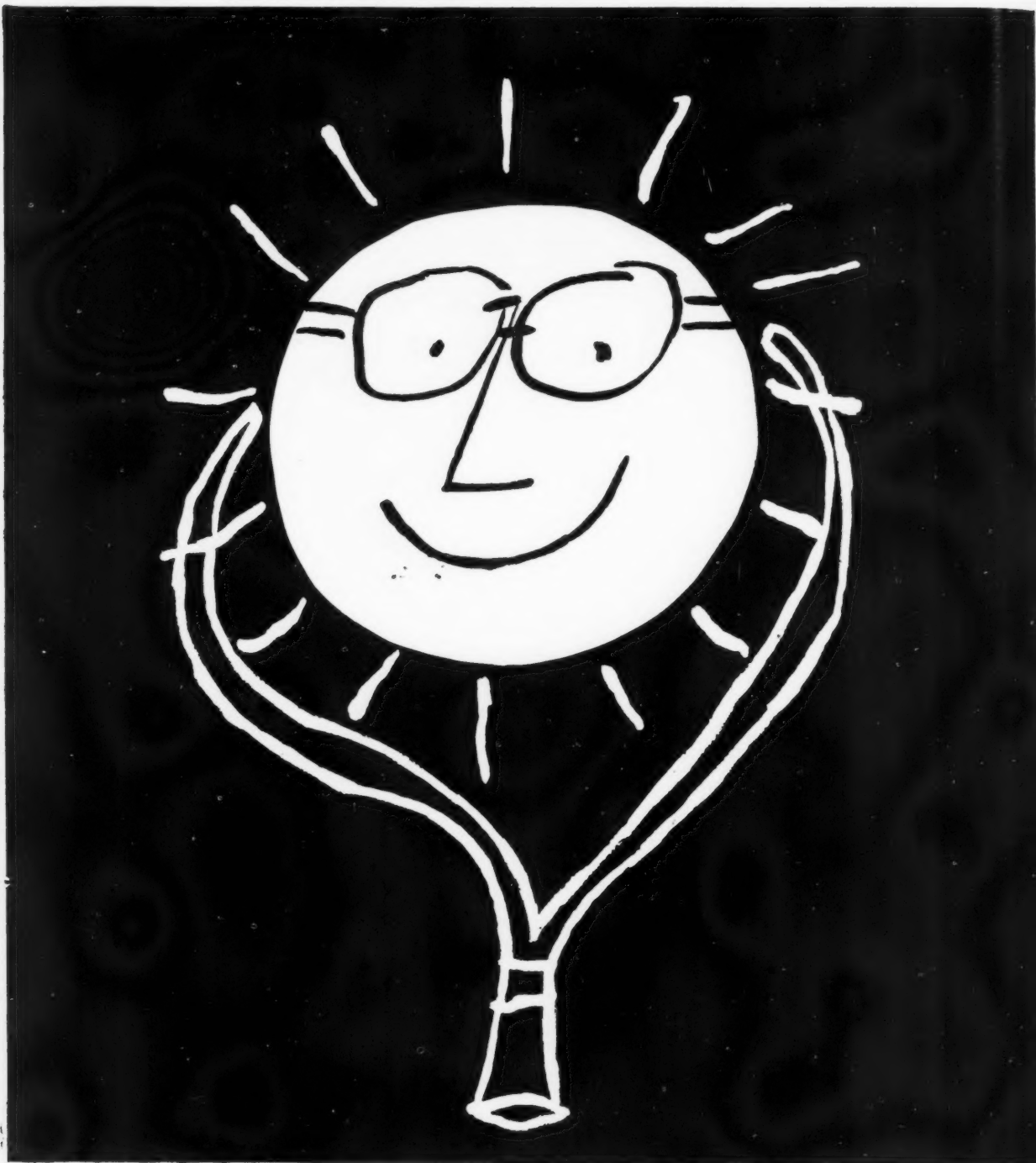
**THE PAINT FOR BUILDING SURFACES**

**Concrete, renderings, asbestos cement, etc.**

TRETOL LTD., TRETOL HOUSE, THE HYDE, LONDON, N.W.9

Telephone: Colindale 7223 (10 lines)

Works: SLOUGH



... say health

... say light

... say **Metal Windows** - *Rustproofed*

# The world's household names use



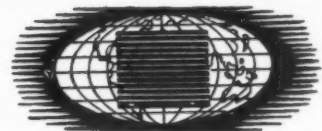
*The doors commanding the world's largest sale*

One of the world's leading petroleum companies, The British American Oil Company Ltd., recently installed a battery of Brady Steel Rolling Doors at their automotive maintenance garage in Toronto, Ontario. Brady Rolling Doors in steel, wood or aluminium — hand or electrically operated — are available to fit any type of opening.



## G. BRADY & COMPANY LIMITED MANCHESTER 4

Telephone COLlyhurst 2797/8. *London:* New Islington Works, Park Royal N.W.10  
*Birmingham:* Rectory Park Road, Sheldon 26. *Canada:* David C. Orrock & Co.  
(G. Brady & Co. Canada Ltd.) 4925 De Sorel Street, Montreal, Que. and also at 23 Scott  
Street, Toronto 1. *U.S.A.:* G. Brady & Co. Ltd., 11 West 42nd St. New York 18 N.Y.  
*Norway:* An Thorbjørnsen, Kongensgate, 14, Oslo. *Hong Kong:* Blair & Co. Ltd.,  
Windsor House and also at Cape Town.



*we shutter the world*

**MANUFACTURERS OF BRADY HAND AND POWER OPERATED LIFTS**

S. & B.



**'ENGLISH ELECTRIC'**

hand-driers

*hygienic*

*and*

*economic*



'ENGLISH ELECTRIC' hand-driers are ideal for school cloakrooms. They dry the hands quickly, quietly and thoroughly and do not spread infection or become untidy. Because they eliminate waste and need no attention they form the most economical means of hand drying. They are completely safe and are built for rough usage.

**'ENGLISH ELECTRIC'**

THE ENGLISH ELECTRIC COMPANY LIMITED, QUEENS HOUSE, KINGSWAY, LONDON, W.C.2

F.H.P. Motors Department, Bradford

WORKS: STAFFORD • PRESTON • RUGBY • BRADFORD • LIVERPOOL • ACCRINGTON

HD.7DS



C.2





**The hidden damage**

**...in a puff**

**of smoke**



In large towns and industrial areas, every  
puff of smoke contains corrosive substances capable  
of slowly destroying metallic building materials. 'Hiduminium'

Rainwater Goods withstand these destructive influences to the utmost, at the same  
time defying rust. And, because of their lightness, they are easy to handle and fix and  
impose a minimum strain on the structure. \*

**Hiduminium**  
**Rainwater Goods**

Manufactured by **HIGH DUTY ALLOYS** LTD · SLOUGH · DUCKS · OBTAINABLE FROM BUILDERS' MERCHANTS · WHOLESALE IRONMONGERS · ETC.  
\* Regd. Trade Mark

## If a man and a half needs time and a half...

... smart lad—knowing the answer to rising costs! Yet it's quite simple—just use the board that has the work already done for you, DURETTE plastic faced plywood. Then you no longer need make separate applications of plastic sheeting... nor need you paint... and the equation of labour, time and material costs is resolved for you. Q.E.D.—the answer is obviously DURETTE! Made by Hills of Stockton, Durette is a balanced plywood with a resin bonded plastic facing in five linen finished colours.

Sizes are up to 7ft. x 3ft. and thickness from  $\frac{1}{8}$ " upwards... Durette has all the constructional virtues of plywood *plus* the tough, durable and colourful finish of plastic. In one board! Worth writing for details, isn't it?

### —The Finishing Touch

*There is an interesting range of DURETTE mouldings and edgings available, in five colours, ready for application. A unique finishing touch—and an opportunity for eye-catching colour schemes! Write for patterns*



# "DURETTE"

PATENT APPLIED FOR

## HILLS

*The Construction Board  
with a host of uses!*

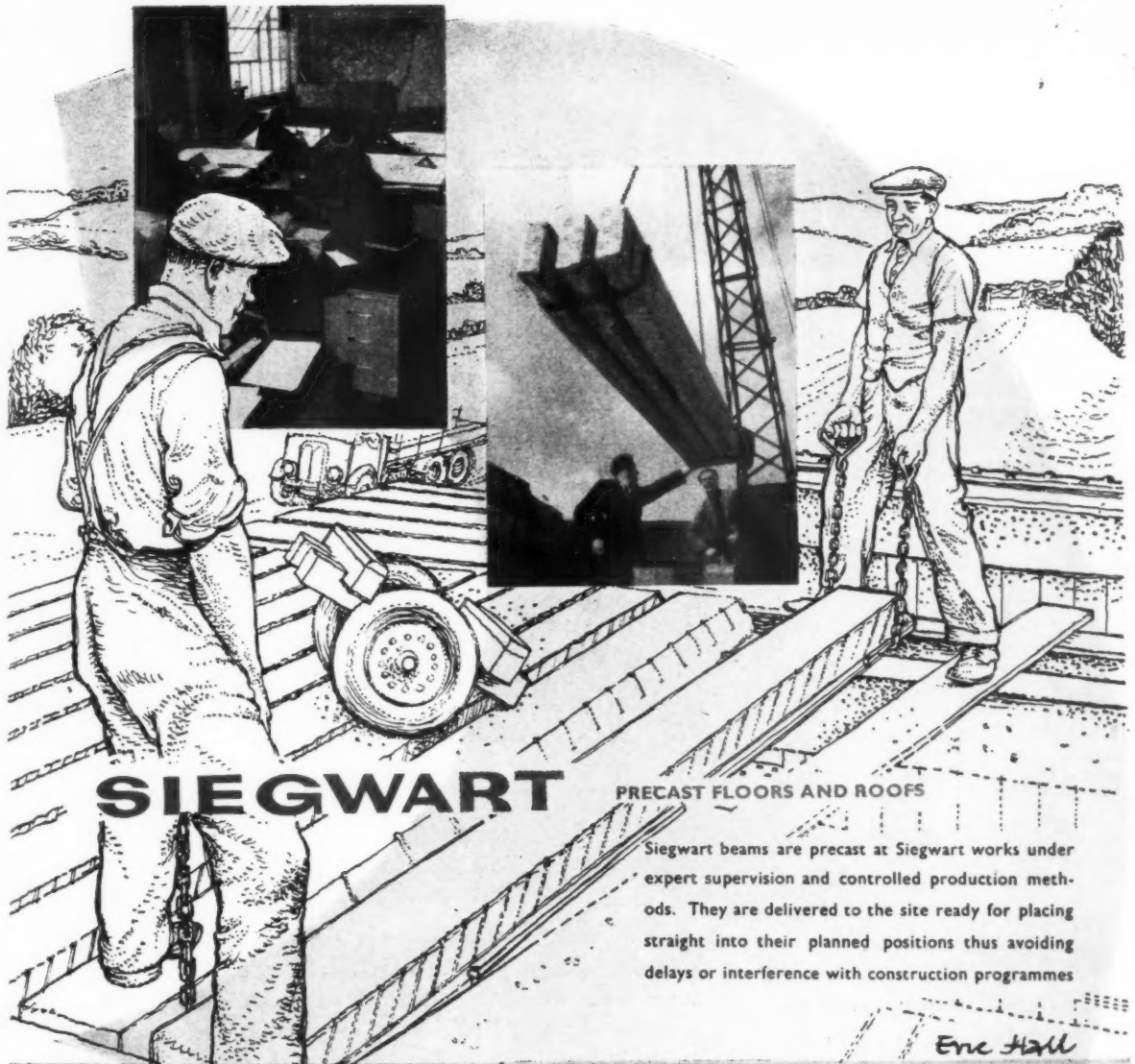
★ As featured on the B.B.C. Television programme "About the House".

## PLASTIC FACED PLYWOOD

"Durette" is available through the usual trade channels.

F. HILLS & SONS LTD., NORTON ROAD, STOCKTON-ON-TEES.

Telephone: Stockton 67141 (7 lines)

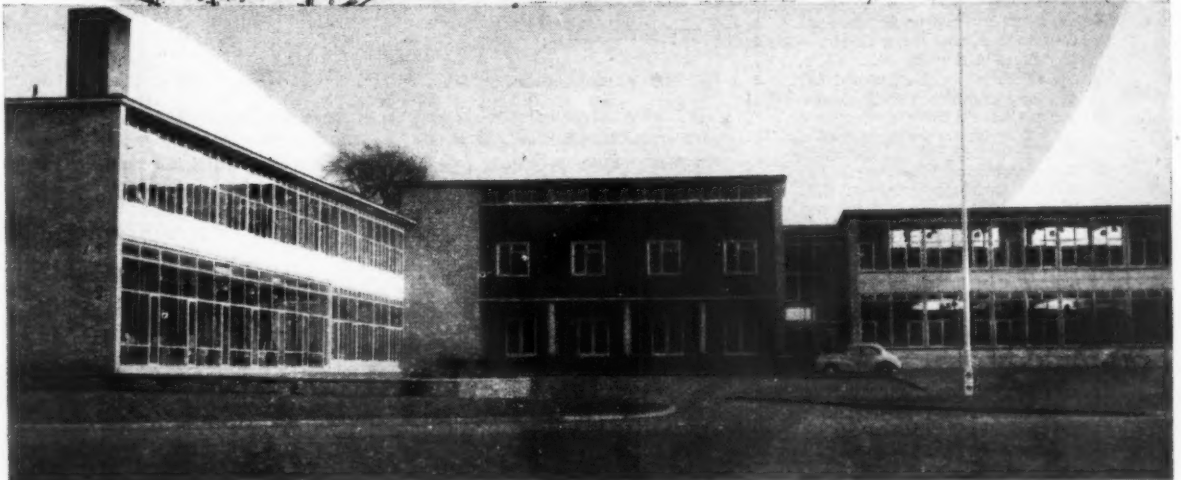


**SIEGWART**

**PRECAST FLOORS AND ROOFS**

Siegwart beams are precast at Siegwart works under expert supervision and controlled production methods. They are delivered to the site ready for placing straight into their planned positions thus avoiding delays or interference with construction programmes

*Eric Hall*



Warwick Beauchamp Secondary School for Girls, Warwick.

SIEGWART FLOOR COMPANY LIMITED

GABLE HOUSE, 40 HIGH STREET, RICKMANSWORTH, HERTFORDSHIRE  
AND AT BIRMINGHAM, LEICESTER, MANCHESTER AND GLASGOW

Add a name-



*Stonyhurst College, Whalley, Lancashire.  
Roofed with Ruberoid Roofing. Architect:  
Wilfrid C. Mangan, M.I.A.A.S.*

remove a doubt

### Special Features of The Ruberoid Roofing Service

- Built-up roofing undertaken on buildings of any shape or size—anywhere in Britain.
- Specifications include roof decks of steel, aluminium and asbestos cement, all these being insulated externally and weatherproofed with Ruberoid.
- Representatives and Branches throughout the country will give immediate attention to plans and estimates.
- Comprehensive service includes consultation, inspection and maintenance. Call in Ruberoid at an early stage.

Built-up roofings carried out to standard specifications may differ widely in quality of materials and workmanship. But a specification which stipulates that the work is to be carried out by the Ruberoid Roofing Service ensures the highest standards every time.

#### The best possible materials . . .

The Ruberoid materials used are world renowned for their weather resistance and durability. By refining and blending selected bitumens, and by making the base felts from which the roofings are manufactured, the Ruberoid Factories are able to control quality throughout.

#### . . . laid in the best possible way

Ruberoid materials, in the hands of Ruberoid craftsmen, ensure a built-up roof without equal, in which the greatest care is taken with specified and unspecified details.

*Ruberoid specifications are listed in detail in Publication No. 326.*

# RUBEROID



## Roofing Service

THE RUBEROID COMPANY LIMITED



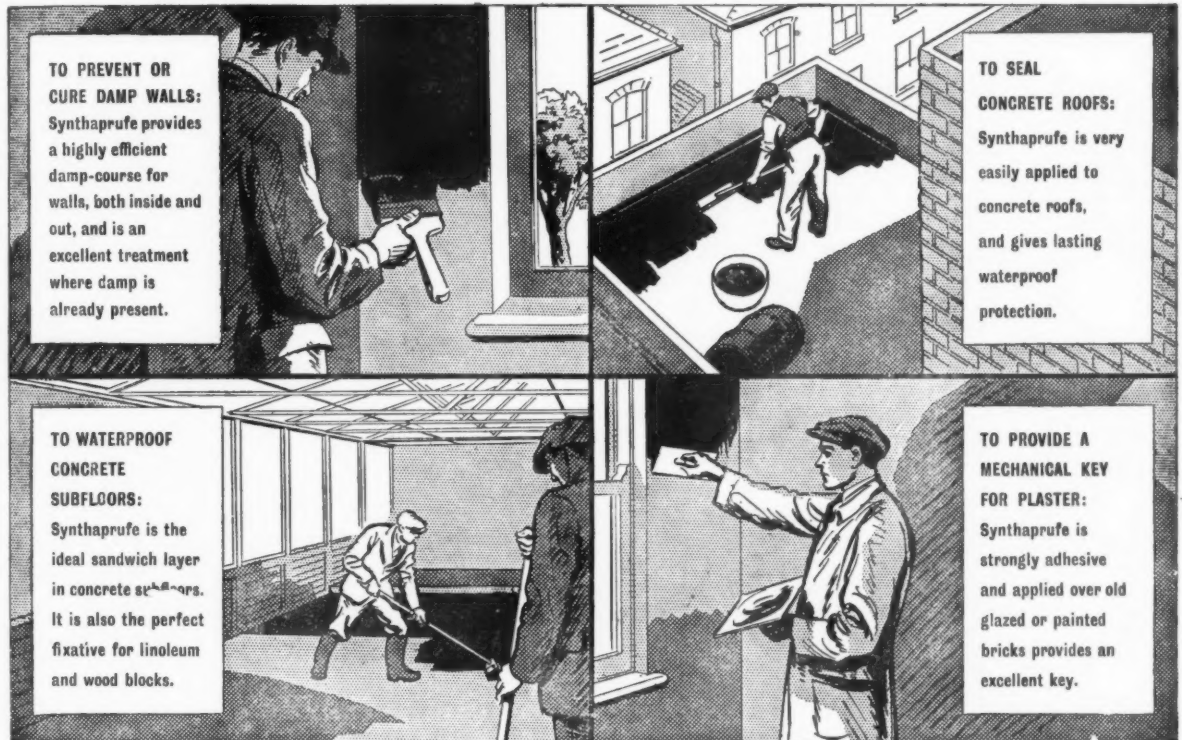
343 Commonwealth House · 1-19 New Oxford Street · London · W.C.1

© C.1956



# A brush-on waterproofing that contains rubber...

ELASTIC, ADHESIVE, IT MAKES AN IDEAL JOINTING



**S**YNTHAPRUF is a waterproofing compound which can be applied cold by brush; its rubber content makes it strongly adhesive, and it sets quickly and forms a strong, elastic, moisture-proof film.

Most surfaces will take Synthaprufe—concrete, plaster, brick, metal or timber—and it is equally effective on old or new buildings.

Synthaprufe is also highly effective as a vertical damp-course on either external or internal surfaces, and is most valuable for treating damp in existing walls.

When applied over old and shabby glazed brick or painted brick wall surfaces (e.g. in hospitals, institutions and factories) Synthaprufe provides an excellent mechanical key for plaster finishes. This process obviates the noise, discomfort and expense of hacking.

When Synthaprufe is applied to inside walls it may be finished in distemper, wallpaper, or emulsion paint; full instructions will be furnished by the manufacturers.

Synthaprufe offers the architect, builder, and engineer a waterproofing and jointing material of unusual efficiency and versatility, ready to use and easily applied.

## Some special uses

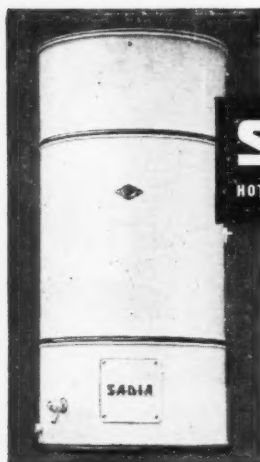
- Sealing concrete structures above and below ground-level, cooling-towers, etc.
- Protecting concrete piles, steelwork, sewer-pipes, and joints, etc.
- Waterproofing old asphalt, lead, zinc, corrugated iron, or felted roofs.

# SYNTHAPRUF

Manufactured by the  National Coal Board

*Synthaprufe is a product of British Coal. Further details, and advice on any technical problem, will gladly be given on application to the National Coal Board, By Products, National Provincial Bank Buildings, Docks, Cardiff.*

Synthaprufe is a Registered Trade Mark.



**SADIA**

HOT WATER BY ELECTRICITY

## ELEVEN SADIA WATER HEATERS

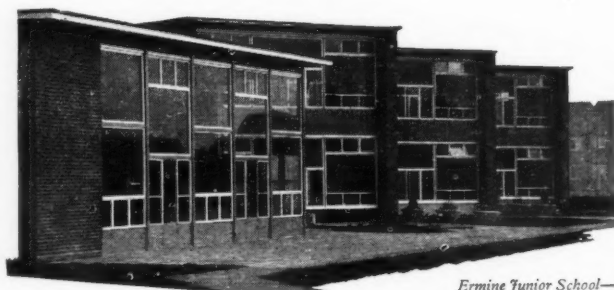
more suitable and economical than central boiler system,

decides Lincoln City Architect

In the building of the Ermine Junior and Infants' schools in Lincoln, the City Architect Mr. R. R. Alexander, Dip. Arch (Abdn), A.R.I.B.A., M.T.P.L., decided on Sadia Water Heaters for the supply of hot water.

In the Junior School 3 Sadia Water Heaters of various capacity were installed. But in the Infants' School, which comprises several independent buildings, 8 were needed. So that these 11 Sadia Water Heaters, placed at key points, meet the particular circumstances of spread-out buildings most satisfactorily and economically, and supply fully and efficiently the needs of children, teaching and domestic staff, and caretakers in both schools.

Furthermore, Mr. Alexander chose Sadia because they are so simple to instal, and because they give many years of unfailing service. The Sadia system also affords additional saving because it is independent of the central heating system which can thus be closed down in warm weather.



*Ermine Junior School—  
Elevation to playing field*



**PERFECT SAFETY FOR CHILDREN.** Sadia Water Heaters afford perfect safety because all the heaters supplying water to the children's toilets are thermostatically controlled to a maximum of 105° F. So that water is always kept sufficiently warm, while at the same time any risk of scalding is entirely eliminated.



*Ermine Infants' School—Washing hands before lunch*

### SAFE • CLEAN • ECONOMICAL

Aidas Electric Ltd, Sadia Works, Rowdell Road,  
Northolt, Middx. Telephone WAXlow 2355



## IT'S MOVING-IN DAY !

At last the house is ready, and one more family has a home. The builders' merchant has made an important contribution towards this great moment. His knowledge and skill ensured a steady and timely flow of materials to the builders.

## BUILDING INDUSTRY DISTRIBUTORS

SOME OF THE MANY LINKS  
IN THE DISTRIBUTORS  
CHAIN ORGANISED BY  
MEMBERS OF BID

Issued by Building Industry Distributors, (the national organisation of builders' merchants) 52-54 High Holborn, W.C.1

Serving the building industry



Serving the nation's housing

*Important Revisions of British Standards for Lead Pipe*

Many permissible minimum weights greatly reduced

---

**The new revisions  
of B.S.1085  
(SILVER-COPPER-LEAD ALLOY)  
permit the use of  
lighter weight Lead pipe  
underground**

Tables incorporating the new British Standards for Lead pipe to B.S.602 and B.S.1085 have been prepared and are available in a revised edition of "CONCISE INFORMATION ON LEAD PIPE" free on request.



**LEAD SHEET AND PIPE COUNCIL**

*In association with* LEAD DEVELOPMENT ASSOCIATION

EAGLE HOUSE · JERMYN STREET · LONDON · SW1

Telegrams: Ukleadman, Piccy, London · Telephone: Whitehall 4175

B.125





Modern paints containing Titanium Oxide are renowned for outstanding durability. **In all weathers** they can be relied on not to flake or crack and they are not discoloured by the atmospheric pollution of industrial areas. Titanium Oxide gives paints of greater hiding power with fewer coats and, when eventually repainting is required, no burning off is necessary. It pays to remember that paints based on Titanium Oxide stay brighter longer.



Issued in the interest of better paintwork by

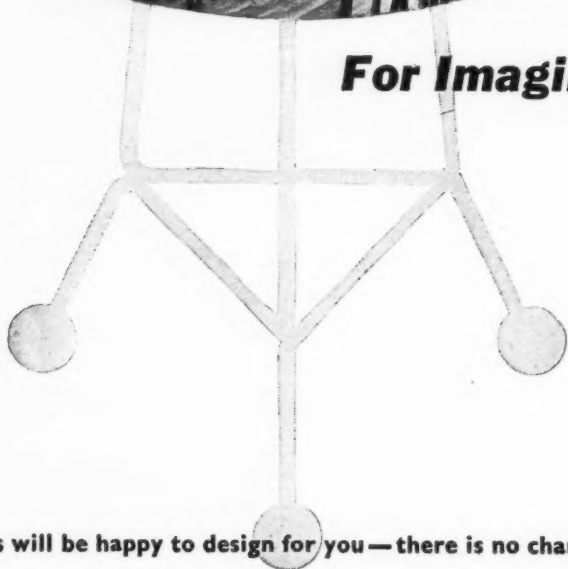
**BRITISH TITAN PRODUCTS  
COMPANY LIMITED**  
COPPERGATE  
YORK

*Factories at Grimsby and Billingham and at Burnie, Tasmania. Agents in most principal countries.*



*This recessed lighting scheme of the canteen in the American Embassy was designed by Philips*

## **For Imaginative Lighting**



**Philips will be happy to design for you — there is no charge**

Some of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors, and the Philips Lighting Design Service.

The advice and assistance provided by this Philips Service is entirely free, and experienced lighting engineers in each Philips branch area are at your service. In addition, a fully qualified architect with special experience of lighting in its relation to architecture and colour is available to co-operate with you.



# **PHILIPS ELECTRICAL LTD**

LIGHTING DIVISION • CENTURY HOUSE • SHAFTESBURY AVENUE • LONDON • W.C.2

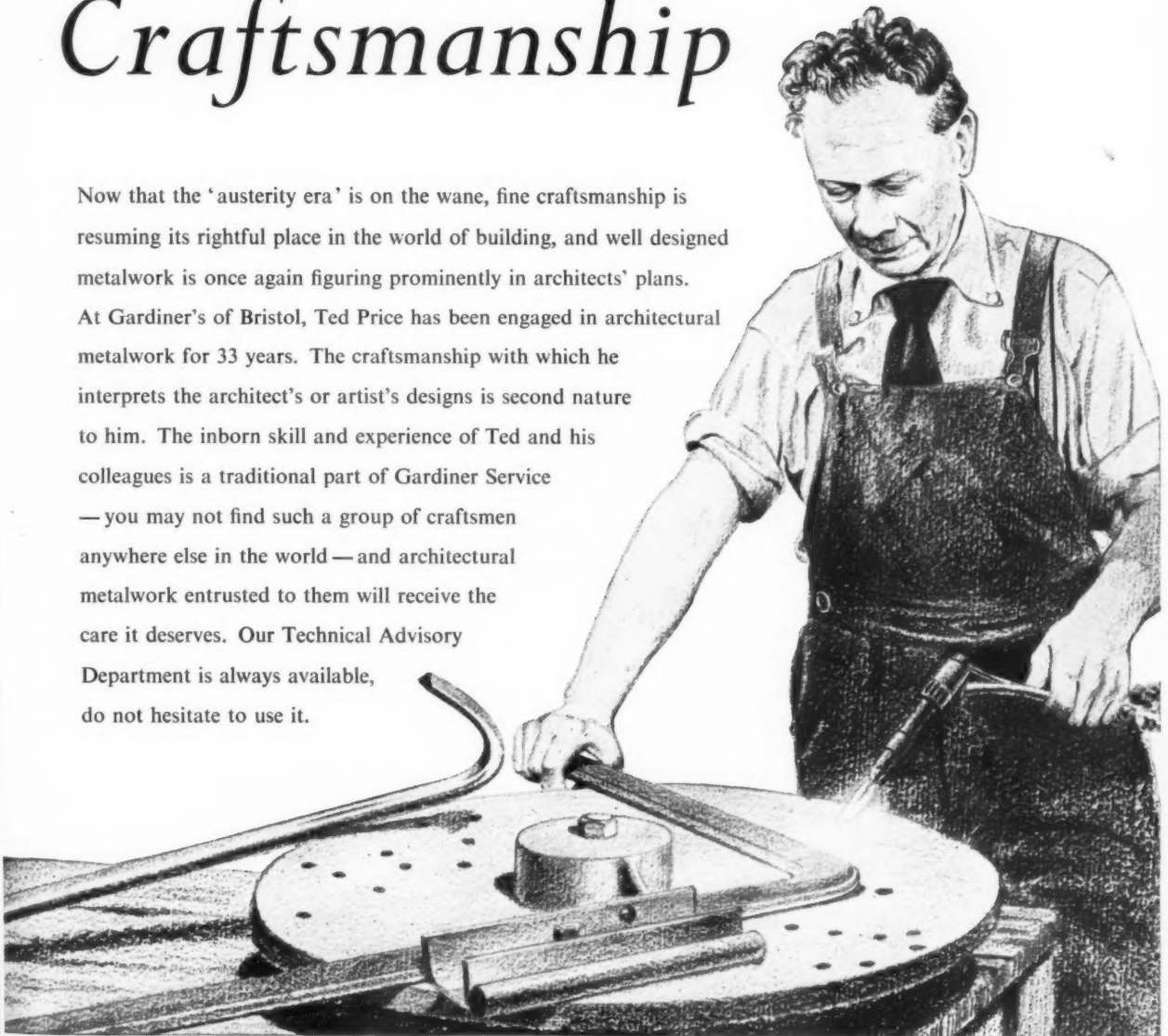
For Lighting Design enquiries by telephone, ring COVent Garden 3371

Tungsten, fluorescent, blended and discharge lamps & lighting equipment • Radio & Television Receivers • "Photoflux" flashbulbs, etc. (LD811 Rev.)

## ARCHITECTURAL METALWORK

# Craftsmanship

Now that the 'austerity era' is on the wane, fine craftsmanship is resuming its rightful place in the world of building, and well designed metalwork is once again figuring prominently in architects' plans. At Gardiner's of Bristol, Ted Price has been engaged in architectural metalwork for 33 years. The craftsmanship with which he interprets the architect's or artist's designs is second nature to him. The inborn skill and experience of Ted and his colleagues is a traditional part of Gardiner Service — you may not find such a group of craftsmen anywhere else in the world — and architectural metalwork entrusted to them will receive the care it deserves. Our Technical Advisory Department is always available, do not hesitate to use it.



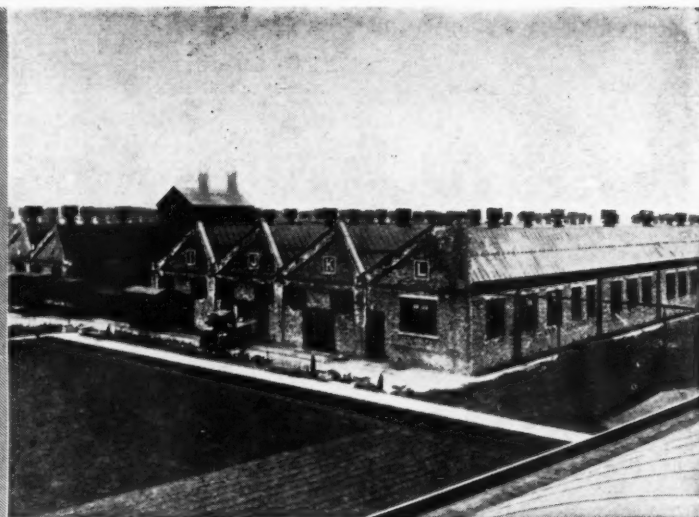
# GARDINER

Gardiner, Sons & Co. Ltd., Midland Works, Willway Street, St. Philip's, Bristol 2, and 8 William IV Street, Strand, London W.C.2

*for planned  
natural*  
**VENTILATION**  
*for  
all*  
**Industries**

TYPES AVAILABLE:  
ROUND VENTILATORS  
FAN VENTILATORS  
ROBERTSONRIDGE VENTILATORS  
HIGH-DUTY FAN EXTRACTORS  
INLET AND INTAKE UNITS

*Hundreds of thousands of ROBERTSON  
Ventilators are in use throughout the World.*



# ROBERTSON

## VENTILATORS

ROBERTSON are pioneers in natural ventilation for ALL industries and undertake large or small schemes for new or existing buildings.

ROBERTSONRIDGE Ventilators are designed specially for constant heat and fume extraction.

They can be fitted to roofs of all kinds and no additional framing is necessary. ROBERTSONRIDGE is available in a range of sizes — 4" to 36" throat width, with or without damper control.

*Let us send you literature  
giving details and exhaust  
capacities.*

### ROBERTSON THAIN LIMITED

ELLESMERE PORT • WIRRAL • CHESHIRE

Telephone: ELLESMERE PORT 2341 Telegrams: "Robertroof" ELLESMERE PORT  
Sales Offices: LONDON • GLASGOW • BELFAST • BIRMINGHAM • NEWCASTLE  
LIVERPOOL • SHEFFIELD • MANCHESTER • CARDIFF.  
*Agents in most countries throughout the World.*



**maximum strength . . . .**  
**. . . . minimum obstruction**

Yes, Coseley Standard Steel Framed Buildings give you just that—plus many other unique features.



Photo: Bowls Pavilion, Bexhill-on-Sea.  
Architect: Kenneth G. Higgs. A.R.I.B.A.  
Bexhill-on-Sea.

**ADAPTABLE**  
**DURABLE**  
**ECONOMICAL**  
**EXTENDABLE**

The illustration shows just one of the countless applications of Coseley Buildings. Designed in clear spans of from 30ft. to 75ft. with eaves heights of from 8ft. to 20ft., there is an answer to any problem of accommodation within this range, which is readily and economically available.

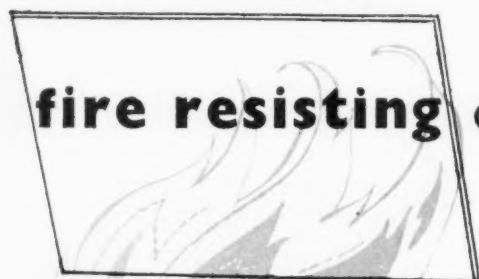
Building and Civil Engineering work can be undertaken by our associate companies.

Why not send for detail drawings and full information—or ask for a representative to call?

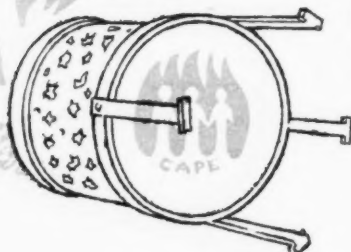
**COSELEY**

**ENGINEERING CO. LTD.**  
LANESFIELD · WOLVERHAMPTON · ENGLAND

TELEPHONE  
BILSTON  
41927 (6 lines)



## fire resisting ceilings for lightweight STRUCTURES



Compliance with the new Bye-Laws need not be a problem. Ceilings of "Modulux"\* design give up to two hours fire protection to structural steelwork. That means economy once there is no need to encase beams. What is more, the removable panels enable the space behind the ceiling to serve as a duct for easy installation and gives access to services.

No wet work — less weight: that is what Dry Construction means to architect, contractor and client. It also means speed, economy and — ASBESTOLUX.

\* "MODULUX" indicates a design officially proved to give a specific degree of fire protection.

"MODULUX" data sheets and "MODULUX" clips and accessories available on application.



Suspended ceiling of ASBESTOLUX  
at the Peter Lea County Primary School,  
Fairwater, Cardiff.

Architects: T. Alwyn Lloyd and Gordon,  
P.P.T.P.I., F. & A.R.I.B.A.

Main Contractors:  
William T. Nicholls Limited.

**dry construction needs**

# ASBESTOLUX

INCOMBUSTIBLE ASBESTOS INSULATION BOARD

**THE CAPE ASBESTOS COMPANY LIMITED**  
114-116 PARK STREET LONDON W1 Telephone: GROsvenor 6022

and at Floor D, National Buildings, St. Mary's Parsonage, MANCHESTER 3 Phone: Deansgate 6016 Eagle Buildings, 217  
Bothwell Street, GLASGOW C.2 Phone: Central 2175 246a Corporation Street, BIRMINGHAM 4 Phone: Central 8168

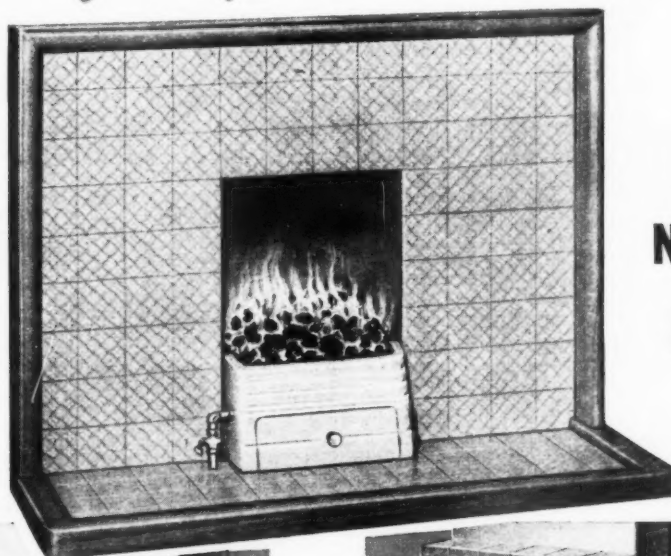
OX  
BOARD



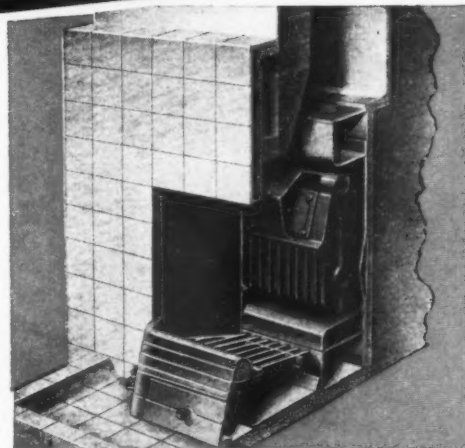
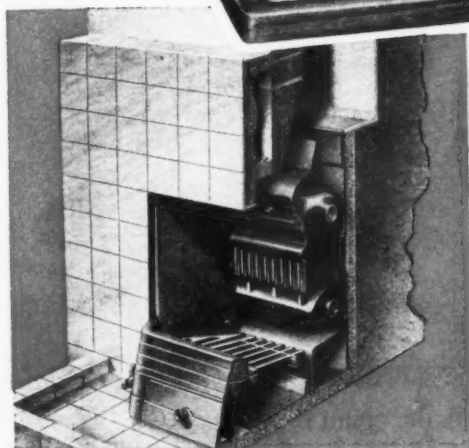


## *Greater Comfort for the Smaller Home*

### **IDEAL NEOFIRE No. 2C**



### **IDEAL NEOFIRE No. 10**



The Ideal No. 2C Neofire is a cheerful open fire, backed by a boiler specially designed to provide the combination of Domestic Hot Water Supply and Background Heating. The boiler will heat up to 3 radiators in other parts of the house, and the domestic supply is obtained by the 'Indirect' method, which entails the installation of an Ideal Indirect Cylinder of appropriate capacity.

The Ideal No. 10 Neofire is primarily designed for Direct Hot Water Supply, with a cylinder of not less than 30 gallons. The boiler can be Bower-barffed (rust resistant treatment) for use in soft water districts. In hard water areas the No. 10 Neofire can be installed to provide both Domestic Hot Water and Background Heating.

Each Neofire has a boiler of sufficient power to take care of approximately 40 square feet of radiation, plus an average amount of piping, and to provide hot water for all domestic purposes with a cylinder of 20 gallon nominal capacity.

Though primarily designed to burn coke, Ideal Neofires will also burn coal, anthracite or special fuels; they consume approximately 2 lb. per hour, utilising up to 60 per cent of the heat contained in the fuel, compared with 15-20 per cent by the ordinary open fire.

*Standard colours are Cream Mottle, Black, Copper Lustre.*

## **IDEAL NEOFIRE**

**Over 170,000 NOW INSTALLED in post-war homes!**

*A working demonstration model of the Ideal Neofire may be seen at Ideal House, Great Marlborough Street, London, W.1*

**IDEAL BOILERS & RADIATORS LIMITED • IDEAL WORKS • HULL**

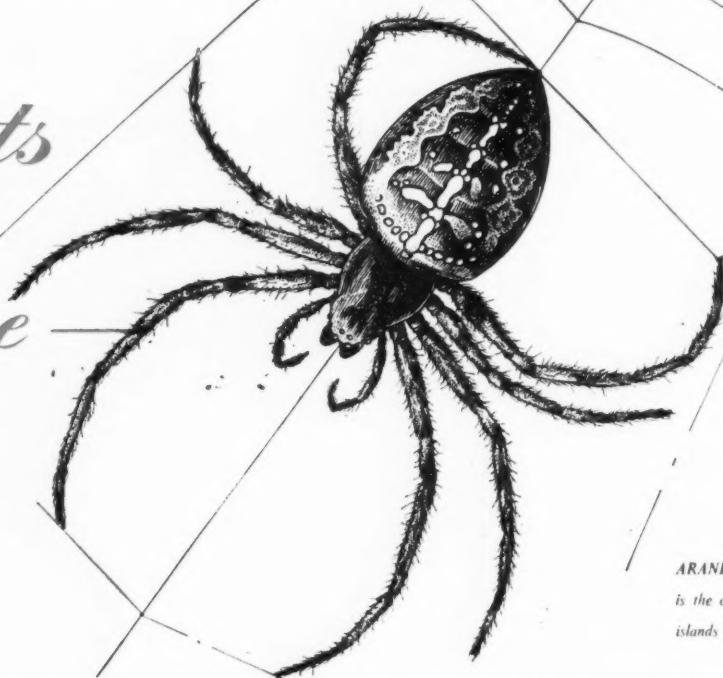


32B

*The*

**ARANEA DIADEMA**

*shoots  
a line*



No. 3 ARANEA DIADEMA

ARANEA DIADEMA, or "Cross Spider"  
is the commonest ARTHROPOD in these  
islands and in parts of Europe.

... which long ago contained for one sad, defeated monarch a moral of some consequence. Bruce was fascinated by the creature's patience; we would rather applaud little A.D.'s production of an amazingly tough and pliable fibre.

What Aranea Diadema creates by instinct "homo sapiens" has produced, with nature's aid and lots of research—the tough, non-stretch, SISAL FIBRE. And we hereby mention SISALKRAFT as an outstanding example of toughness. It is also clean, pliable and water-resisting—the ideal material for sarking, wall and floor lining, etc.

Then there's SISALATION Reflective Insulation, with all the virtues of SISALKRAFT, plus bright aluminium foil on one or both sides, for highly effective THERMAL Insulation.

**SISALKRAFT**  
TRADE MARK  
Estd. 1857

*The Supreme* BUILDING PAPER

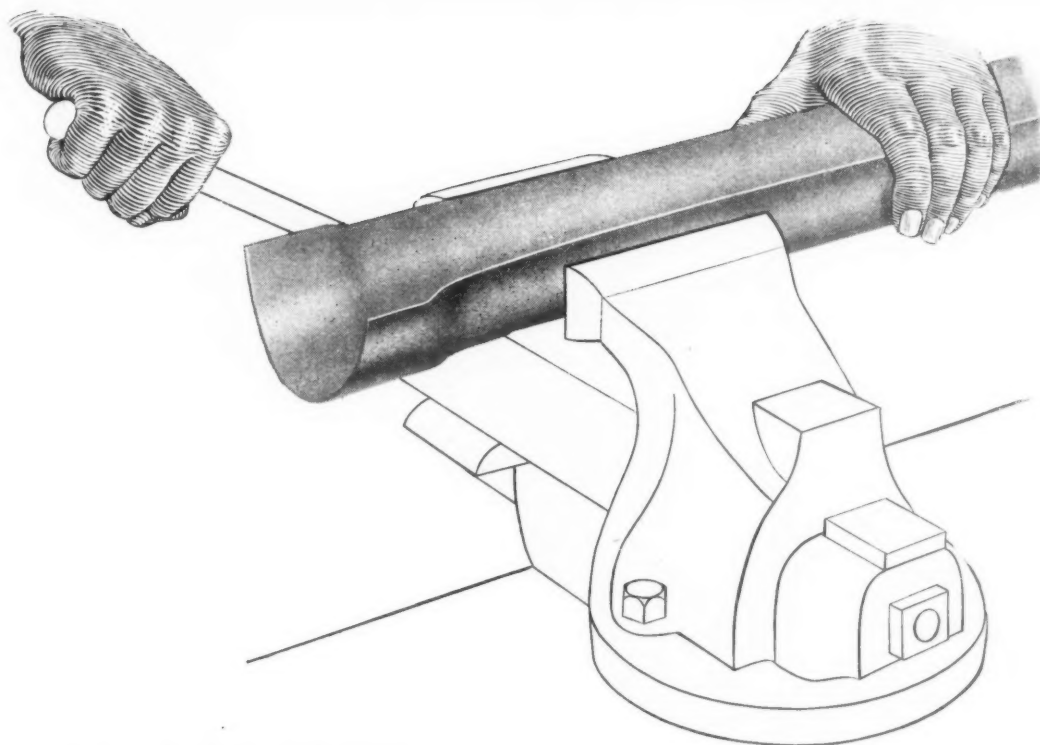
**J.H. SANKEY & SON, LTD.**

Sole Distributors for British Sisalkraft LTD.

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2.

Phone: HOLborn 6949 (20 lines)

Grams: Brickwork, Estrand London

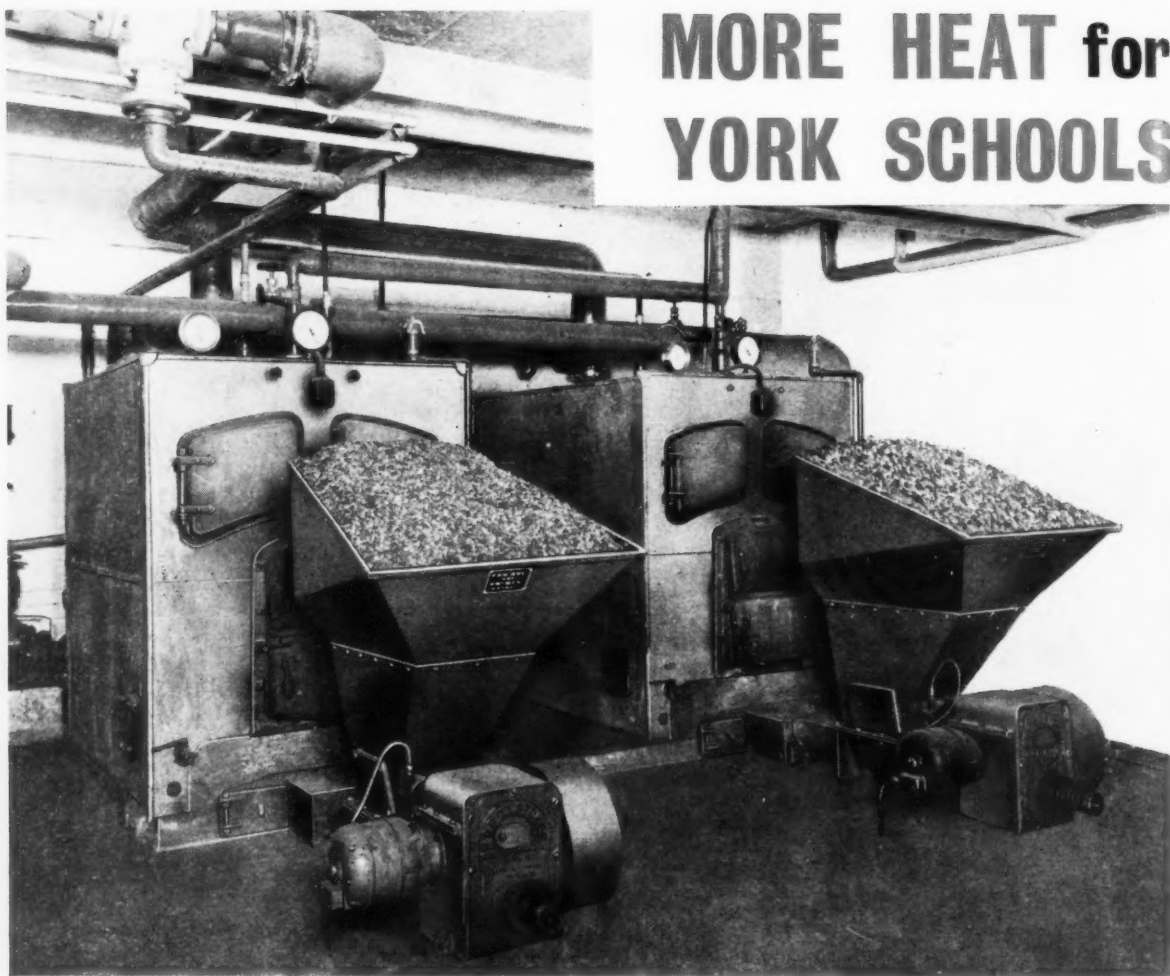


## SQUEEZE IT

Take a Birimid gutter and squeeze it  
 in a vice—you'll find that it will take a lot of  
 punishment before a crack appears. This Birimid toughness means  
 that transit and site breakages are almost unknown. Yet, for all their strength,  
 Birimid RWG are light and very easy to handle, keeping labour charges  
 down to the minimum. Birimid gutters and fittings are die-cast  
 and made of the finest quality materials and workmanship,  
 for long service. Safe, secure, and of lasting  
 good appearance, they appeal to the builder,  
 plumber, and householder alike, for  
 Birimid RWG are the *practical*  
 choice for all-round economy.

## BIRMID RAINWATER GOODS

BIRMID WORKS • SMETHWICK 40 • STAFFS



## ... with *less* Coal

Constant warmth in the classrooms and constant economy in the boiler rooms—that, in a few words, is what Riley Robot Stokers mean to many of York's fine schools. And the comfort they bring features in the plans for even better schools to come. Besides keeping down coal consumption, Riley Automatic Stokers—

- ★ *Require little supervision or maintenance.*
- ★ *Burn local coals efficiently.*
- ★ *Control boiler temperatures automatically.*
- ★ *Are exceptionally robust.*
- ★ *Provide smokeless combustion.*

There are types to suit nearly every kind of boiler.

# RILEY (IC) PRODUCTS LIMITED

MEMBER OF THE INTERNATIONAL COMBUSTION ORGANISATION  
Nineteen Woburn Place • London • W.C.1 • TER 2622



# Richard COSTAIN Limited

## CRITTALL UNIVERSAL CASEMENTS

This illustration shows the new London offices of Richard Costain Ltd. which are fitted with CRITTALL PURPOSE-MADE UNIVERSAL CASEMENTS POSITIVELY RUSTPROOFED by the hot-dip galvanizing process. The offices were designed by the Company's staff in collaboration with Mr. R. N. Wakelin, F.R.I.B.A. (of Messrs. Campbell Jones & Sons), *Consultant Architect.*



Of all the many calls upon their services in the manufacture of purpose-made windows none has a readier welcome at Crittalls than that which poses some new problem in function or design. For it is out of the accumulated experience which comes from tackling such new concepts, that Crittalls will be made more able still to contribute their skills, and in greater measure, to the buildings of the future.

# CRITTALL



THE CRITTALL MANUFACTURING CO LTD · BRAINTREE · ESSEX

*Branches and Depots throughout the country*

for  
LS

constant  
ords, is  
k's fine  
in the  
keeping  
kers—

boiler.

GANISATION  
TER 2622



**LOG CUTTING FOR—**

# ROYAL BOARD



**MADE IN SWEDEN**

**THE  
OUTSTANDING  
ALL WOOD FIBRE  
HARDBOARD**

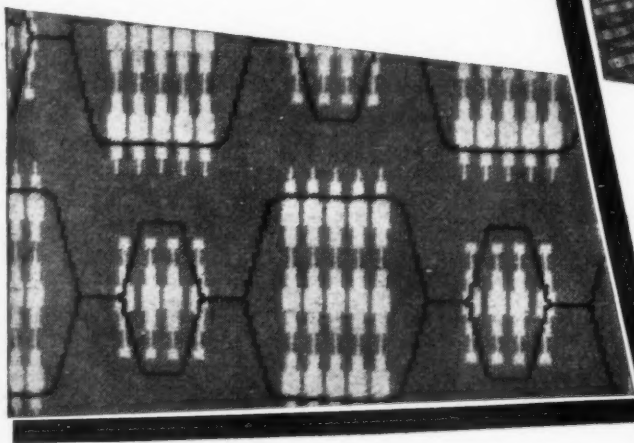
**ROYAL**

**RMML**

**R M M L**

## SOFTWOODS FOR JOINERY AND BUILDING

The 'Leofric'  
specified  
2½ miles...



**"LINKS"...**

a striking motif from the  
Stockwell Royalist Wilton range of  
Contemporary Designs created  
by Ronald Grierson, M.S.I.A.

... of  
**Royalist**

REGD.

...for carpeting the main public rooms, halls  
and staircases of this new all-British luxury  
hotel at Coventry, where only the finest examples  
of modern design and craftsmanship were  
chosen for its furnishings.

(Photos: Council of Industrial Design  
and London Press Exchange Ltd.)  
(Hotel Leofric: Ind, Coope & Allsopp Ltd.)



***a stockwell carpet***



For further information, please write to:  
S. J. STOCKWELL & CO. (CARPETS) LTD • 16 GRAFTON STREET • LONDON • W.1  
(In association with James Templeton & Co. Ltd) Tel: GROsvenor 5734. HYDe Park 9359  
Originators of British Mothproof Carpets





**UNITEX**  
ACOUSTILE  
INSTALLATION

**MANCHESTER UNIVERSITY** Electrical Engineering Department

Architects:  
Messrs. J. W. Beaumont & Sons  
71, Mosley Street, Manchester

Fixed by:  
Messrs. Robert Carlyle & Co., Ltd.  
General Contractors  
Elsinore Road, Manchester, 16.

'Stocks consist of:

INSULATING BOARDS  
HARD BOARDS  
PERFORATED HARD BOARDS  
ENAMELLED HARD BOARDS  
ACOUSTICAL TILES  
JOINT COVERINGS  
COVER STRIPS AND  
ACCESSORIES



## METCO SERVICE

is available for complete schemes and designs  
from the preliminary work to the finished job.

### METCO 'VEELAP'

$\frac{1}{2}$  in. Insulating Board cut to sizes and  
edges processed with "Vee and Lap" or a  
"Moulding and Lap".

### METCO METAL FIXING SYSTEMS

We can offer you a technical service includ-  
ing complete proposals for interior layouts  
utilising the "Metco" Metal fixing Systems.  
Specialist Contractors are available for install-  
ation if desired.



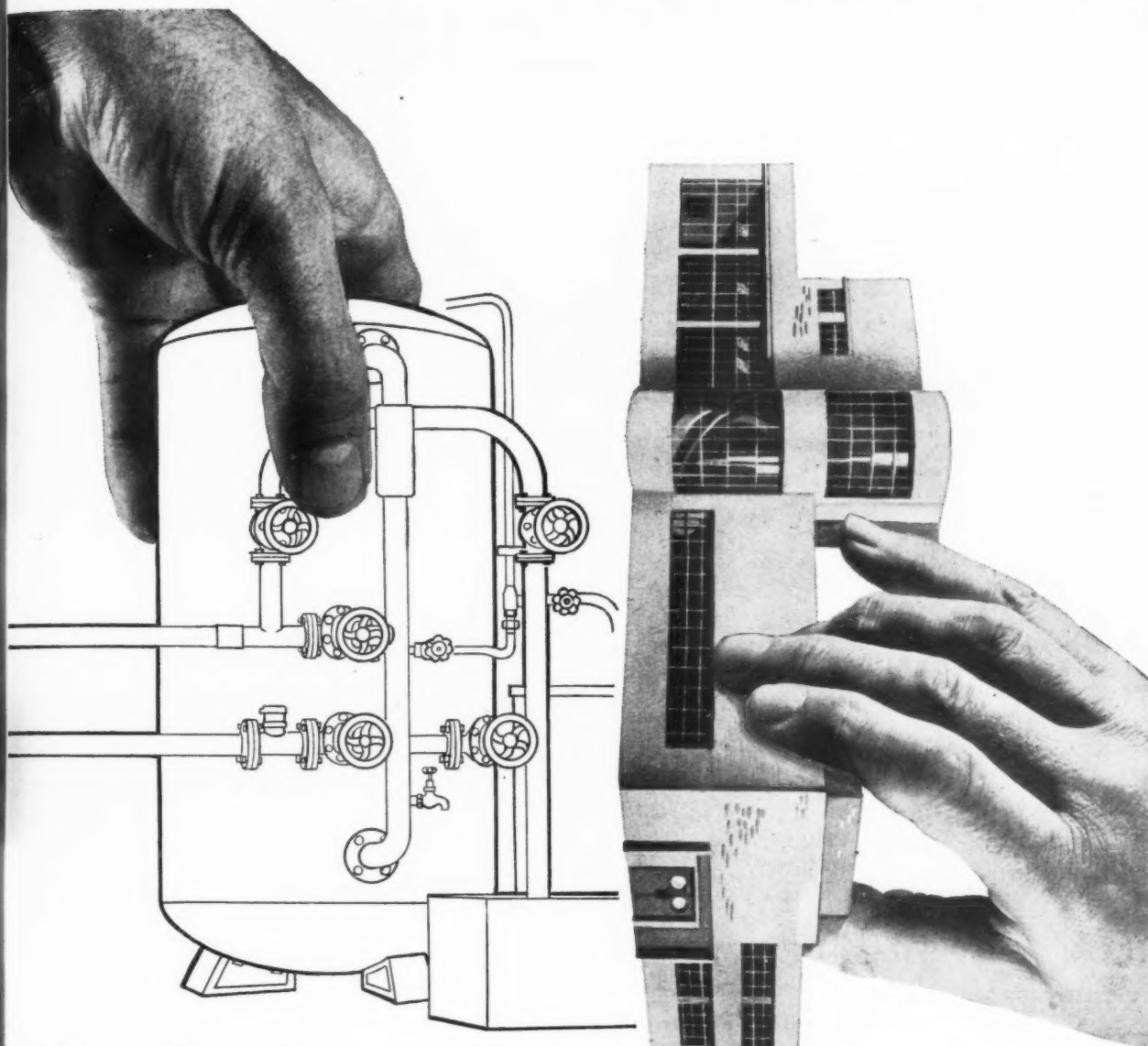
Your enquiries and early consultation on your problems are invited

*The* **MERCHANT TRADING COMPANY** *Limited*

**EFFINGHAM HOUSE, ARUNDEL STREET, STRAND, LONDON, W.C.2**

Telegrams: "Themetraco, Estrand, London," Telephone: TEMple Bar 5303 (8 lines)





# Include PERMUTIT

## IN YOUR PLANS FOR SCHOOLS AND BLOCKS OF FLATS

Plan for economy by including a Permutit Water Softening plant in new buildings—schools, blocks of flats, canteens, self-service laundries and other municipal buildings. By preventing the formation of scale in boilers,

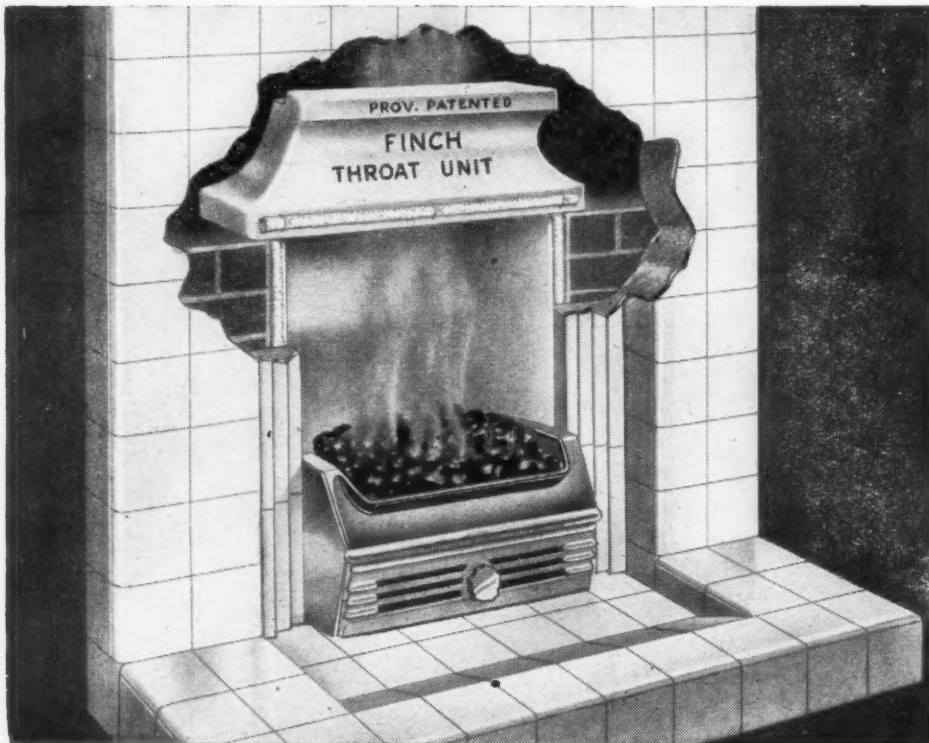
pipes, radiators and valves, a Permutit Water Softener will effect substantial economies in fuel and maintenance. It will also save soap, soda and detergents and simplify cleaning operations and dishwashing.

*For further details please write to:*

**THE PERMUTIT COMPANY LIMITED** (Dept. Z.X.226)  
Permutit House, Gunnersbury Avenue, London, W.4. Telephone: CHIswick 6431

IMPROVED MODERN HEATING APPLIANCES DESERVE BETTER FLUES

Better flues are achieved with the



## Finch Throat Unit

Faulty design at the entrance to the flue can waste heat, cause smoky fires and damage to surrounds. The Finch Throat Unit overcomes these problems by providing a smooth, streamlined union between the fire and flue. In this way, the smoke column is given extra velocity, down draughts are reduced and a protective insulating void is provided between the throat and the surround.

The restriction provided by the unit reduces excessive ventilation in the room. Recent practical tests have proved that the installation of the Throat Unit actually gives a room-heat conservation figure of 17% plus, over and above the saving made by the modern appliance.

These very practical advantages make the Finch Throat Unit an essential part of every fireplace installation.

THE *Finch* ORGANIZATION

Head Office & Works:

BELVEDERE WORKS, BARKINGSIDE, ESSEX VALENTINE 8888 (30 lines)

Showrooms:

FINCH CORNER, 679/687 EASTERN AVENUE, ILFORD, ESSEX

A comprehensive work on flue design entitled "The Finch Chimney Throat Unit" is available free on request.



*Horse's head  
from the Parthenon sculptures  
Reproduced by permission  
of the Trustees of the British Museum*

## Good Stable

"We were discussing plasters. Now we seem to be on horses . . ."

"No, still plasters — Thistle by Gotham out of Gypsum."

"Ah, the architect's favourite and the builder's cert . . ."

"Don't overlook the others — Herculite, Barytite and Carlite pre-mixed — all Gotham winners . . ."

"Another Gotham fancy of mine is 'Technical Service', most helpful in moments of crisis or indecision."

## Gotham Plasters

**THISTLE PLASTER** in the following grades:

'Thistle' Browning  
'Thistle' Haired  
'Thistle' Special Haired  
'Thistle' Finish  
'Thistle' Board Finish

**CARLITE** pre-mixed plasters.

**HERCULITE** for exceptionally strong and detailed castings

**BARYTITE** pre-mixed Barium plaster with gypsum base, to prevent X-ray penetration.

*The Companies of the Gotham Group are:*



The Gotham Company Limited, Gotham, Nottingham.  
The Carlisle Plaster & Cement Co., Cocklakes, Nr. Carlisle.  
Thomas McGhie & Sons, Ltd., Kirkby Thore, Westmorland.



#### THE MASTER CLOCK

Smiths Pendulum Master-clock, working independently of the mains for its timekeeping, controls a whole system of slave-clocks and provides accurate and uniform time throughout the building. Any number of time-recorders and audible time signals can be incorporated into the same Master-clock System. Wherever correct time is required in Commerce and Industry, ECS clocks have proved their invariable efficiency.



Architect: G. Grey Wornum, F.R.I.B.A.  
Now Wornum and Playne

## THE CHOICE OF BRITISH ARCHITECTS



"The Electrician." One of the ceiling-plaques by James Woodford at the R.I.B.A.

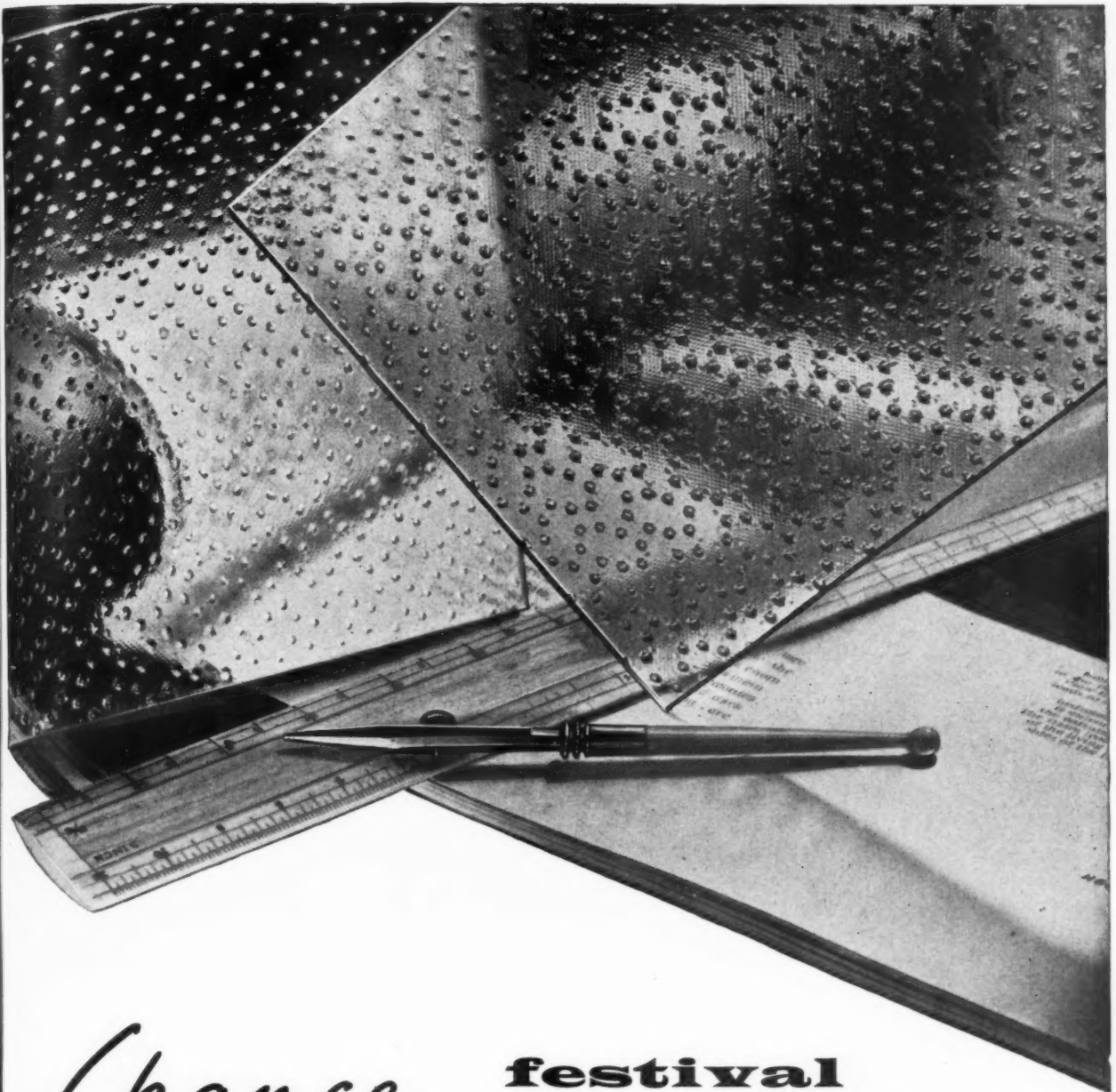
Over twenty years ago an ECS Master-clock System was chosen for the R.I.B.A. new Headquarters in Portland Place and has given faithful and accurate service over the years. The precision and efficiency of this system are a tribute to the clockmakers who designed and manufactured it, and to the electricians who assisted in its installation.

## ENGLISH CLOCK SYSTEMS

179-185 GT. PORTLAND ST. LONDON W.1 LANGHAM 7226

A branch of the Clock and Watch Division **SMITHS** of S. Smith & Sons (England) Ltd.





*Chance*  
\* \* \* \* GLASS

## **festival**

*Festival brings to glazing an effect of brilliance and liveliness. The obscuration factor is considerable and makes the pattern ideal for office partitions and windows for which a high degree of privacy is desirable, and for lighting fittings. The design, which contains no dust-traps, is such that adjacent panes do not need to be matched.*

## **technical details**

Light transmission..... 82 per cent  
Thickness.....  $\frac{1}{8}$  in. (26 oz./sq. ft.)  
Maximum size..... 100 in. x 48 in.

PILKINGTON BROTHERS LIMITED



For further information on the use of glass in building consult  
the Technical Sales and Service Department, St. Helens, Lancs. (Telephone: St. Helens 4001),  
or Selwyn House, Cleveland Row, St. James's, London, S.W.1. (Telephone: Whitehall 5672-6)

Supplies are available through the usual trade channels.





**N.C.B.**  
**keeps warm**  
**and quiet**  
**with Frenger Ceilings**



The National Coal Board Laboratories, Cheltenham, are always comfortably warm and delightfully quiet—thanks to Frenger Ceilings. Frenger is a heated acoustic ceiling made up of a pipe grid (connected to the hot water heating system) supporting perforated metal panels and blanketed by insulating material.

**IMPORTANT FRENGER FEATURES**

- radiates all heat to room below—no loss upwards
- immediate response to thermostat control
- ultra-efficient sound absorption
- needs no floor or wall space
- quickly erected
- adaptable to any room and ventilating system
- conceals—yet leaves accessible—pipes, wires, ducts
- no restriction on room partitioning.

## **FRENGER**

**heated acoustic ceiling**

*Illustration shows the Reception Hall, National Coal Board Laboratories, Cheltenham.*

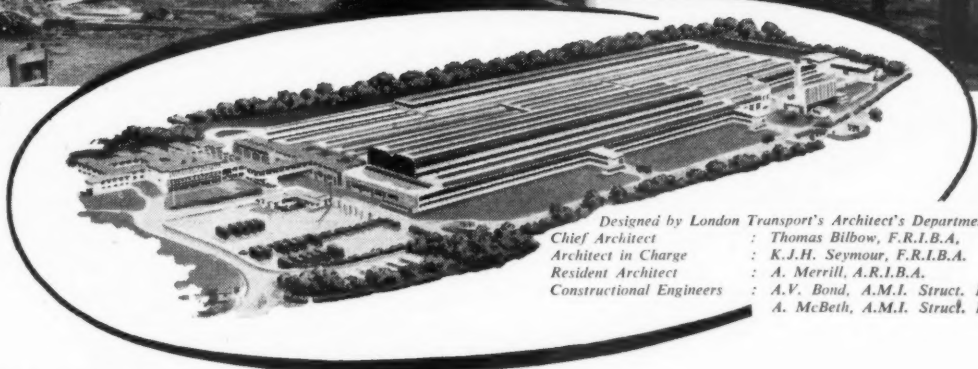
Write for full information to:  
**FRENGER CEILINGS LTD.**

67 Great Russell Street, London W.C.1

Phone: CHA 5534



Photographs reproduced by kind permission of The London Transport Executive.



Designed by London Transport's Architect's Department  
 Chief Architect : Thomas Bilbow, F.R.I.B.A.  
 Architect in Charge : K.J.H. Seymour, F.R.I.B.A.  
 Resident Architect : A. Merrill, A.R.I.B.A.  
 Constructional Engineers : A.V. Bond, A.M.I. Struct. E.  
 : A. McBeth, A.M.I. Struct. E.

## London Transport Executive

# ROAD SERVICES FACTORY AT ALDENHAM

In this important contract, 3,600 tons of Structural Steelwork were fabricated and erected by South Durham Steel & Iron Co. Ltd.

The contract comprises the Main Workshops Buildings, together with the Main Office Block, which is connected by a bridge to the Main Workshops Buildings. Overall dimensions, approximately 1,500 ft. x 560 ft., together with various Ancillary Buildings including Boiler House, Welfare Block, Materials Store and Service Block.

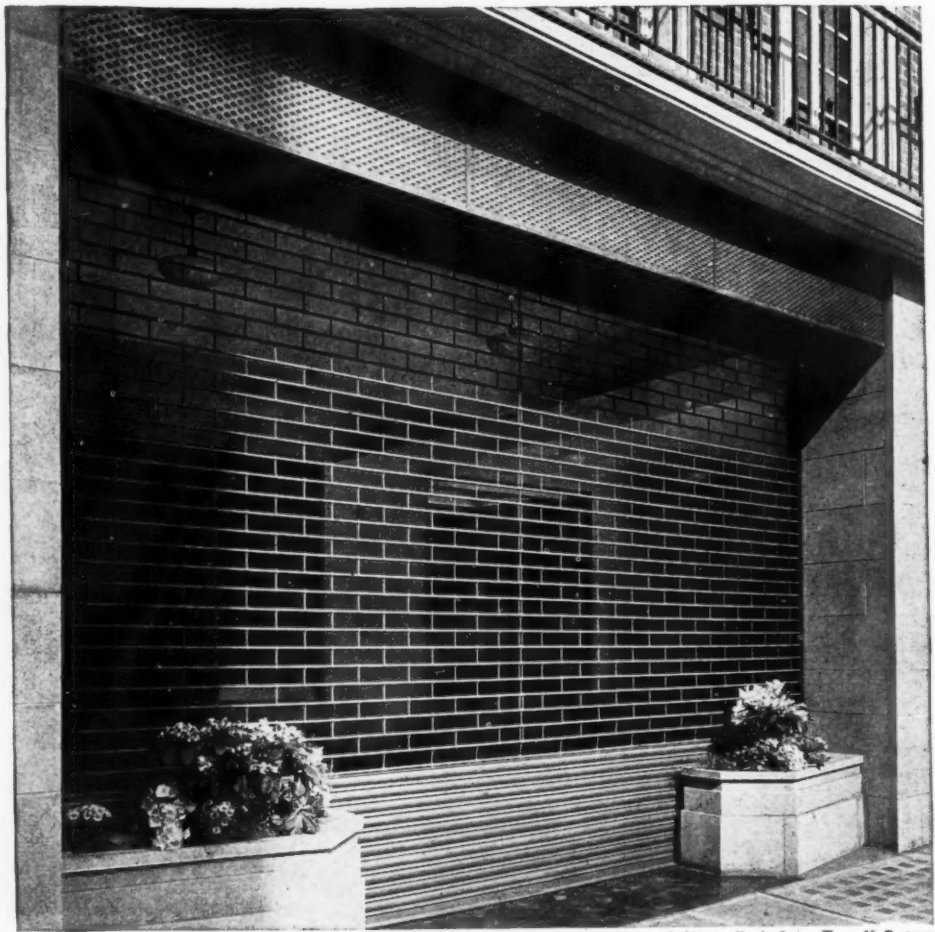
# SOUTH DURHAM STEEL & IRON CO. LTD.

(Incorporating CARGO FLEET IRON CO. LTD.)

Central Constructional Department, Malleable Works, STOCKTON-ON-TEES, Co. Durham.

Telephone: Stockton-on-Tees 66117.





Architects: E. A. Stone, Toms & Partners

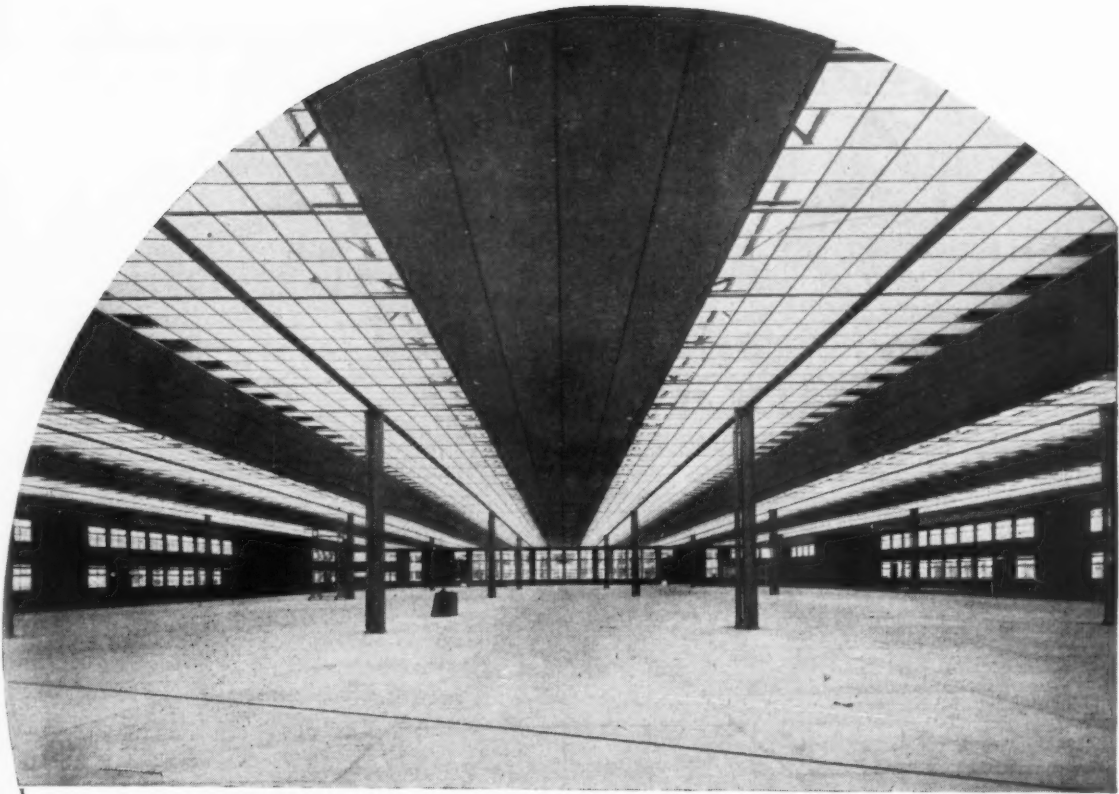
*in Savile Row*  
*openings are tailored with*  
**Haskins**

ROLLING PORTCULLIS GRILLES

HASKINS, GNOME HOUSE, BLACKHORSE LANE, LONDON E 17

TELEPHONE LARKSWOOD 2622



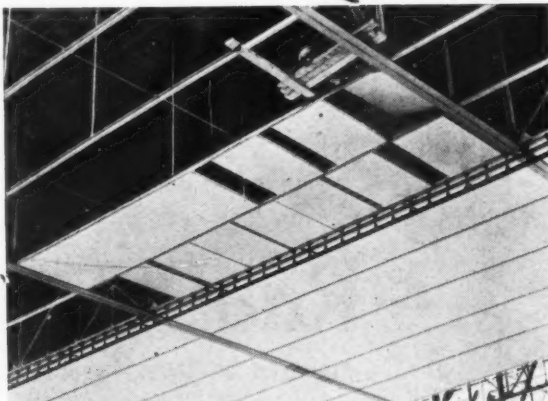


Melsbrouck (Brussels Airport)  
Ceiling 400—20 mm. Glinex.

**A type for  
every job**

**10 THICKNESSES  
5 DENSITIES**

Melsbrouck (Brussels Airport)  
—detail



"GLINEX" is the versatile building material made from flax. It can be used either as cores faced with veneers, asbestos-cement, hardboard, kraft paper, asbestos paper, etc., or in its natural state. PROPERTIES comprise lightness with strength; thermal and acoustical insulation; consistency and stability. It has a pleasing, decorative appearance and is quickly erected. USES include roofs, walls, partitions, ceilings, doors, furniture and fitments.

**versatile**



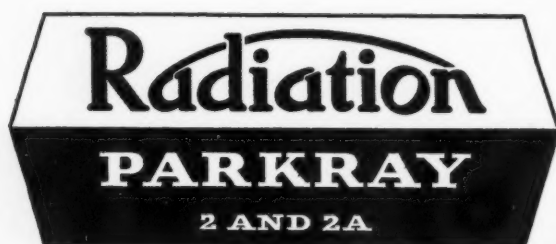
Sole Distributors in the U.K.

**GLIKSTEN BUILDING MATERIALS, CARPENTERS ROAD, LONDON, E.15.**

Telephone: AMHerst 3300.

Liverpool Office: 87 Lord Street. Tel: Central 3441

The facts  
about the  
smoke-consuming



convector fires



## DESIGN

The Radiation Parkray 2 and 2a are free-standing, continuous-burning convector fires, of contemporary design and fitted with a number of special features. An adjustable throat restrictor saves about three quarters of the warm air normally lost up the chimney and virtually eliminates draughts. The rate of combustion is controlled with great exactness so the fire can also be used to provide a very economical "background warmth". Both models can be supplied with built-in gas ignition. The specially designed shaker grate ensures easy ash clearance into the ashpan without disturbing the fire.

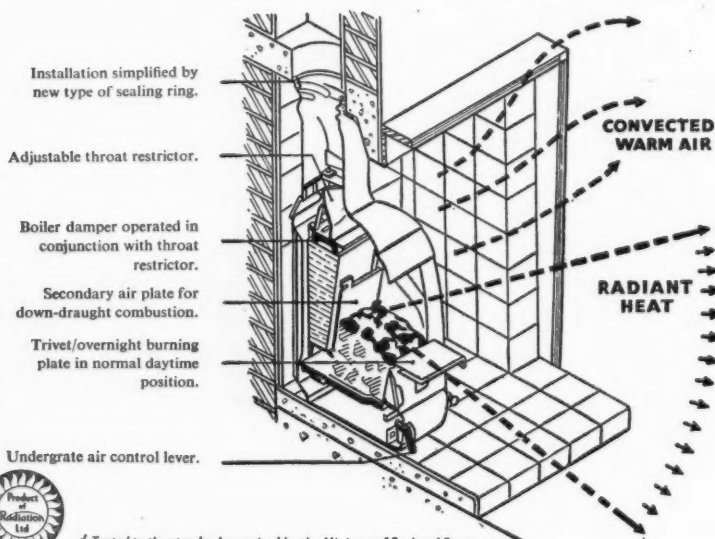
## INSTALLATION

The Parkray 2 and 2a can be very simply installed in recesses of varying dimensions, providing the minimum depth is 14" and the minimum width is 18". The flue adapter must be sealed to a 7" diameter hole in a pre-cast lintel block. A hot water storage cylinder of not more than 30 gallons is recommended for the Parkray 2; the flow and return pipes should not exceed 30 ft. each in length and should be lagged if they exceed 15 ft.

## PERFORMANCE

When burning coal the Parkray 2 and 2a burn 80% of their own smoke; the

draught is made to pull the volatiles down through the hot fuel bed, turning them into clean useful heat. The No. 2, boiler model, operates at an efficiency well above that of the typical openable stove fitted with a boiler. It will provide plenty of hot water for the household and, in addition, will heat a radiating surface of 10 sq. ft. In a simple central heating system it will heat up to 45 sq. ft. of radiating surface. Its normal output is 9,000 B.Th.U/hr.—equivalent to about 10 gallons of water per hour heated from 50° to 140°F. The Parkray 2a will heat rooms up to 3,000 cu. ft. and the No. 2 model up to 2,000 cu. ft. Both the No. 2 and No. 2a (non-boiler model) are extremely efficient when burning coke and other smokeless fuels, as well as coal. The average weekly fuel consumption in spring and autumn is 1-1½ cwt. and in winter, 1½-2 cwt. In the typical modern room a high standard of comfort can be maintained on a lower fuel consumption.



Tested to the standards required by the Ministry of Fuel and Power.

SPECIFY  
THE PARKRAY 2 and 2A  
MADE BY

**Radiation**

PIONEERS OF SMOKE REDUCTION

Full details from Radiation Group Sales Limited (Solid Fuel Division), Park Foundry, Belper, Nr. Derby.

# Hey Prestik!

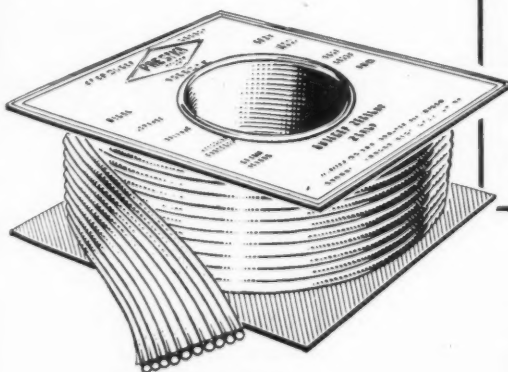
## SEE THE EASE AND SPEED OF THIS JOINTING AND SEALING!

Use PRESTIK Builders' White Sealing Strip once, and you will never be content with any other method of jointing, sealing or bedding.

For PRESTIK offers altogether new ease and speed of operation . . .

gives you a far more efficient,  
longer-lasting job . . . can be  
used inside or outside . . . needs  
no special tools . . . is completely  
clean to handle . . . is permanent  
and weather-proof.

PRESTIK is supplied in handy boxed reels from which you unwind the ready-made strip as you want it. Ask your usual Builders' Merchant for it. Or write to the address below for a sample.



made by the  
**Bostik**  
people



### PRESTIK makes quick work of:

**MASONRY**—Jointing gutter sections and coping stones. Bedding and jointing concrete blocks and panels.

**PRE-FABRICATION**—Bedding and Jointing roof sections. Sealing joints in sectional buildings.

**FLOORS**—Sealing cable duct covers. Sealing skirting board joints.

**WALLS and CEILINGS**—Sealing wall-board joints (with cover strips). Sealing glass bricks to door and window frames.

**DOORS and WINDOWS**—Sealing door and window frames to brickwork. Bedding window frames and window boards.

**SANITARY WARE**—Sealing baths, washbasins, etc., to walls.

white  
**PRESTIK**  
Builders' Sealing Strip

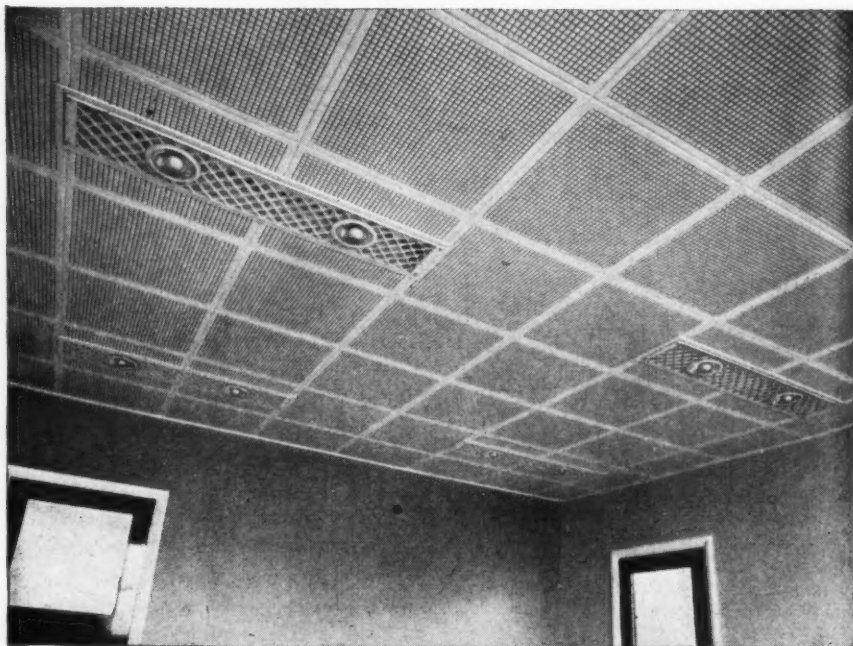
BOSTIK and PRESTIK are registered trademarks of:

B.B. CHEMICAL CO. LTD., ULVERSCROFT ROAD, LEICESTER.

For Efficient Sound Correction

# Sundeala

NEW-LOOK ACOUSTIC PANELS



Beauty and utility are perfectly combined in this Acoustic Panelled Ceiling installed recently at the premises of Messrs. Mullard Ltd., Waddon, Croydon.  
Architect: Graham Crump, F.R.I.B.A.

Standard sizes 12" x 12", 12" x 24", 24" x 24". All  $\frac{3}{4}$ " thickness.  
Made in Britain. British Patent No. 692709.

Full particulars and Technical Service from

**SUNDEALA BOARD CO. LIMITED**

Head Office: ALDWYCH HOUSE, LONDON, W.C.2. Tel.: CHAncery 8159

or from its Offices at

Glasgow: BALTIC CHAMBERS, 50, WELLINGTON ST., C.2

Newcastle: NORTHUMBRIA HOUSE, PORTLAND TERRACE, 2





**PERMANITE**

**'ASBEX'**

**NON-PERISHABLE**

**DAMPCOURSE**

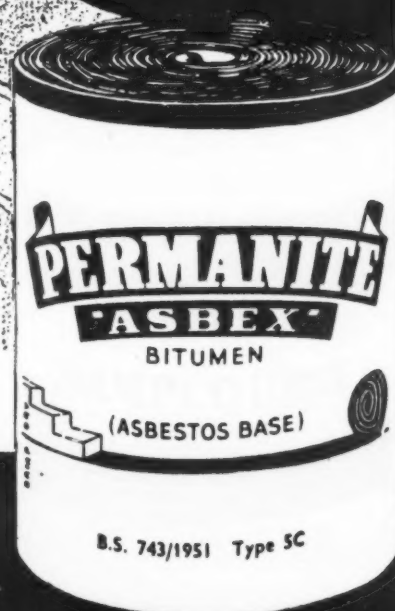
**the materials  
in 'ASBEX' have  
stood the test  
of time . . .**

Materials that have stood the test of time are still the best for building purposes . . . Bitumen and Asbestos . . . as old as the hills and as enduring . . . are scientifically combined in 'ASBEX' to form an imperishable, impenetrable dampcourse that moisture cannot harm in any way. Specify 'ASBEX'—as do Architects, Government Departments and Local Authorities—and know that your dampcourses will stand up to settlement and vibration and effectively resist deteriorating influences.

'ASBEX' asbestos dampcourse is also available incorporating a lead lining in compliance with B.S.743/1951, type 5F.

Supplied in rolls 24 feet in length and cut to any required width.

Please send for 'Asbex' leaflet.

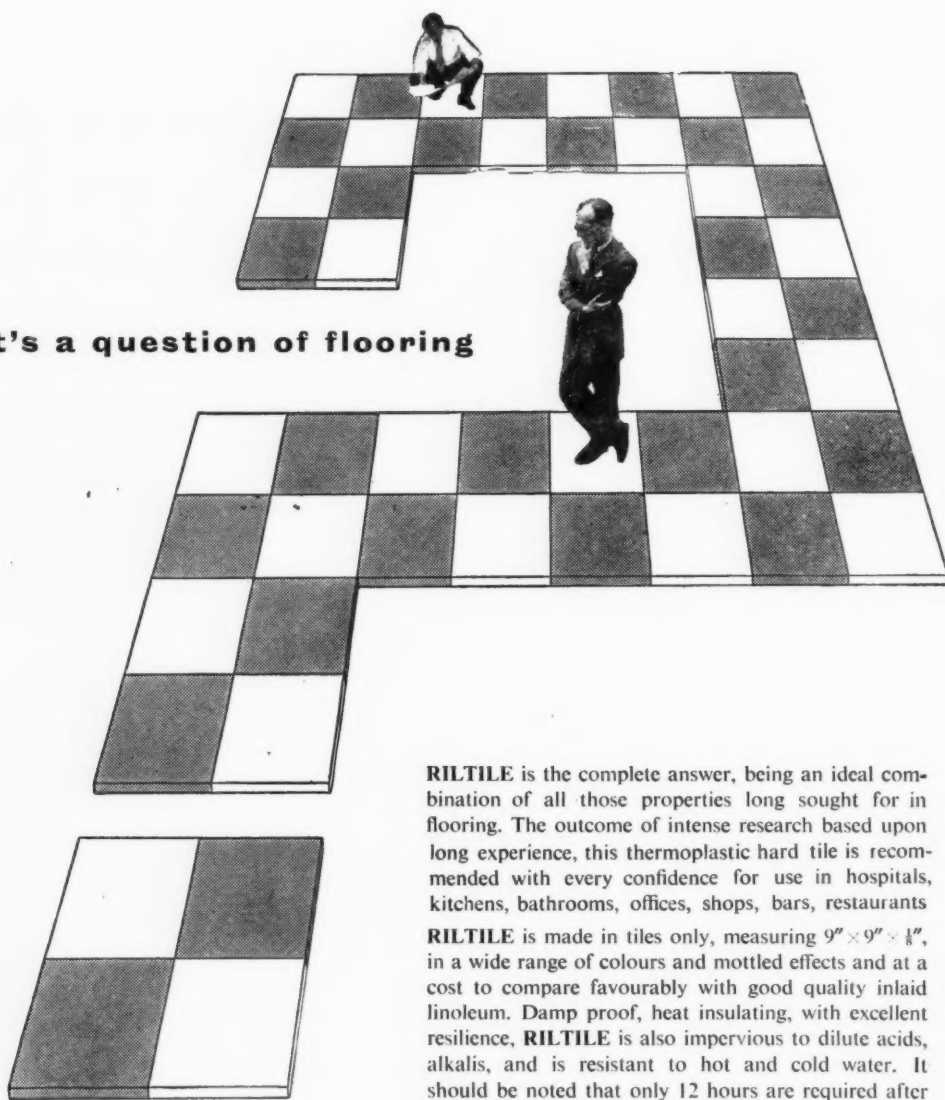


**PERMANITE LIMITED**

**455 OLD FORD ROAD LONDON E 3**

Telephone : ADVance 4477 (11 lines) Est. 1909

when it's a question of flooring



**RILTILE**  
Thermoplastic Flooring

**RILTILE** is the complete answer, being an ideal combination of all those properties long sought for in flooring. The outcome of intense research based upon long experience, this thermoplastic hard tile is recommended with every confidence for use in hospitals, kitchens, bathrooms, offices, shops, bars, restaurants

**RILTILE** is made in tiles only, measuring  $9'' \times 9'' \times \frac{1}{8}''$ , in a wide range of colours and mottled effects and at a cost to compare favourably with good quality inlaid linoleum. Damp proof, heat insulating, with excellent resilience, **RILTILE** is also impervious to dilute acids, alkalis, and is resistant to hot and cold water. It should be noted that only 12 hours are required after laying, before the floor is ready for normal traffic. While not completely fireproof, the asbestos used in the manufacture of **RILTILE** gives it excellent fire-resisting qualities.

Extremely hard wearing ☐ Easily and quickly laid  
Reduces foot fatigue ☐ No special cleaning required

Write for samples and illustrated brochure—

BRITISH MOULDEX LTD • MOULDEX HOUSE • 27/29 Fitzroy Street, London, W.1 • Tel: LAngham 4211/2  
Works at WELLINGBOROUGH, NORTHANTS.



n-  
n  
n-  
s,  
s  
,  
a  
d  
t  
s,  
t  
r  
n  
-

/







**BICC**

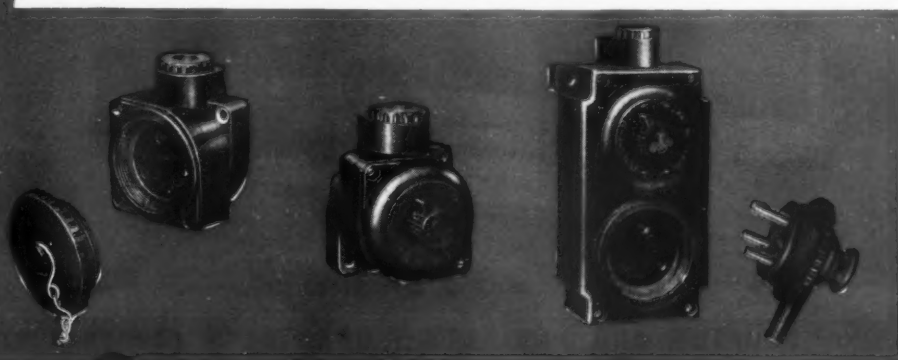
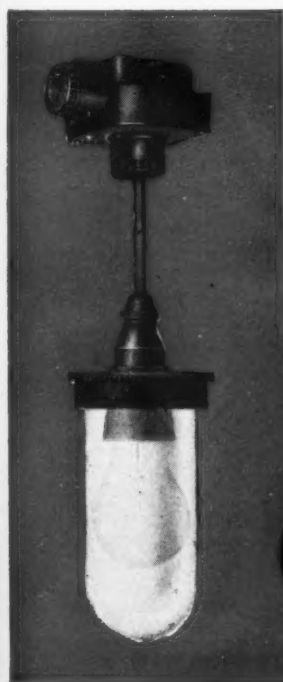
## ALL-INSULATED INDUSTRIAL WIRING SYSTEM

This is the ideal wiring system to withstand the rigours of industrial installations.\* It is watertight, resists corrosion, and is safe and reliable in use.

This BICC system is easily fixed to brickwork, concrete, wood joists or steelwork. Several types of cable are available, depending upon service conditions. They are: vulcanised rubber insulated tough rubber sheathed cables, and P.V.C. sheathed cables having either polythene or P.V.C. insulation. The robust junction boxes and fittings are all-insulated.

Full details of the BICC All-Insulated Industrial Wiring Systems are contained in Publication No. 298. We shall be pleased to send you a copy on request.

\* Particularly suitable for use in chemical factories, paper mills, bleach and dye works, laundries, breweries, abattoirs, etc.



BRITISH INSULATED CALLENDER'S CABLES LIMITED • 21 Bloomsbury St. London WCI



Extensions to the Thorpe Road Works  
LAURENCE SCOTT & ELECTROMOTORS LTD., NORWICH  
Architects: A.F. Scott & Sons, Norwich

**BOULTON AND PAUL LTD • NORWICH • LONDON • BIRMINGHAM**  
*Fabricators and Erectors of Structural Steelwork*

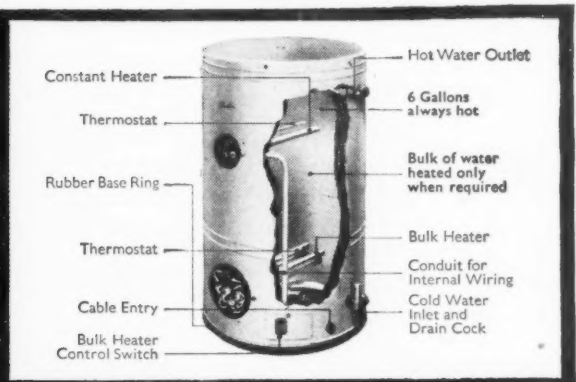
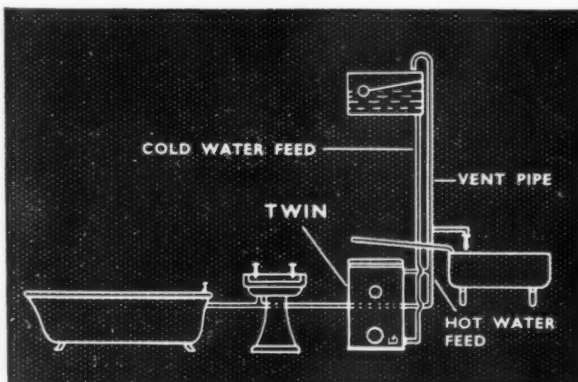
**LOWER INSTALLATION COSTS**

**LOWER RUNNING COSTS**

WITH THE **B·N·E TWIN** WATER HEATER

The reduction of installation costs is one of the primary advantages of the B.N.E. 'Twin' water heater. The diagram below shows the simplicity of the plumbing—no independent hot water storage tank, and no flow and return pipes. The plumbing consists of a feed pipe from the cold water tank, another from the heater outlet to the hot water taps, and a vent pipe. The elimination of flues is another installation advantage that is perhaps of even greater importance in flats than in houses. Finally, the 'Twin's' compact size enables it to be tucked away under the draining board, where the pipe run to the kitchen sink is reduced to a minimum, removing one more of the problems associated with water heating systems.

The reduction in running costs is achieved by the 'dual personality' of the B.N.E. 'Twin'. As shown below it incorporates two heaters, the upper one—with only a 500 watt element—is permanently in circuit, and being thermostatically controlled ensures that 6 gallons of really hot water are always available for normal needs at the sink or hand-basin. When larger quantities of hot water are required, the lower heater—consisting of five 500 watt thermostatically controlled elements—can be brought into circuit by the operation of a conveniently placed foot switch. In a short time the full contents, 20-30 gallons according to the model, are heated to scalding temperature. Thus the B.N.E. 'Twin' provides large or small quantities of hot water without the expense of keeping large quantities constantly heated.

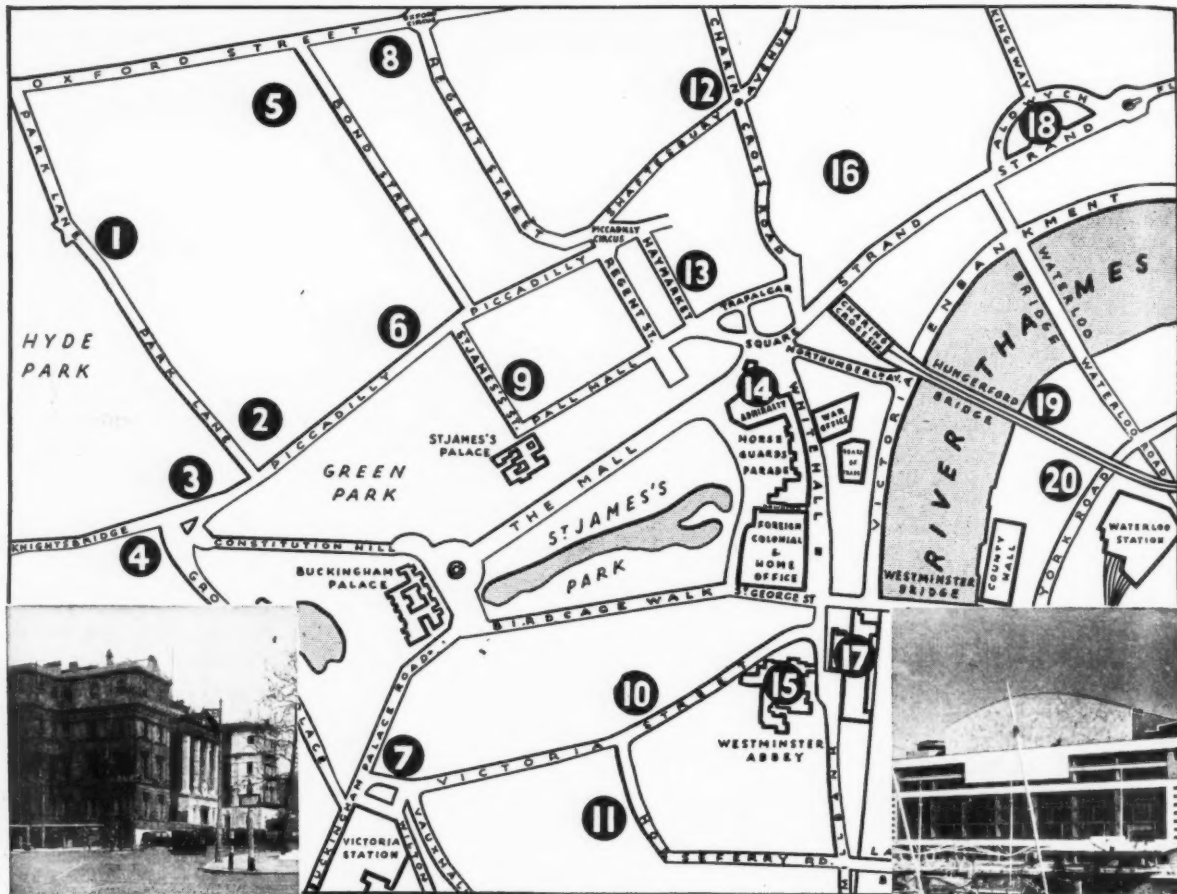


Send for further details to:

**BRITISH NATIONAL ELECTRICS LTD.**

The Domestic Appliance Section of JOHNSON & PHILLIPS LTD.

**NEWARTHILL • MOTHERWELL • SCOTLAND**



## LONDON'S LANDMARKS

If you have ever walked or driven through London, every few hundred yards you will have passed within sight of a building which has had one of the many Cementone products either incorporated in its structure or applied to its various elevations. Space does not permit the showing of more than 20 of these contracts on the map above: but from this selection, visitors to London may be interested to see for themselves the versatility of the Cementone range.

- |  |  |
|--|--|
| <p>1 THE DORCHESTER HOTEL.<br/>Cementone No. 8 Liquid Concrete Hardener.</p> <p>2 LONDONDERRY HOUSE.<br/>Cementone NUMBER SEVEN Universal Decorative Finish.</p> <p>3 "No. 1 LONDON," APSLEY HOUSE.<br/>Cementone No. 9 Waterproof Stoneface Composition and Exelaero Wall Flat.</p> <p>4 ST. GEORGE'S HOSPITAL.<br/>Cementone NUMBER SEVEN and No. 9.</p> <p>5 "THE RUNNING HORSE".<br/>Cementone NUMBER SEVEN.</p> <p>6 CALDER HOUSE.<br/>Cementone NUMBER SEVEN.</p> <p>7 WATNEY'S BREWERY.<br/>Cementone NUMBER SEVEN.</p> <p>8 REGENT HALL.<br/>Cementone NUMBER SEVEN.</p> <p>9 ALLIANCE ASSURANCE CO.<br/>Cementone NUMBER SEVEN.</p> <p>10 CAXTON HALL.<br/>Cementone No. 9.</p> | <p>11 GREYCOAT HOSPITAL.<br/>Cementone NUMBER SEVEN.</p> <p>12 PALACE THEATRE.<br/>Cementone No. 9.</p> <p>13 COMEDY THEATRE.<br/>Cementone NUMBER SEVEN and Cementone No. 10.<br/>Liquid Surface Tinter.</p> <p>14 OLD COUNTY HALL.<br/>Cementone No. 9.</p> <p>15 THE DEANERY, WESTMINSTER ABBEY.<br/>Cementone No. 3 Transparent Waterproofing Liquid.</p> <p>16 WESTMINSTER FIRE OFFICE.<br/>Cementone NUMBER SEVEN.</p> <p>17 HOUSES OF PARLIAMENT.<br/>Cementone No. 3.</p> <p>18 BUSH HOUSE.<br/>Cementone No. 3.</p> <p>19 ROYAL FESTIVAL HALL.<br/>Cementone NUMBER SEVEN. No. 9 and Exelaero Wall Flat.</p> <p>20 WATERLOO AIR TERMINAL.<br/>Cementone No. 1 Permanent Colours for Cement.</p> |
|--|--|

Full details of all Cementone products will be found in the Cementone Handbook sent, free on request to:

**JOSEPH FREEMAN, SONS & CO. LTD.**

CEMENTONE WORKS · WANDSWORTH · LONDON · S.W.18

Telephone: VANDyke 2432 (10 lines).

Telegrams: CEMENTONE, WESPHONE, LONDON



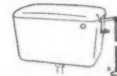
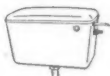
# The most fitting fitting

In contemporary building, with its trend towards functional design and streamlined efficiency, a most fitting fitting for the toilet is the Lawley 'Britannia' plastic flushing cistern. Smoothly silent in action, unobtrusively pleasing in appearance, this new plastic cistern is ultra-modern, ultra-hygienic, ultra-efficient. A touch of the hand is sufficient for smooth, silent action — first time and *every* time. Seventy-five years' specialised experience backs every Lawley cistern — when you specify Lawley, you know it's as good as it looks!

Our illustrated folder gives details of four Lawley models in plastic, to suit all water regulations. We shall be pleased to forward copies on request.

## Lawley

**BRITANNIA**



*One of the oldest and largest cistern makers in the world.*

**W. & J. LAWLEY LTD., BRITANNIA WORKS, SAMS LANE, WEST BROMWICH**

M-100

# LANDMARKS IN STEEL

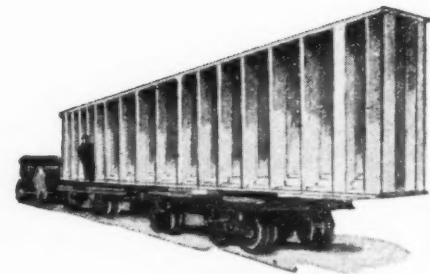
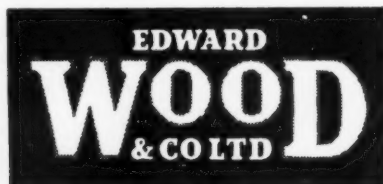


Architects and Surveyors: Harry S. Fairhurst & Son,  
55 Brown Street, Manchester, 2.

## **STEELWORK** *for Commerce*

### SHIP CANAL HOUSE, MANCHESTER

This fine building is the nerve centre of the great inland waterway, The Manchester Ship Canal and is also the home of The Manchester Chamber of Commerce. Big business is built on solid foundations and once again it's Steelwork by:



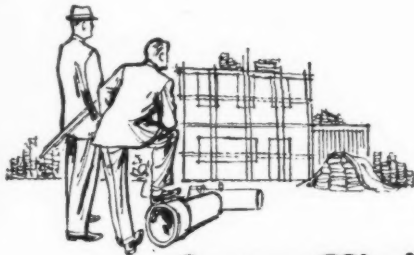
Registered Office & Works: **MANCHESTER, 17**

Telephone: TRAfford Park 2341 (10 lines)

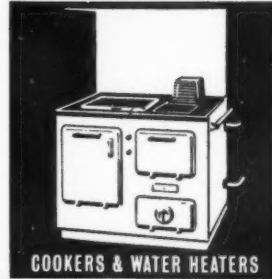
London Office: 68 Victoria Street, S.W.1. Telephone: VICtoria 1331/2.

Technical Offices: Birmingham, Loughborough

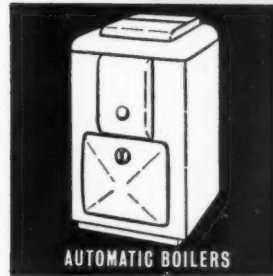
## Specify modern solid fuel appliances



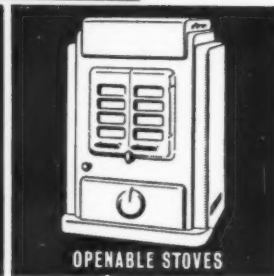
CONVECTOR FIRES



COOKERS & WATER HEATERS



AUTOMATIC BOILERS



OPENABLE STOVES

## ...for efficient heating at lowest cost

Nothing is as cheap for continuous domestic heating as solid fuel. And nothing is as popular—particularly when it's burned in modern, newly-designed appliances. More and more householders are finding that the new fires, stoves, boilers and cookers give far more heat, are much cleaner and easier to run—and look very well in any setting. And more and more are demanding them.

To help you select appliances and install them correctly, the C.U.C. offers the following services :

List of Recommended Appliances—published twice yearly, offered free of charge. C.U.C. booklets on appliances and their

installation, also fuel storage. These are listed on the coupon below and are free of charge. Fill in the coupon and send it to

the C.U.C. for those you—or your staff—would find useful.

C.U.C. Training Courses are held in London and Glasgow for the staffs of builders and local authorities. Instruction in installation is given by experts. Special one-day courses are held in Technical Colleges in various parts of the country for those who cannot attend the courses in London or Glasgow. For full information about all C.U.C. Training Courses, write to the C.U.C. at the address below.

### C.U.C. INFORMATION CENTRES

in many major cities display the latest appliances, have leaflets, and can give you expert information. See their addresses below.

**BIRMINGHAM:**  
Burlington Passage, New St.

**BRISTOL:**  
5 Broad Quay, City Centre.

**CAMBRIDGE:**  
24 St. Andrew's Street.

**CARDIFF:**  
9 Castle Street.

**GLASGOW:**  
341 Bath Street.

**LEEDS:**  
99 Albion Street.

**LONDON:**  
The Building Centre,  
26 Store Street, W.C.1.

**MANCHESTER:**  
257 Deansgate.

**NEWCASTLE-UPON-TYNE:**  
18 Saville Row.

**NOTTINGHAM:**  
4 and 6 St. Peter's Gate.

**PLYMOUTH:**  
Royal Cinema Buildings,  
Athenæum Place.

### The Coal Utilisation Council, 3 Upper Belgrave Street, S.W.1

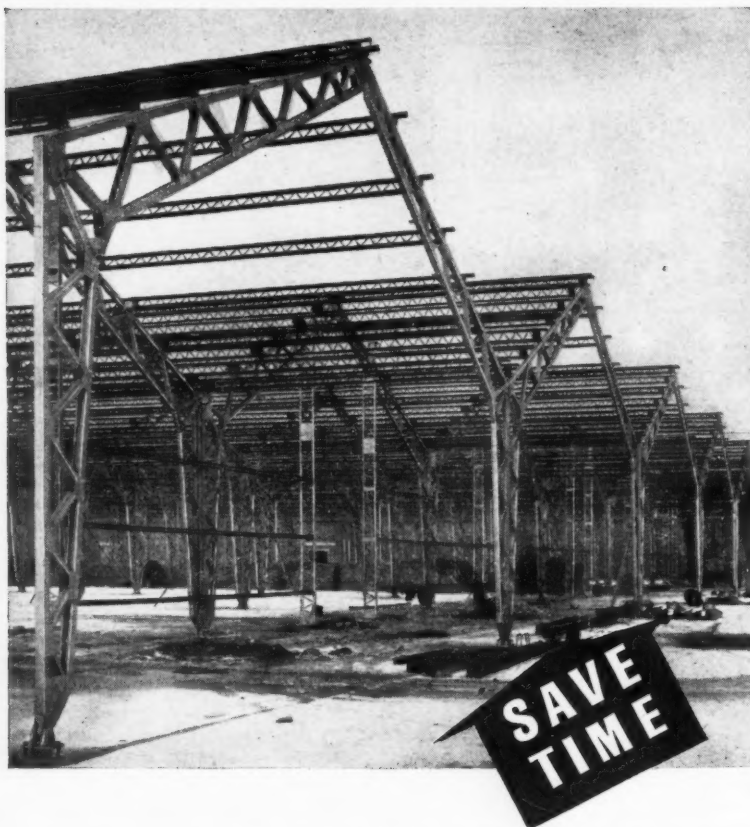
Please send me the following : (Please cross out those not needed)

- List of Recommended Solid Fuel Appliances
- Insulation Booklet—"Make Your House Cosier in Winter"
- Architectural Design Data for Solid Fuel
- Fuel Stores for Houses and Flats
- Common Fixing Faults

Name .....

Address .....

A.J.S



The Metsec technique for portal frame buildings is responsible for a number of important advantages, all of which contribute to the basic characteristic of the system—**SAVING COST BY THE SAVING OF TIME AND LABOUR**

- Rapid site erection—on prepared foundations building framework can be erected at the rate of 1,000 sq. feet per hour.
- Lining, insulation and sheeting, which is incorporated in the structure, is completed by the same gang of men working from the outside of the building—without expensive interior scaffolding. A very real cost-saving feature.
- COR-TEN corrosion-resistant, low alloy steel reduces maintenance to a minimum.
- When compared with buildings of equivalent specification, there is often more than a 10 per cent. saving on the total cost.

## METSEC BUILDINGS

Metsec buildings are manufactured in standard sizes and the constructional technique has a wide application to buildings at home and overseas, particularly where considerable accommodation is required at short notice—warehouses, stores, offices, airport buildings, factory extensions, garages, and recreation centres, etc.



Send for this NEW CATALOGUE A1, giving complete details and specification of Metsec Buildings.

**METAL SECTIONS LTD.**

**OLDBURY**

**BIRMINGHAM** 



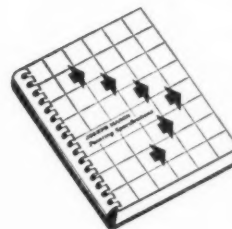
# + service TOOLS ^ FOR ARCHITECTS

## The non-spill ink dispenser

A light pressure by the tip of the ruling pen on the push-switch of this fascinating device activates the solenoid which in turn depresses the plunger of the patent precision pump. Pressure is thus built up in the ink-bottle and one drop of ink is exuded from the nozzle on to the pen. An automatic return and a pressure relief valve to prevent wastage are features of the design. Two other Joseph Mason designed tools dispense much useful information and advice on paint. They are in book form — *Joseph Mason Painting Specifications* and *The Architects' Special Colour Range*. Architects will find these as helpful as the personal service given by our Technical Staff.

MASOPAR Alkyd Enamels

MASOTEX Emulsion Paints



Established architects are invited to apply on their official letter-headings for either of the above books.

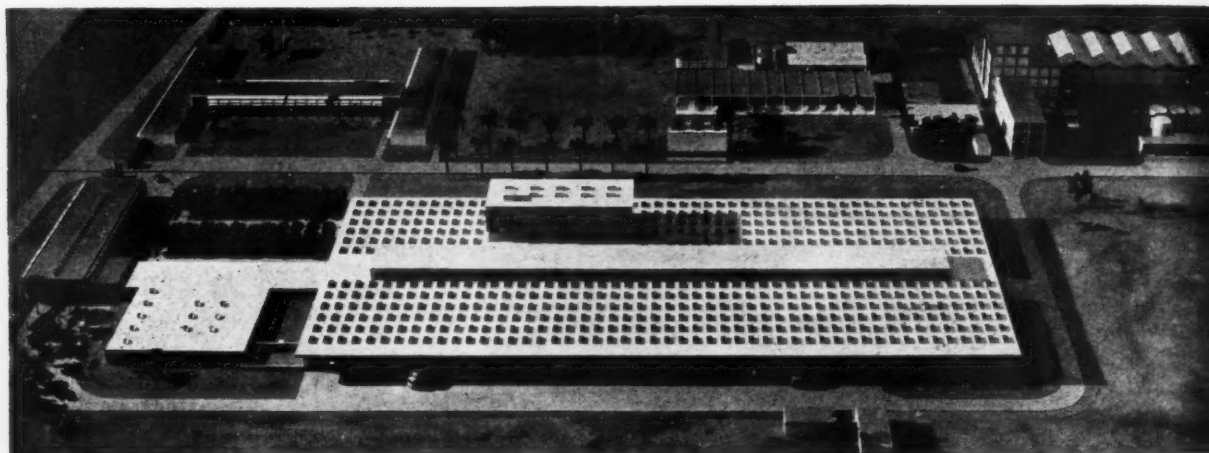
# joseph mason paints

JOSEPH MASON AND COMPANY LIMITED, DERBY. TELEPHONE: 46038

MANUFACTURERS OF VERY GOOD PAINTS SINCE 1800

# 4 acres

of CHEECOLITE (waterproof) lightweight aerated concrete used on this roof



BURMA PHARMACEUTICAL INDUSTRIES PROJECT

Architect: James Cubitt & Partners  
Contractor: Messrs. Holland Hannen & Cubitts  
Consulting Engineer: Bolton & Hennessy

Construction consists of a space deck roofing with infill CHEECOLITE panels, size 3' 10" × 3' 10" × 2", covered with six inches of CHEECOLITE Screed and topped by CHEECOLITE Solar Slabs. Calculated "U" value of the roof, 0.26

Some major contracts on which CHEECOLITE building blocks, screeding, solar slabs, rendering and/or bedding mortar have been used:

Singapore Improvement Trust  
Ceylon Government  
Dutch Government  
Kuwait Government  
Burma Government

India  
Saudi Arabia  
Gold Coast Government

Nigeria

Multi-storey blocks of Flats  
New Secretariat building  
Housing in New Guinea and Surinam  
Government Housing Factory  
Pharmaceutical Factory  
Engineering College and other contracts  
Tea Factory and Housing  
Multi-storey office buildings, Jeddah  
Numerous Teacher-training Colleges and Secondary  
Day Schools and Institutes. Kumasi College of Technology  
Kumasi Central Hospital. Accra Hotel—under construction  
New Multi-storey office building for Shell Company, Lagos

Local Agents in many countries; for further details and licensing arrangements, please write to:

**CHEECOL PROCESSES LTD.**

KEELAND HOUSE • OXFORD ROAD • READING • ENGLAND

# 4 acres

of CHEECOLITE (waterproof) lightweight aerated concrete used for Roof Screeds



LONDON AIRPORT, New Central Terminal Buildings

Architect: Mr. Frederick Gibberd, C.B.E., F.R.I.B.A., M.T.P.I.  
Contractors: Messrs. Taylor, Woodrow

CHEECOLITE lightweight screeds are used extensively for roofs and floors to give thermal and sound insulation in flats, schools, office blocks and factories, etc. CHEECOLITE is waterproof, nailable and requires no further screed or topping coat.

Conduits can be laid in CHEECOLITE and floor finishes such as Thermo-plastic tiles are laid direct.

Whisking machines for producing CHEECOLITE are available for hire in the U.K. Our Technical Department is at your service to answer all enquiries without obligation.

Write to:

**CHEECOL PROCESSES LTD.**

KEELAND HOUSE • OXFORD ROAD • READING • BERKS.

# NU-SWIFT

*The world's fastest  
and most reliable  
fire extinguishers*



Complying with British Standard Code of Practice  
(British Standard Code of Practice C.P. 402.401 (1951) is published  
on behalf of the Council for Codes of Practice for Buildings by the  
British Standards Institution.)

Universal (Royal Navy) Extinguisher Model 1301 for Class A fires  
Air Foam Extinguisher Model 1400 - - - - - Class B fires

Approved by the Fire Offices Committee

Universal (Royal Navy) Extinguisher Model 1301 for	FOC Ref. No.
Air Foam Extinguisher Model 1400	Class A fires 104/6
Auto (CTC) Extinguisher Model 1003	Class B fires 104/3
Auto (Chloro-flash) Extinguisher Model 2003	Class C fires 104/5
	Class B & C fires 104/7

All these models comply with British Standard specifications, where these exist. No British standards exist for chlorobromomethane extinguishers or double-action nozzles like that of the Universal extinguisher. But special FOC approval has been given to these Nu-Swift features because of their increased efficiency.

Accepted by the London County Council

Consent granted under Sec. 20 of the London Building Acts (Amendment) Act 1930.

All Nu-Swift extinguishers that are approved by the Fire Offices Committee.

#### Why Nu-Swift are better:

Nu-Swift extinguishers are the only ones on the market to combine these essential advantages.

**Immediate action—**  
instant pressure-charge operation eliminates waiting for a chemical action to build up pressure.

**Quicker recharging—**  
all 2-gallon Nu-Swift extinguishers can be recharged and back in use in 30 seconds.

**Standard system—**  
all Nu-Swift extinguishers are used in the commonsense upright position. There are distinctive colours for the models for different fire risks.

**Greater reliability—**  
Nu-Swift pressure charges produce a pressure that is always exactly right for fire-fighting, never too great for safety. They will not leak, evaporate, or cause corrosion.

For extra safety in buildings new and  
old—specify Nu-Swift extinguishers

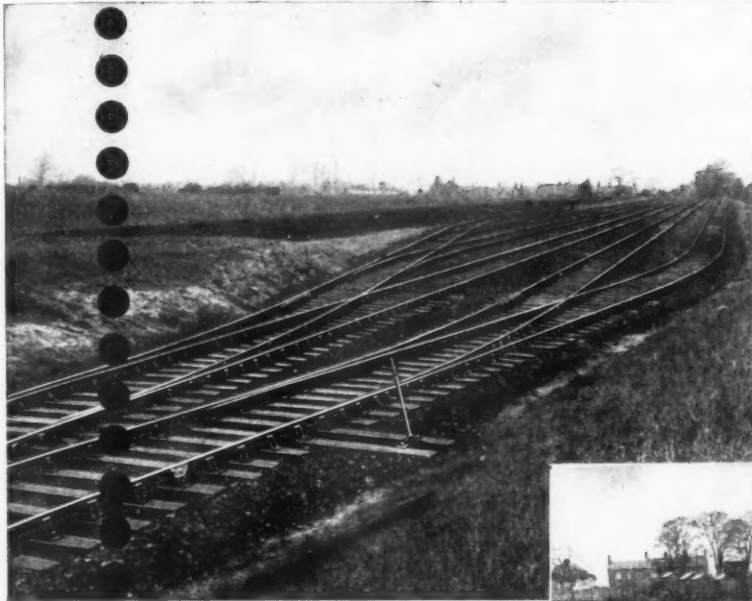
# NU-SWIFT

**Nu-Swift Ltd.,**  
25 Piccadilly, London, W.1  
Telephone: REGent 5724  
Telegrams:  
NUSWIFT PICCY LONDON  
Headquarters and works:  
Elland, Yorkshire  
Telephone: Elland 2852  
Telegrams:  
NUSWIFT ELLAND



# WARDS *for Railway Sidings*

The service offered to industry by Wards is backed by the experience of over half a century, and covers every aspect of railway siding planning, construction and maintenance.



The accompanying photographs show sections of a recently completed "Ward-built" siding.

Copies of the third edition of our booklet "Rails and Rail Accessories" forwarded on request.



COLLIERIES  
REFINERIES  
POWER STATIONS  
GAS WORKS  
BREWERIES  
DOCKS, ETC., ETC.

**TWW**

*The Railway Siding Consultants  
and Contractors*

THOS.W.WARD LTD • ALBION WORKS • SHEFFIELD

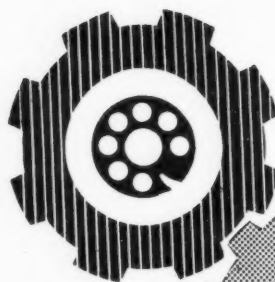
TELEPHONE: 26311 (22 LINES) • TELEGRAMS: "FORWARD • SHEFFIELD"

LONDON OFFICE: BRETENHAM HOUSE • LANCASTER PLACE • STRAND • W.C.2

The British

**HOME & OFFICE TELEPHONE**

Co. Ltd.



## INTERCOMMUNICATION **gears** ANY BUSINESS—

small, medium or large to the highest pitch of efficiency. With a flick of a key of the B.H.O.T. Loudspeaker Master the Executive effects instant contact with his staff, anywhere at office or factory. B.H.O.T. provide all facilities related to smooth and efficient intercommunication, on rent-maintenance basis or outright purchase. Write for full and detailed information.



A FEW INSTRUMENTS  
FROM OUR  
EXTENSIVE RANGE

The British

**HOME & OFFICE TELEPHONE**

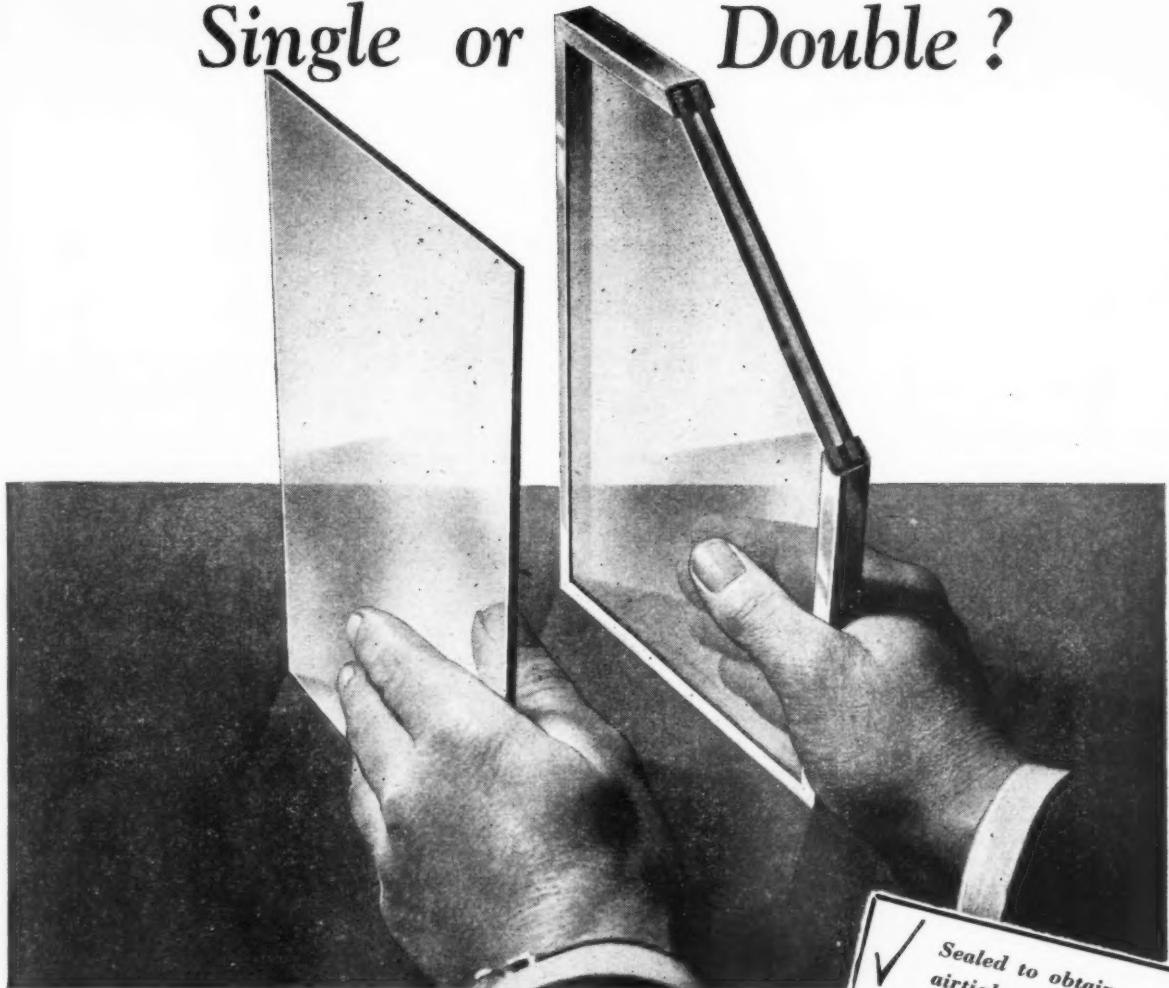
Co. Ltd.

73 GREAT PETER STREET, LONDON, S.W.1.

TELEPHONE: ABBey 4242 (P.B.X.)

ESTABLISHED 1890

# Single or Double ?



## HILLSULATE

Regd. Trade Mark.

### DOUBLE GLASS CLEAR PANELS

Light without heat loss—comfort with economy—"HILLSULATE" Double Glass Clear Panels are better from every point of view. Their high thermal value (equivalent to  $4\frac{1}{2}$ " brickwork) enables the modern demand for larger glazing areas to be met without any increased heat loss. As a consequence, less fuel is required and a smaller heating plant, at lower capital cost, is sufficient. Comfortable inside temperature can be easily maintained throughout the changing seasons, and condensation is virtually eliminated.

The Panels consist of two panes of clear sheet glass  $\frac{3}{16}$ " apart, continuously sealed along all edges to provide an airtight cavity and fitted with an aluminium surround frame. They can be supplied in sizes up to a maximum of 80" x 40".

MANUFACTURED AND SUPPLIED BY

**HILLS** (WEST BROMWICH) LIMITED

- ✓ Sealed to obtain an airtight cavity
- ✓ Increases daylight without heat loss
- ✓ Handled as easily as a single pane of glass
- ✓ Can be glazed into any normal window rebate
- ✓ Reduces heating costs
- ✓ Eliminates condensation



Architects are invited to write for illustrated literature and price list.

ALBION RD., WEST BROMWICH, STAFFS. Tel.: WEST Bromwich 1811 (15 lines). LONDON: CHAPONE PLACE, DEAN ST., W.1. Tel.: GERRard 0526/9. Branches at Birmingham (Midland 5175), Manchester (Blackfriars 3382), Bristol (24765), Leeds (25868), Newcastle-on-Tyne (59081), Glasgow (City 5564) and Belfast (26112).

• **Light**

• **Strong**

**GYPKLITH**

REGISTERED TRADE MARK

• **Durable**

**WOOD  
WOOL  
SLABS**

• **Heat insulating**

• **Sound insulating**

• **Sound absorbing**

• **Fire resisting**

THE PERFECT BASE for **PARISTONE** PLASTER  
and **GYPLITE** VERMICULITE INSULATING PLASTER

**GYPROC PRODUCTS LIMITED**

Head Office: Singlewell Road, Gravesend, Kent. Gravesend 4251-4.  
Telegrams: Gyproc, Gravesend, Glasgow Office: Gyproc Wharf,  
Shieldhall, Glasgow, S.W.1. Govan 2141-3. Telegrams: Gyproc,  
Glasgow. Midland District Sales Office: East Leake, Loughborough,  
Leics. East Leake 231. London Office: Bath House, 82 Piccadilly,  
London, W.1. Grosvenor 4617-9.

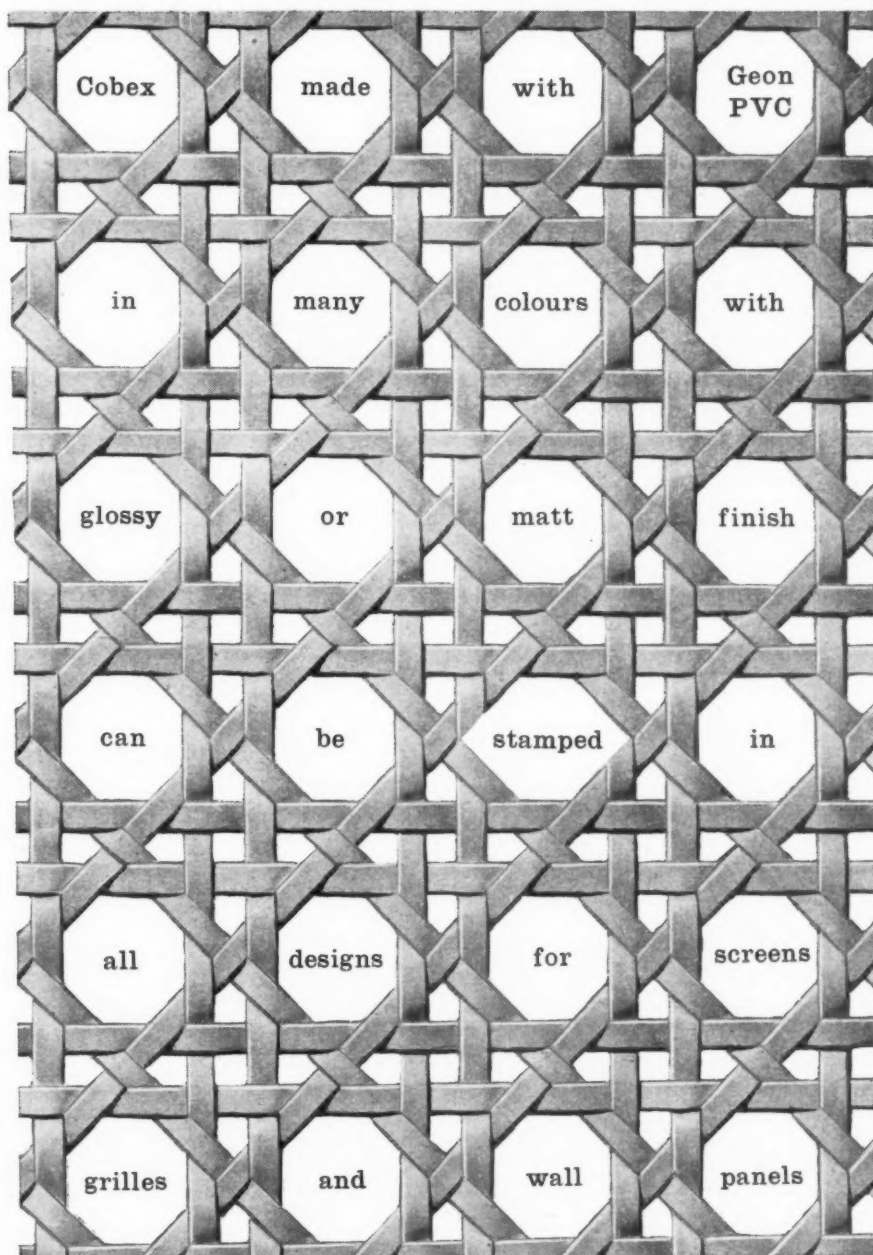
Write for

**GYPKLITH** Leaflet P.358 which  
includes plastering specifications and  
details of acoustic qualities and fire  
resistance tests.



## Reading between lines made with GEON PVC

Part of a  
perforated  
rigid  
PVC Panel



Cobex rigid sheet made  
with Geon PVC perforated by  
G. A. Harvey & Co. (London) Ltd.

For further information about Geon PVC please write for  
descriptive booklet No. 128 free on request.



'Geon' is a regd. trade mark

### BRITISH GEON LIMITED

Sales and Technical Service

DEVONSHIRE HOUSE PICCADILLY LONDON W1

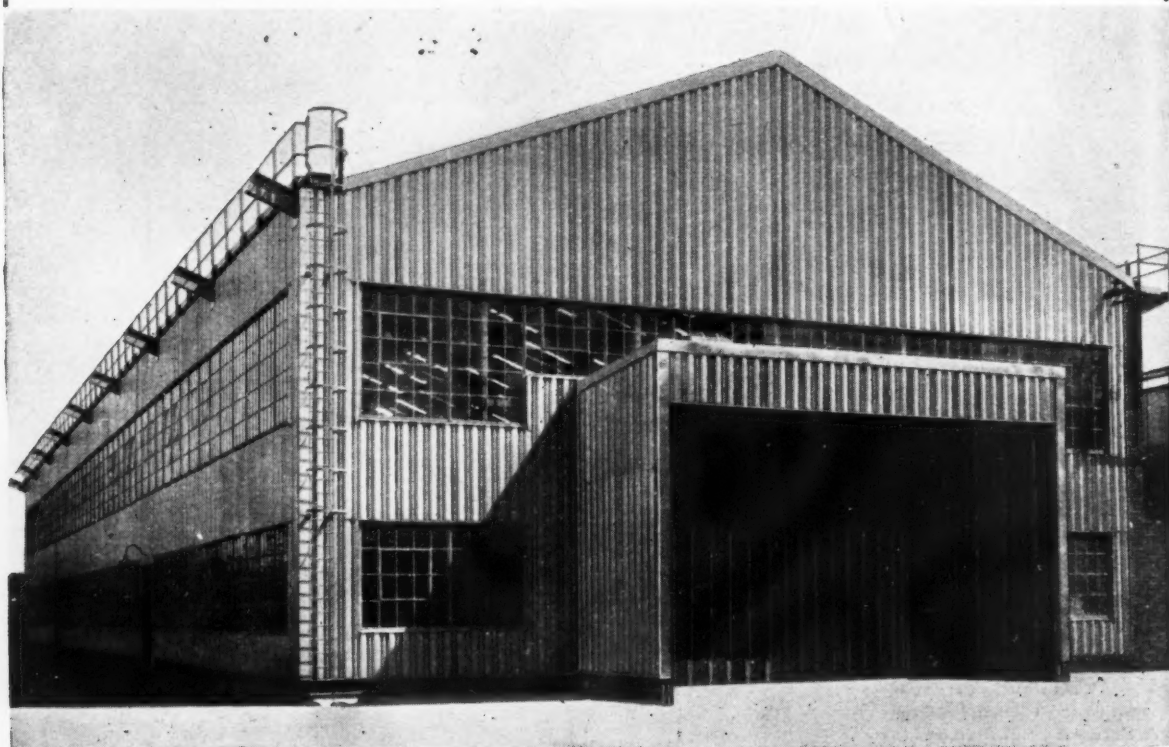
Telephone: MAYFAIR 8867

# WHAT THE well dressed FACTORY WEARS

Look at this factory building . . . neat . . . distinctive . . . businesslike. That's what 'KYNALOK' Secret-fix Cladding can do for roofs and walls.

Made from 'Kynal' aluminium alloys 'KYNALOK' is strong and durable, light to transport, easy to erect.

It has other good points, too. 'KYNALOK' is adaptable to any metal or wood frame, provides excellent thermal insulation and has no protruding bolt heads to spoil its profile or bolt holes to invite leaks. If need be, it can be quickly dismantled and re-erected.



IN EVERY WAY

**'Kynalok'**  
*Secret-fix cladding*

IS A PLEASURE TO WORK WITH

IMPERIAL CHEMICAL INDUSTRIES LIMITED, LONDON, S.W.1



M.413



# Steelwork to Architects' Specification



Warehouse

Length 300 ft.

Span 101 ft. - 6 ins.

Pitch 17°

Architects: Fowler Grove & Haggard  
Southampton.



PLATERS' SHOP FOR GEO. WIMPEY & CO. LTD.

Length 200ft. Width 50ft. Height to Eaves 30ft. Frames at 28ft. centres.  
1-30 ton and 1-15 ton overhead travelling cranes operating simultaneously.

After half a century of stagnation, steel is once again taking its place as the pre-eminent structural medium. In single and multi-storey work alike new forms and new design and fabrication methods take the place of the old.

CONDER is in the forefront of these developments.

*Illustrated booklet with useful data on costing, roofing materials and insulation sent on request.*



**CONDER ENGINEERING CO., LTD.**  
WINCHESTER, HANTS.

TEL: WINCHESTER 5095

Midlands Branch: PEEL HOUSE, LICHFIELD STREET, BURTON-ON-TRENT Tel: 4690





*British Registered Design*

# TWYFORDS

No. 2642P/1 "Ceramant" Vitreous China Lavatory  
31" x 19"

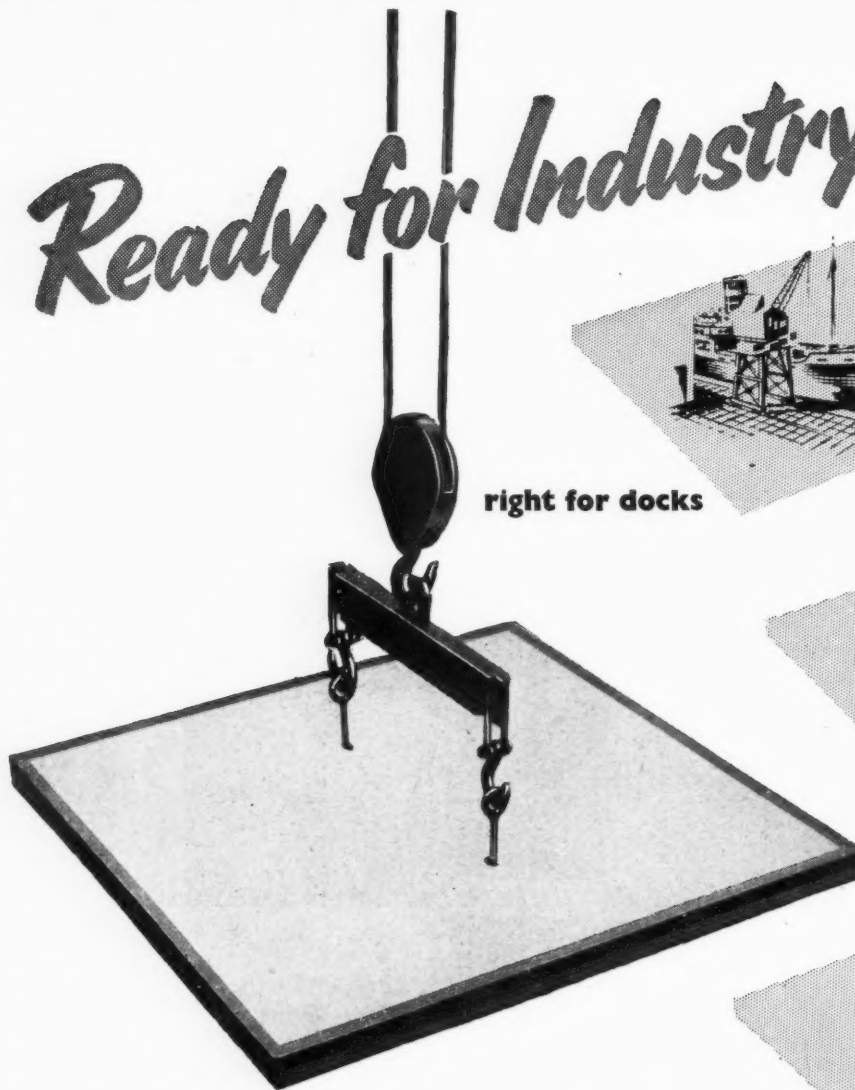
*Selected by*

THE COUNCIL OF INDUSTRIAL DESIGN  
for the opening exhibition of well designed products at  
THE DESIGN CENTRE for British Industries  
HAYMARKET, LONDON

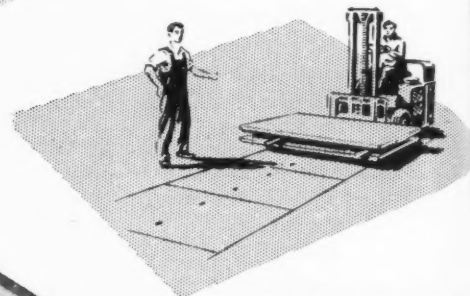
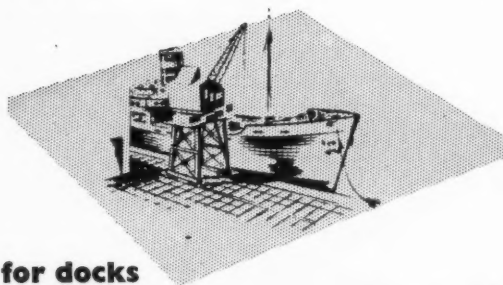
TWYFORDS LIMITED · STOKE-ON-TRENT · STAFFORDSHIRE

also at Africa House · Kingsway · London W.C.2

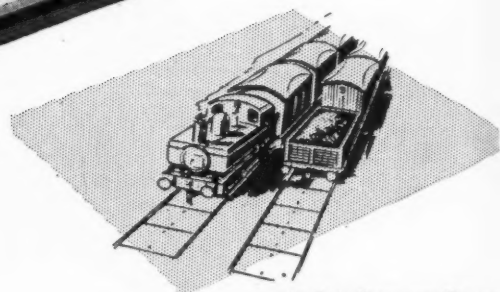
# Ready for Industry!



**right for docks**



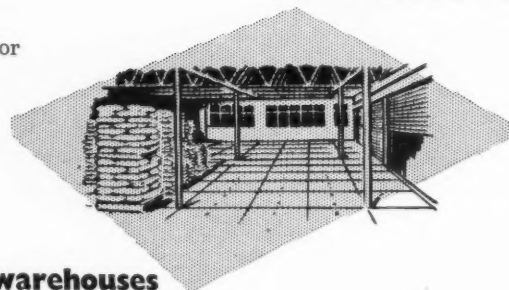
**right for foundries**



**right for railway**

A Stelcon Raft floor will take the heaviest traffic the moment it has been put down. The Rafts\* are simply laid on a bed of compacted sand, so dispensing with a sub-floor, and can always be picked up and laid elsewhere as required. The use of Stelcon Rafts shortens the time to get into production when building new factories or replanning existing works. As to the working life of Stelcon Rafts—they are doubly reinforced concrete, having a Stelcon Steel Clad wearing surface, bound in angle iron. Many a Stelcon Raft floor has already lasted 20 years without costing a penny in maintenance.

\* Approximately 6½' square.



**right for warehouses**

## Stelcon 'RAFT' FLOORS

**strong — mobile — adaptable**

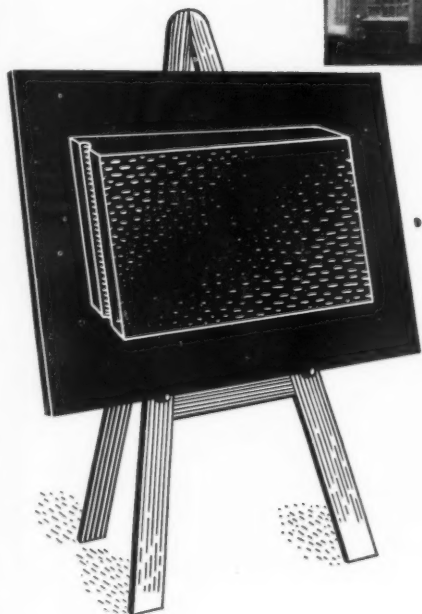
*Please write for details of Stelcon Floors, including Stelcon Anchor Steel Plates—Stelcon Steel Clad and Mineral Clad Flags*

# School Construction with **LIGNACITE**



The George Tomlinson County Primary School  
**LEYTONSTONE**

Architect:  
H. Conolly, F.R.I.B.A., County Architect, County Council of Essex



## **SAVES LABOUR**

Lignacite Blocks can be laid in less than half the time of Brickwork and can be sawn, chiselled, drilled, channelled or bolted. Lignacite can be screwed and nailed without plugging.

## **REDUCES WEIGHT**

Lignacite Blocks are half the weight of concrete, yet load bearing to all domestic requirements.

## **IMPROVES INSULATION**

Lignacite walls provide excellent sound and heat insulation, the latter showing a recurring saving over the years.

## **MEETS FIRE RESISTANCE REQUIREMENTS**

A recent Fire Resistance Test conclusively proved the stability, integrity and insulation value of Lignacite. A non load-bearing Lignacite wall fulfilled the test requirements of B.S. 476/1953, providing fire resistance of the four-hour grade.

*If you would like further particulars we should be pleased to forward our illustrated Brochure on request.*

# LIGNACITE

TRADE MARK

## **LIGHTWEIGHT BUILDING BLOCKS**

**LIGNACITE (North London) Ltd.**, Meadgate Works, Nazeing, Essex.  
Telephone: Hoddesdon 2277

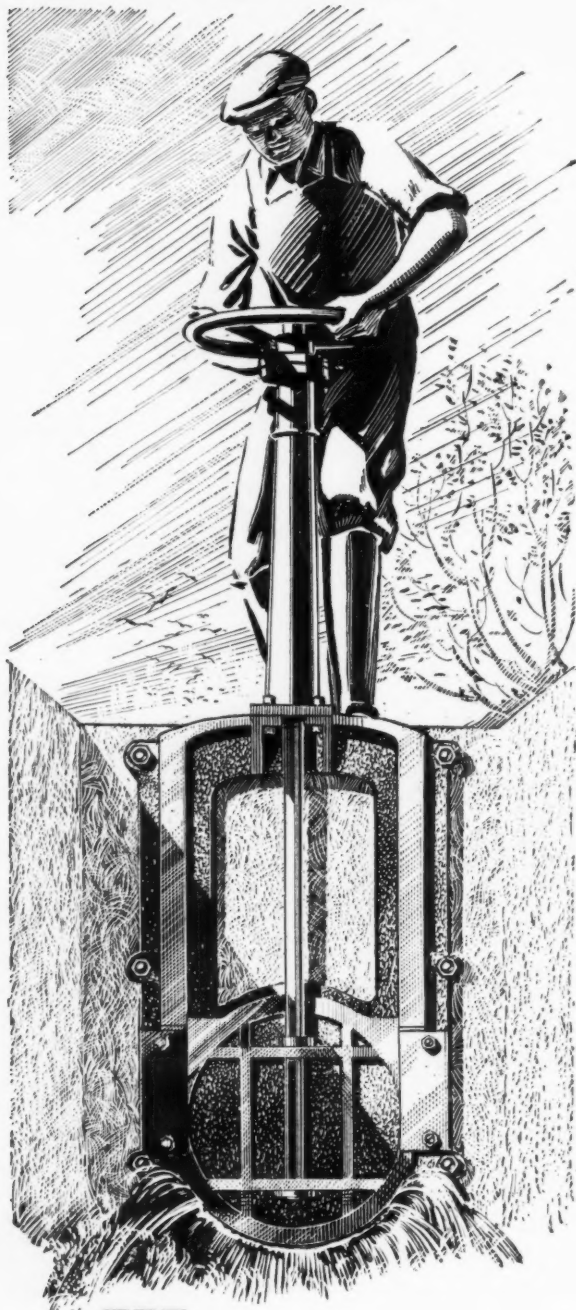
**LIGNACITE (Home Counties) Ltd.**, Bracknell, Berkshire.  
Telephone: Bracknell 666

**LIGNACITE (North Eastern) Ltd.**, Whitley Bridge, Nr. Goole, Yorks.  
Telephone: Whitley Bridge 354/5

**LIGNACITE (South Eastern) Ltd.**, Ninfield, Sussex.  
Telephone: Ninfield 345.

**LIGNACITE (Brandon) Ltd.**, Brandon, Suffolk.  
Telephone: Brandon 350.

**LIGNACITE (Fordingbridge) Ltd.**, Fordingbridge, Hampshire.  
Telephone: Fordingbridge 2177.



**WE** MANUFACTURE  
A WIDE RANGE OF  
PENSTOCKS, VALVES AND GENERAL FITTINGS  
FOR SEWAGE PURIFICATION WORKS  
AND MAKE SPECIAL MENTION OF:

**AMES  
CROSTA  
MILLS  
AND  
COMPANY  
LIMITED**

HAND STOPS  
HAND-LIFTING PENSTOCKS  
RECTANGULAR PENSTOCKS  
CIRCULAR PENSTOCKS  
WEIR PENSTOCKS  
MOTOR-OPERATED PENSTOCKS  
FLOATING OUTLETS  
DECANTING VALVES  
SLUDGE PLUGS AND VALVES  
SLUICE VALVES  
FLAP VALVES

**OF HEYWOOD LANCASHIRE**

THE SPECIALISTS IN THE PURIFICATION OF SEWAGE  
LONDON OFFICE: ABBEY HOUSE, VICTORIA STREET, S.W.1.

CW 3407



**Tenby**  
**PLASTER-MASTER**

**Fits  
just  
right  
-always  
cuts installation  
time and costs  
and automatically  
ensures correct  
levelling**

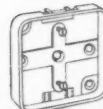
No separate adjustment or packing is necessary to bring depth switch assemblies perfectly flush with plaster surfaces—not with the Tenby Pilot 'Plaster Master'. By simply tightening two cover screws, the accessory is automatically raised to the correct level in relation to depth of plaster. Simplifies installation . . . saves time and trouble . . . cuts costs . . . complete rigidity ensured. This ingenious self-adjusting accessory forms an integral part of the base of all Tenby Pilot plaster depth pressed steel boxes, which are available for various types of 5 amp AC/DC wiring—T.R.S. wiring, oval grip and round grip conduit wiring, and  $\frac{3}{4}$  in. screwed conduit wiring.



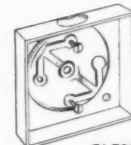
76 XI



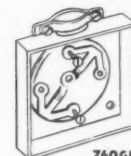
76 PI



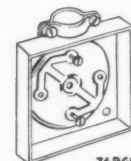
76 BMI



76 TRI



76 OGI



76 RGI



76 CSI

**S.O. BOWKER LTD.**

Tenby WORKS · WARSTONE LANE  
BIRMINGHAM 10 Telephone CENTRAL 3701

London & Home Counties Office & Store:—34-36, Oxford Street, W.1.  
Telephone: M15500 4895. Manager: H. Harding.  
Manchester Office & Store:—81, Mosley Street, Manchester.  
Telephone: CENTRAL 0251. Manager: H. Altherton.  
Yorkshire Office & Store:—5, Park Place, Leeds 1.  
Telephone: 34941/2 (Two Lines). Manager: G. Sonner.  
Glasgow Office & Store:—A. Roy Duff, 73, Robertson Street, Glasgow C. 2.  
Telephone: Glasgow C21044 4952.  
Representative for South Western Counties and South Wales:  
W. M. Walker, 23, Bloomfield Grove, Bath, Somerset. Telephone: Bath 60255.  
Stockists for Northern Ireland:—Bell & Hull Ltd., 17, College Street, Belfast.  
Telephone: Belfast 26255.  
Stockists for Eire:—Nagert & Cooper Ltd., Nisco House, Lower Abbey Street, Dublin. Telephone: Dublin 79437.

Write or phone  
for  
**TENBY**  
'Plaster Master'  
Publication  
No. 76/1154



In the  
**"PHOENIX AREA"**  
phone  
**RAINHAM 3311**



FOR **Protim** PROTECTED TIMBER

PHOENIX are Authorised Protim Processors and can give you quick delivery of Protim protected timber. Protim is a new water-free wood preservative which gives permanent protection against Dry Rot, Woodworm and Termites. One of its principal constituents is Shell's famous Dieldrin insecticide, which is 8 to 10 times more effective than D.D.T.

Because Protim is water-free, the seasoned state of timber is unaffected by impregnation, thus avoiding the expense and delay of kilning or re-seasoning. Furthermore, no shrinkage or warping can occur as the result of Protim treatment.

Protim has been tested to B.S. 838 and conforms to B.S. 1282 and Building Bye-Laws. Protimised timber has been used on contract work for Government departments, Services, Nationalised Industries and Local Authority housing.

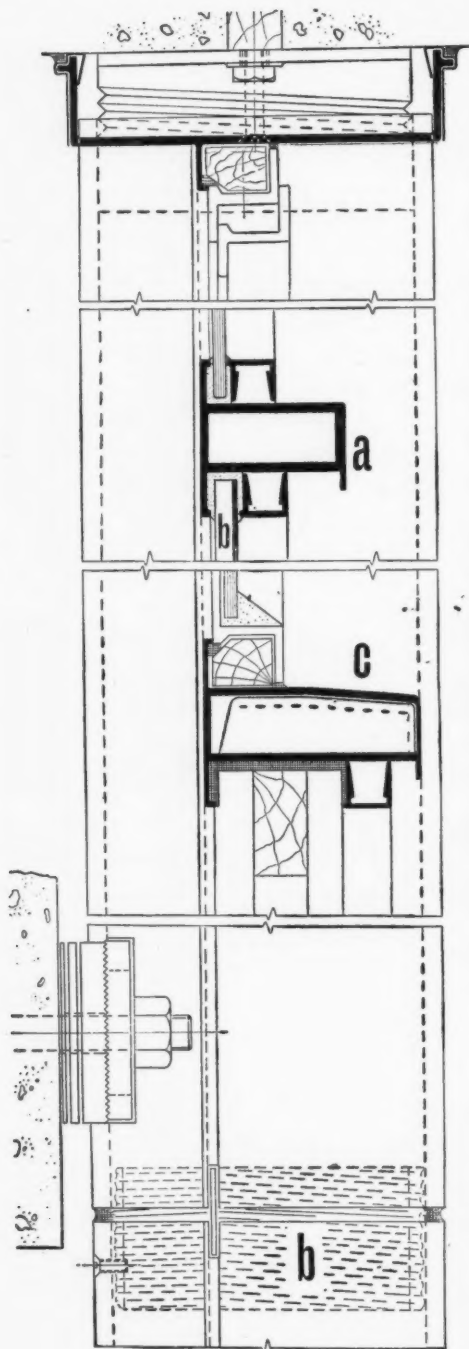
'Phone Phoenix at Rainham 3311 for service.



**THE PHOENIX TIMBER CO. LTD.**

FROG ISLAND · NEW ROAD · RAINHAM · ESSEX · Telephone: RAINHAM · Essex 3311

T16.78



**a** Drip bars on all horizontal members divert rainwater from the wall surface.

**b** All spigots are channelled to afford a good key for non-setting mastic. Glazing wings are rebated and there is a nib on the glazing bead for the same purpose.

**c** Sloping-sill transoms are available as an added precaution.

## Weathering in Curtain Walling

Experience of curtain walls both here and in North America emphasises the imperative need for adequate weathering. In a heavy wind-driven rainstorm the build-up of water on a wall area constructed of non-absorbent materials constitutes a severe test of the joints.

An exhaustive investigation of weathering problems was carried out during the development of Wallspan, and the three main conclusions arrived at have been embodied in the patented Wallspan design.

**1**

External joints should be kept to a minimum. The main Wallspan members are manufactured as one-piece extrusions to accomplish this.

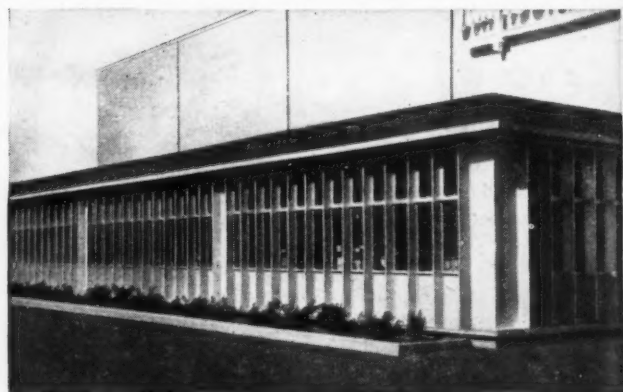
**2**

External joints should be weathered by the form of their construction—non-setting mastic forming a plastic cushion or bedding for the component members. All Wallspan members have been designed with this basic requirement in mind, and are provided with suitable retaining grooves and flanges to retain the mastic in position.

**3**

Horizontal components should be designed so that rainwater is thrown clear of the wall surface, preventing 'build-up' lower down the wall. All Wallspan transoms and sill members are provided with drip bars for this purpose.

As a result of its exclusive weathering features, Wallspan is satisfactory even in climates where heavy squalls and downpours are a seasonal characteristic.



**Wallspan is going up all over the world!**

In the new Simpson Sears Building in Peterborough, Ontario (Architects: John B. Parkin Associates) extensive use has been made of Wallspan for the ground floor elevations. The use of 9" mullions creates an interesting contrast of light and shade to offset the impressive upper facade.

Further details from **Williams & Williams Ltd.** Reliance Works, Chester

in North  
e weather-  
of water on  
onstitutes

blems was  
d the three  
ed in the

tain Wallspan  
accomplish this.

of their con-  
e cushion or  
members have  
d are provided  
the mastic in

rainwater is  
'dild-up' lower  
rs are provided

Wallspan is  
and downpours

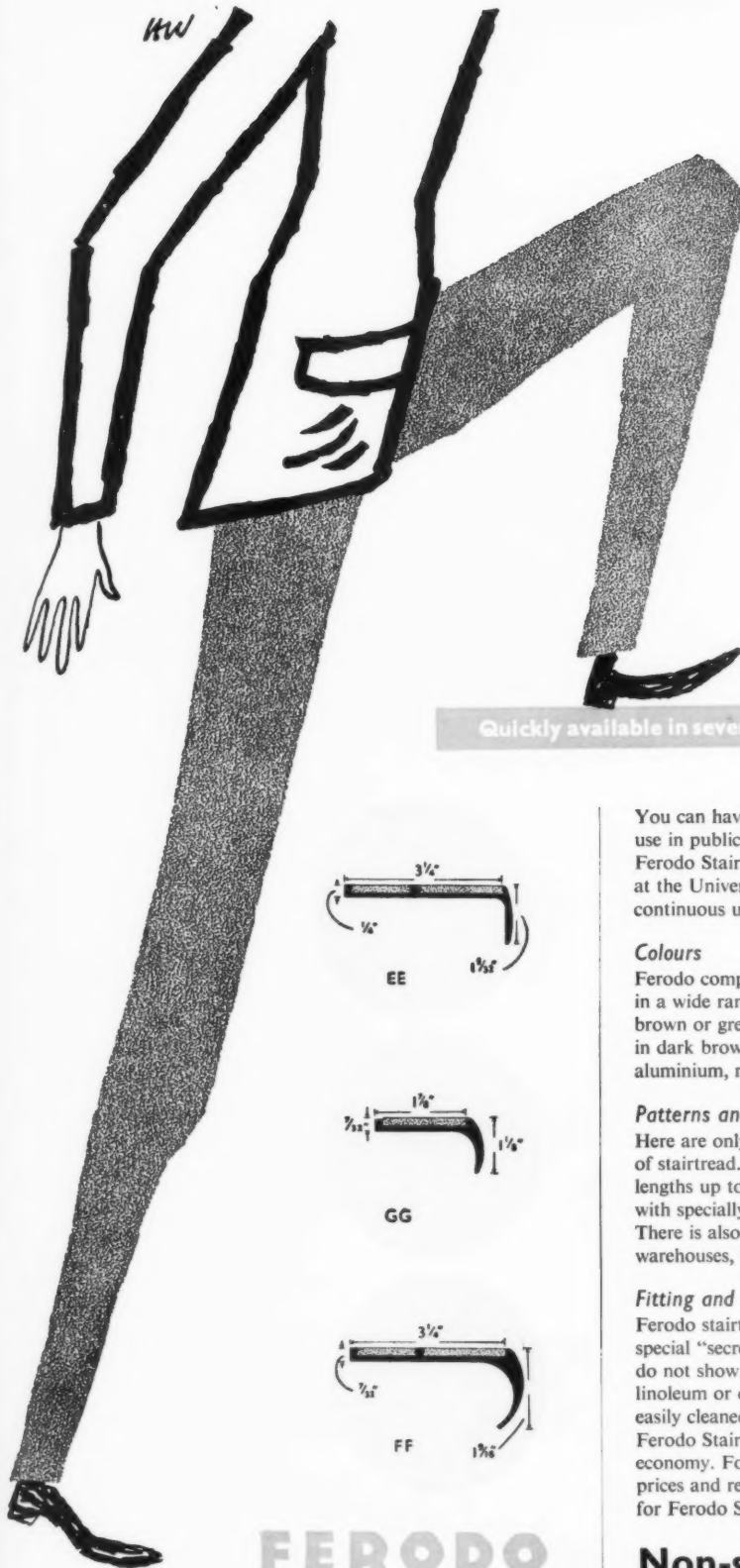


ugh, Ontario  
use has been  
The use of 9"  
and shade to

Chester

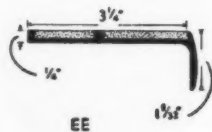






## FERODO Stairtreads

Quickly available in seven colours and twenty-two shapes



FERODO

You can have rapid delivery of Ferodo Stairtreads, for use in public buildings, offices, hotels etc. Ferodo Stairtreads wear extremely well. One set at the University Union, Manchester withstood 33 years' continuous use before renewal!

### Colours

Ferodo composition gives a non slip surface in a wide range of colours: red, white, blue, green, black, brown or grey. Ferodo Fabric is also available in dark brown. There is a choice of nosing colours too; aluminium, manganese bronze & silver bronze.

### Patterns and dimensions

Here are only three of the 31 types and sizes of stairtread. This very wide range of patterns comes in lengths up to 13'6" and curved treads are available for steps with specially shaped ends.

There is also a plain, steelbacked stairtread for warehouses, factories etc.

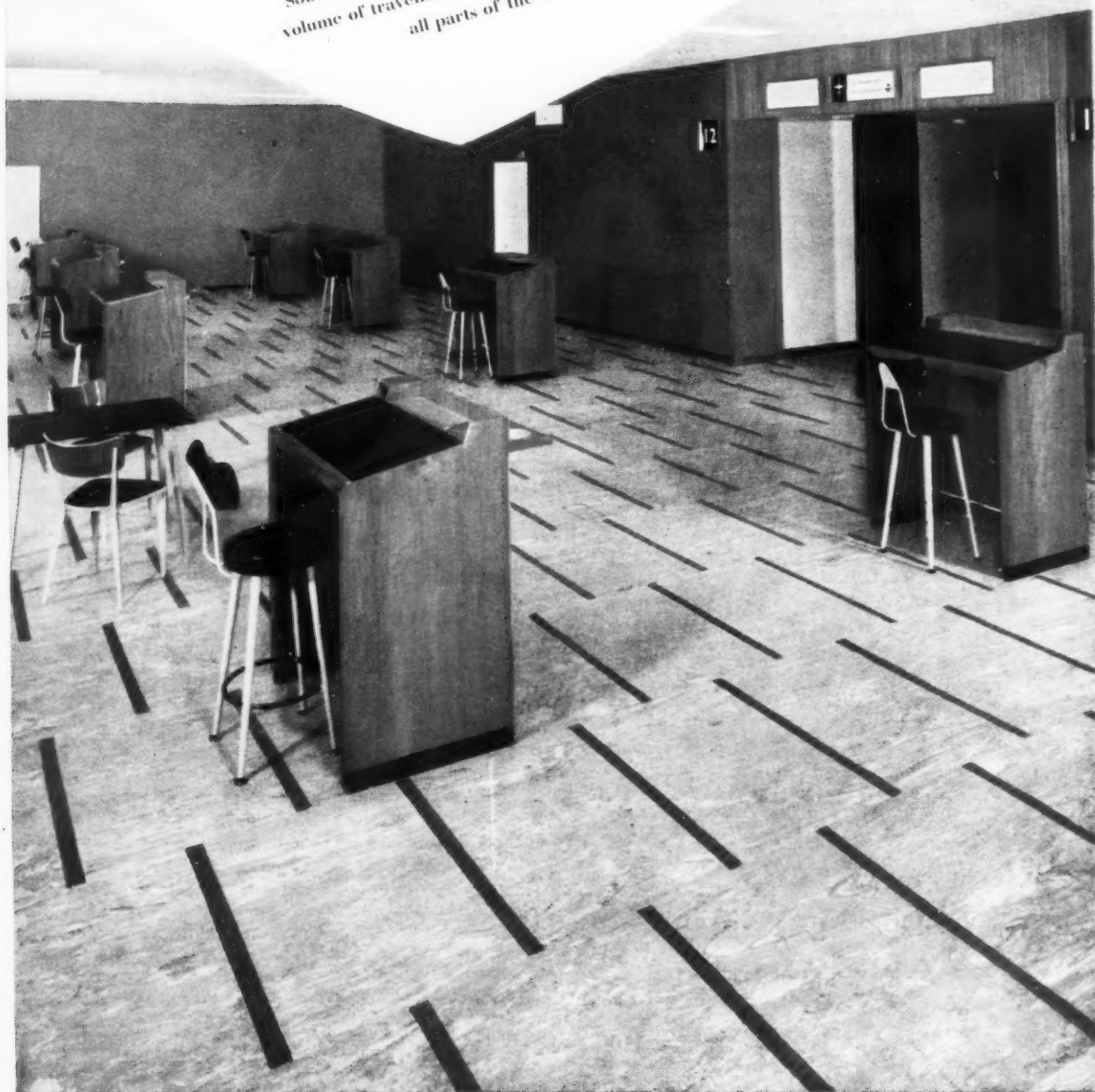
### Fitting and maintenance

Ferodo stairtreads are ready drilled and the special "secret fitting" feature ensures that retaining screws do not show. The treads may be backed with good quality linoleum or other flooring materials. The treads are easily cleaned, and need no other maintenance. Ferodo Stairtreads combine good appearance and safety with economy. For full details, prices and reference numbers for easy ordering, send for Ferodo Stairtread Catalogue No. 925.

## Non-slip Stairtreads

## Accent on Security

For the safe, sure foothold that only rubber can offer; for its resistance to wear under heavy traffic; for the ease with which it is laid . . . its quietness . . . its permanent good looks, Runnymede Rubber Flooring was chosen for the main Immigration Hall at London Airport where, in the newly-opened South East Face, Passenger Handling Building, an ever-increasing volume of travellers daily arrive from and depart to all parts of the world.



RUNNYMEDE RUBBER COMPANY LTD • 6 OLD BAILEY • LONDON • E.C.4. • TELEPHONE CITY 2471

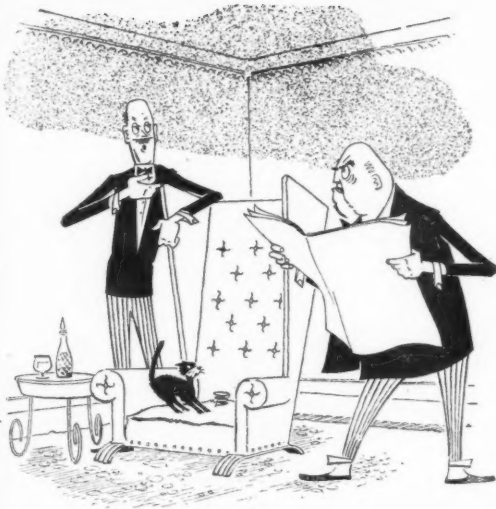


THE ARCHITECTS' JOURNAL

No. 3194 Vol. 123 May 17, 1956

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

Subscription rates: by post in the U.K. or abroad, £2.10s. 0d. per annum. Single copies, 1s.; post free 1s. 3d. Special numbers are included in Subscriptions; single copies, 2s.; post free, 2s. 3d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for 30s.; carriage, 1s. extra.



Featherstonechaugh's livid!

What about?

'Pears they asked him to present  
the prizes to the darts team  
at the local last night.

Nothing wrong in that.

No, but Featherstonechaugh hasn't been  
to the "Cat and Fiddle" since the  
new people took it over. Didn't know  
the place. Fancy mirrors in pink  
and blue . . . glass screens . . .  
cocktail bar . . . all the trimmin's . . .  
even the you-know-what . . .  
and half the county there.

Our Newcastle friends again. Telephone 28383?

Beyond a doubt. Featherstonechaugh  
flew off the handle. Told 'em if they  
couldn't consult the Squire before they  
turned his pub into a gin-palace, they'd  
better get Reed Millican\* to present  
their damn' prizes—and swept out.

Good old Featherstonechaugh!



.. ARTISTRY IN



GLASS

NOT QUITE ARCHITECTURE\*

CRICKET NEWS:

VITRUVIANS† v. AA

Last week's match at Elstree

Frank Lloyd Wright scotched this fixture  
for 1951. He turned up to lecture at the  
AA and eleven thwarted students cut  
cricket. This was too bad. What if  
Donald George Bradman had been turn-  
ing out at Elstree that day? Surely they  
would have all cut their throats.

\*

They are very keen, the AA. They beat  
us wheezy pressmen last year. This year  
they won the toss and, batting first, at  
once began to chase the bowling. Bob  
Knott set his chin, chanced his arm and  
when he edged the quick ones edged  
them high and safe. He is a forearm  
player. Thick strong forearms cut the ball  
to third man, forced it past mid-off and  
dabbed it away on the leg-side.

\*

First to suffer were W. K. H. Bowden, of  
*Architecture and Building*, and the great  
Middlesex pace-bowler, Self. P. Arrand  
too batted nicely (a first-year face in cap  
and spectacles) and not until the GEC's  
leg-spinner Roy Hart came on to york  
Knott for 38, and film-and-TV star Bruce  
Beeby to exact, from the infallible Editor  
of *Whitaker's Almanac*, an LBW decision  
against Arrand for 20, not until then  
could the Vitruvians forget the chilly

\* Meaning exactly what it says.

† A team drawn from the technical press, invariably  
helped out by personalities from stage, screen, Rowton  
House and advertising.



### *Pre-Patent Glazing*

A structure of horizontal and vertical members of wood and brass with in-fill of obscured glass:—that sounds “jolly modern,” but the example above is the work of Robert Adam and formed part of the panelling of the Glass Drawing-room of Northumberland House. Carefully stored away when the house was pulled down in the 1870’s these panels lately came into the possession of the Victoria and Albert Museum, where they are now on exhibition. They show English Neo-Classical interior design at its most sumptuous and inventive, the glass panels being back-gilded in crackled gold-foil to imitate green and purple porphyry. Such cavalier treatment of the nature of

materials would not serve today, but the technique can hardly fail to be suggestive in the era of patent glazing, and might serve to spark off some more imaginative materials for spandrel filling. Few architects nowadays seem to realize how rich the V and A has become in large scale exhibits of this kind, and other recent additions to the range of interiors on show include two more fine eighteenth century examples—the Boudoir of Madame de Sérilly, and an unidentified oval room from the Chester Beattie collection (see pictures on p. 469). Both date from about 1780, both are masterpieces of panel-work, and both create noble living-spaces within extremely small floor areas.



wind and look for blueness in a cloudy sky.

But it was not to be. The rain came and with it K. Kwan from Hong Kong. He is a terrorist batsman. He lurks. He strikes. He lurks again. The good ones he brushed aside disgustedly, like a cat-hater, and he picked out the bad ones as they left the bowler's hand and hit them with prodigious savagery. In his 32 not out there were two straight skimming sixes into private gardens, and one straight drive that ought to have broken a stump at the bowler's end. As it was Hart got a brave fingertip to it so that ex-evangelist R. Ringshall was run out by a yard. Kwan was murder. He looked good for 500. Between strokes he impassively chewed gum.

Batting at No. 5 S. K. Sharma from Ceylon played a most cultured little innings, stroking the ball off his toes, glancing it with languor and supplely persuading it about the field. Very good. But the rain now would have driven even footballers indoors and the ball to bowl with felt like a wet pear. In we went to tea and tuck, and R. Case sportingly (it was 125 for 3) declared.

It was still raining after tea. Beeby, an Australian, whose egregious batting grip has at last been corrected at an English cricket school, opened the innings with little George Cruickshank, whose motor-car had conked out at Mill Hill, who had missed his lunch, whose hair in the rain had curled up like wood shavings and who had fielded in a borrowed sweater twice his size. No, not his day. Back he walked, bowled first ball of the innings by Ringshall, the scorebook reading time in 5.3, time out 5.4. Beeby held out, however, against some good bowling by Ringshall and Sharma, and soon the bearded captain of the Invalids, A. Boyd, began to knock the ball about with sureness and skill, making up for that twisty little skier that he had grassed when fielding in the gully, shaping for it as if he were trying to climb up a bell-rope. They were both in command. Should either fall there was always the great Middlesex and England forcing batsman, Self, to knock the runs off at No. 4, and failing him other invincible Vitruvians whom rain finally prevented from proving themselves. At 22 for 1 the cold, wet, miserable affair was abandoned as a draw.

ROBIN MUDIE

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury, O.B.E., Hon.A.R.I.B.A. (2) *House Editor*, J. M. Richards, A.R.I.B.A. (3) *Executive Editor*, D. A. C. A. Boyne. (4) *Editor Information Sheets*, Cotterell Butler, A.R.I.B.A. (5) *Editorial Director*, H. de C. Hastings.

TECHNICAL EDITOR: (6) Lance Wright, A.R.I.B.A.

SPECIALIST EDITORS\*: (7) Planning (8) Practice (9) Surveying and Specification (10) Materials (11) General Construction (12) Structural Engineering (13) Sound Insulation and Acoustics (14) Heating and Ventilation (15) Lighting (16) Sanitation (17) Legal.

ASSISTANT EDITORS: (18) *Chief Assistant Editor*, Kenneth J. Robinson. (19) *Assistant Editor* (Buildings), L. F. R. Jones. (20) *Assistant Editor* (Production), W. Slack. (21) *Assistant Editor* (Information Sheets), V. A. Groom. (22) *Assistant Editor* (Costs), J. Carter, A.R.I.B.A. (23) *Photographic Department*, H. de Burgh Galwey, W. J. Toomey. (24) *Editorial Secretary*, Monica Craig.

\* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous

## The Editors

### BUILDING HIGH

THE subsoil of London, while varied, will in many parts carry, without unduly costly foundations, buildings of up to 300 feet in height. Structurally there are, of course, no great difficulties, the only obvious disadvantage is that, so far, the British building industry, unlike those on the Continent, finds it more expensive, rather than cheaper, to go high. The LCC have issued a Town Planning Committee Report (an extract from the Council agenda) on the problem of high buildings in London which is printed in part in this issue. It is a sensible, concise document which will be read with interest by architects and planners in other dense urban areas who naturally tend to expect an organization of the size and quality of the LCC to lead the way. There are, however, three points on which the report might have been more specific. First, the fact that high buildings, even when used to make possible the open treatment of land at ground level (which should, surely, be obligatory), can create local traffic and pedestrian congestion at peak hours. Second, the report's concern as to whether a high building will "disrupt the pattern of existing development or obtrude itself on the skyline to the detriment of existing architectural groups" is an aspect which must be treated cautiously. A town is, or should be, in a constant state of change. Except for a few special monuments we must learn to accept some obtrusions to existing skylines in order to obtain the townscapes of the future. The progressive-minded who wish to speed-up the change should be encouraged, and their energies directed to the spot where they can make a positive contribution. And this is the third point to which the LCC could give further study. They appear to rely on the developer approaching the LCC and making a case for permission to build high. Could not the LCC take the more positive step of listing forthwith certain sites or areas on which high re-building would be not only permitted but encouraged?

### THE NEW ART PATRON

As, in some people's opinion, all art is useless, it is obviously in danger of being the first item in a budget to be cut at a time of financial crisis. Great credit should therefore be given to the LCC for deciding to spend up to £20,000 a year on buying or commissioning works of art. The LCC have received the approval of the MOE, the Arts Council and others, to this proposal, and as a result of discussion, they consider that panels of artists should be formed from which individuals

should be chosen at need. It is significant that while it has been suggested that the panels should be representative of all tastes and styles, and that they should be frequently reviewed so as to give full opportunity to young artists, the LCC's architect and art inspector in the education officer's department, and persons of standing in the artistic world (to be suggested by the Arts Council) will advise on the composition of the panels. One is therefore assured of the quality of the artists patronized. It only remains for other public authorities to follow the same enlightened path.



#### SOVIET ARCHITECTS LOOK AT BRITAIN

Academician Karo Alabyan, the head architect of a large office in Moscow, a Russian professor of town planning, and two structural engineers, who have been touring this country for the past few weeks, gave their comments, thanks to the interpreting of Lubetkin, on what they had seen to a meeting of the SCR last week. We've had English architects commenting on Russian work, but not, as far as ASTRAGAL can recall, *vice versa*.

\*

They seemed to be genuinely quite impressed with much of what they had seen: our treatment of new towns as organic units, our carefully informal housing layouts, our housing standards, our avoidance of corridor streets and emphasis in a variety of heights. All rosy, rosy, sincere compliments all the way—save for one thundering crack on

the complacency-bone. "The use of industrialization is not as well developed here as in our country," said Alabyan's bass voice *via* Lubetkin's tenor, "whereas in school building we have seen elements in the factory, in domestic architecture *in situ* work prevails in a large percentage of cases. Yet one would have thought that domestic architecture, which depends on repetition, would have been a fruitful field for industrial standardization." Obviously no one had told the Russians about the frustratingly small scale of housing programmes developed at our local authority level, but even so it is depressing to have visitors expressing wonder at a state of affairs which has been obvious to most for many years.

\*

In the questions and answers which followed several in the audience criticized Russian standards of design (thinking of our LCC and Coventry, no doubt, and forgetting the City and much of what is to come, to judge from the exhibition now at Burlington House). The Russians, apart from pointing out climatic considerations, accepted the criticism. In reply to a further question they stated that there were only 15,000 architects in Russia, and they had difficulty in understanding how all the British architects could find work and a livelihood. The answer might lie in the very much greater number of Russian engineers. ASTRAGAL expects that, in addition to greater standardization, a much greater proportion of the designing and detailing is carried out by engineers.

#### WHY WORRY?

Ever feel a twinge of doubt over what materials to use where? So does BRS, I suspect, but so does not the *Evening Standard's* Eileen Ascroft. In a quiz (How good is YOUR taste?) she asks "What is the most suitable floor

covering for a living room with concrete floor?" "Which is the most suitable type of wall covering for: (a) a nursery, (b) a bathroom, (c) a kitchen?"

\*

For the floor you must use "Carpet, with a paper-type underfelt," and for the nursery, plastic emulsion paint that can be washed down; while for the bathroom or kitchen you can have a heat- and damp-proof wallpaper or plastic emulsion paint again. Really quite simple you see: don't bother to think about costs or the relative virtues of cork, hardwood or plastic tiles for your floors—forget all the sheet materials for walls—just take it as read and don't argue.

#### OXFORD EVENT

*The Architectural Review*, I am told, will soon be bringing out an article about the Oxford College barges, that delightful range of water-borne grandstands that enliven the banks of the river and serve as a reminder that the nautical tradition can be gay as well as grim.

\*

An appreciation of the barges (which includes some intriguing historical background—many of them were acquired second-hand, for example, from London livery companies) is combined with a criticism of the boathouses that have lately taken over some of their functions but have failed to carry on their architectural traditions.

\*

A series of paintings that Kenneth Rowntree has recently made of the barges (some of which will illustrate the *Review* article) will be on view at the Ashmolean—appropriately during Eights week, from next Monday. ASTRAGAL has seen the paintings and recommends a visit. "Gowns," his invitation says, "will not be worn."

#### COUNCIL ELECTIONS

When the modern movement in architecture first began, and pioneers stood out for all to see in the black and white photos of the glossies, the young progressive in the provinces knew at once who to vote for in the RIBA council elections. A designer in the modern style could not help but be progressive. But what does the provincial architect do now that nearly all the council are followers (in their

individual ways) of the modern movement? He reads, of course, the candidates' election statements published in the JOURNAL. (See page 507 in this issue.)

\*

But if these statements only confuse, there are points which the voter-in-the-provinces should bear in mind. The major issues before the RIBA at this precise moment are raising architectural standards, raising remuneration, and maintaining unity in the profession. Amongst the galaxy of able men up for election there are some whose experience in teaching and in practice peculiarly fits them for these tasks. Their publicly spoken and written words—and, not least, their actions—show how they are aware of the dangers before the profession. Robert Matthew and Gardner-Medwin have the widest experience, of course, and the value of their judgment is immense, but Ling, Pooley, Cleeve Barr, Le Maré and Gwyn Morris, to name a few, are all men who know from long years of salaried work in public offices how close, and how dangerous, a split in the profession might come.

\*

Bryan Westwood, who as AA President, has had a year on the council has, by all reports, shown a quick and sympathetic grasp of the troubles that could lie ahead for all sides of the profession, and of the policies to combat them. And, of course, there is Stirrat Johnson-Marshall, the man who, in forming the design teams which have helped to put British schools at the top, has also gone far towards forming the type of office organization which is both efficient and pleasant to work in, and well-paid into the bargain. His experience and advice could be invaluable at this stage in the development of the profession.

In addition to the glass inner-curtain walling shown in this week's frontispiece, the V & A are also showing two small but extremely attractive late eighteenth-century panelled rooms. Top right, an oval room, measuring 13 ft. 6 in. by 10 ft. 6 in., by 13 ft. 6 in. high to the springing of the dome, probably from north Italy. The ceiling is panelled in glass, the back of which is painted grey and off-white. Walls are white and gilt, the bed has blue silk damask hangings, and a mirror to the canopy. Right, another deceptively sized room, 16 ft. high, but with a floor area of about only 125 sq. ft., designed by Claude Nicholas Ledoux, and painted by Simon de la Rottière, as a boudoir for Madame de Sérilly.





## OVER THE BORDER

Congratulations to the RIAS on their revamped quarterly magazine, now dignified by a title of its own—*Architectural PROSPECT* (their capitals)—and enlivened with a gay Zipatone collage on the cover and whistle-clean typography inside. The articles cover a good range of material, from profiles of RIAS worthies to those unusually praiseworthy spec houses at Joppa, designed by Alan Reiach; from profiles of new Scottish buildings to Scots practitioners of the allied arts (in this case mural painting), and from office experiences in the land of Nja Tak (Aalborg to you) to campus experiences in the land of Phi Beta Kappa (Cornell University to us). Altogether a bright, stimulating magazine.

## YOU CAN'T GET THE WOOD

ASTRAGAL, who has more than his share of the English architect's traditional mistrust of anyone who travels a long way to sell him something, had some difficulty in steeling himself against the charm of Professor Laserre, who is talking to architects up and down the country on the good use made of timber in Canada, at the behest of the Canadian Lumber Manufacturers' Association. Peering about for the nigger in this particular woodpile, he came to realize what an impossible task the Professor had been set. Broadly speaking, we cannot get the timber because we cannot find enough dollars to pay for it, and if we had it we could not use it because the people who lend us money to build don't fancy the fire risk.

Laserre's way of getting over the first difficulty was reasonable enough; i.e., that our manufacturers should earn more dollars for us by making products which would sell in Canada; but his way of getting over the second did not seem so good. This was to overcome rational and irrational fears alike by building small houses with a timber frame inside a 4½-in. brick skin. This struck ASTRAGAL as a real belt-and-braces affair, which should dissipate any advantages on the site which timber construction has to offer: it is not half as promising as the LCC's analogous notion of putting a timber maisonnette inside a multi-storey concrete frame.

And how different building problems look in Canada! ASTRAGAL, as the harassed owner of a stuccoed house, gained much strength from the knowledge that it is "a great satisfaction to many people in Canada to know that every five years they have an opportunity to obtain with a coat of paint what looks like a new and different house." Boy, hand me my Davy Crockett cap!

## DON'T FILE THIS . . .

. . . just read it. I've been asked to tell you that you still have time, although the closing date was May 14, to apply for your 1955 index for the JOURNAL's Technical Section.

ASTRAGAL

## N E W S

## RIBA

## New President

Mr. Kenneth M. B. Cross who is to be the new President for the session 1956/57, was born in 1890 and educated at Felstead School and Caius College, Cambridge. He received his architectural training in articles to his father, Alfred W. S. Cross, and at the Cambridge University School of Architecture, setting up in private practice in 1919 and entering into partnership with his father in 1922.

He is (says the RIBA) a leading authority on the design and construction of swimming pools. He has published *Swimming Baths* (1928) and *Modern Public Baths* (1938). His other publications include *Practical Notes for Architectural Draughtsmen* (1927) and contributions to the technical press.

He has served on the RIBA Council since 1950, as well as for the 1937-38 session. He was honorary secretary of the Institute from 1952-55 and in July 1955 was appointed a vice-president.

He has also served on many committees of the Institute.

## Signing Your Building

The council of the RIBA have given approval to the recommendation that members should, wherever possible, make use of a specially designed standardized sign board (shown below) on all building jobs.

They consider that the repetitive value of such boards will provide excellent publicity for the profession and indicate to the public the large number and variety of jobs on which members are engaged.

The board will measure 20 in. by 32 in.



ARCHITECTS

ICTINUS AND CALLICRATES  
66 PORTLAND PLACE LONDON W 1

made of plastic liner  $\frac{3}{8}$  in. thick, with a stoved enamel finish and eyeletted for easy fixing. The top half of the board will carry the RIBA Badge and the word "architect" or "architects" in grey on a white background, while the lower half will carry the name of the architect or firm and the address in white lettering on a dark green background.

Sufficient space has been provided on the lower half for affixes after the name and for the address. Although the illustration shows the name of a firm and an address which occupies only two lines, a total of three lines can easily be accommodated by a slight adjustment of layout.

The boards can be obtained from The Lettering Centre, 61-63 Borough Road, S.E.1, who will undertake to do a layout of the name and address for each architect ordering a board and will signurite the name and as agreed in standardized lettering. The charge for this, including package and despatch will be as follows: Single board, £6 3s.; four boards, £5 1s.; eight boards £4 13s.; Twelve boards, £4 6s.

There will be a small additional charge where the name and address occupies three lines instead of the normal two.

A prototype of the board can be inspected at the RIBA on application.

## DIARY

*The Mosaics of Ravenna.* Illustrated talk by E. A. Remnant. At the AA, 34, Bedford Square, W.C.1. 6.15 p.m. MAY 17

*Gracious Living.* 1750-1850. Gordon Rattray Taylor. At ICA, 17-18, Dover Street, W.1. (First of two lectures). Chairman: J. M. Richards. 8.15 p.m. MAY 17

*Burle Marx: Brazilian landscape architect.* Exhibition at the ICA, 17, Dover Street, W.1. Monday to Friday 10 a.m.—6 p.m., Saturday 10 a.m.—1 p.m. UNTIL MAY 26

*Hemel Hempstead—New Town From Old.* Exhibition at RIBA, 66, Portland Place, W.1. MAY 22-30



## FILE THIS WEEK

**The Industry.** Brian Grant writes about insulated asbestos-cement roof decking, prefabricated shelving, a new range of oil-fired boilers and a new gas cooker page 513

**Information Centre.** Reviewed this week: Max Bill's book on Robert Mailart, a text-book on structural and building work, a BSCA publication on single-storey portal frames, and a BRS digest on damp-proofing solid floors page 514

**Timber Article.** No. 10 in a series on "Design and Practice of Joinery" page 515

**Buildings Illustrated.** This is the first building devoted entirely to production to be analysed in the JOURNAL page 521

**Information Sheets.** The first is an acoustic ceiling; the second is a sink with the waste fitted into its back wall after page 534

**Working Detail.** A bridge in a school at Great Missenden after page 534



# CHOOSE YOUR LEADERS

*Once again we give space to those nominated for election to the RIBA Council to express their views on the issues which they consider should be the concern of the RIBA Council during the next two or three years. We are pleased to note that this year the great majority of those nominated, availed themselves of this opportunity to show their fellow members of the profession some of the subjects on which they are particularly concerned. Of those whose names are not printed, a few refused, but most were those privately nominated who, presumably, had not enough time to prepare statements, following our invitation of last week, before this week's issue went to press. And once again we ask the RIBA to take over this annual task from us.*

## REPLIES FROM FELLOWS

Nominated: SIR HUGH CASSON, JOHN MURRAY EASTON, PROFESSOR ROBERT GARDNER-MEDWIN, L. W. HUTSON, ARTHUR LING, PROFESSOR ROBERT H. MATTHEW, F. J. M. ORMROD, FREDERICK POOLEY, F. C. SAXON, BRYAN WESTWOOD.

SIR HUGH CASSON writes: I hope it does not sound too pompous to say that in my view the main concern of the RIBA should be the same now as always, i.e., to promote by every possible means the cause of Architecture . . . and if architects benefit indirectly as a result, then so much the better.

To achieve this aim of better architecture we need, as ever, continually to re-examine and improve upon our educational system, to work for unity within the profession, to encourage livelier public relations, to spend less time binding about our "rights" and more time in worrying about our "responsibilities" and how best to fulfil them. All this should keep us pretty busy in Portland Place during the coming year, and only the most cynical or ungrateful AJ reader will, I hope, suspect that we might do more for architecture (and thus for him) by designing better buildings than by spending hours in well-intentioned debate on his behalf.

JOHN MURRAY EASTON writes: To try to state one's views about RIBA policy in full view of a clear-eyed electorate concentrates the mind wonderfully in much the same way as in Dr. Johnson's opinion the near prospect of being hanged did. Rather than attempt to suggest what the RIBA should be doing in the next few years, I should prefer to try to describe my attitude of mind.

As architects we are and must be part of the activity of building in its widest sense, that is to say, of the business of provision of the whole environment of man. Therefore we must examine our relationship to all concerned with these

achievements, with the public in general, with the responsible authorities and, of course, with our nearest neighbour, the building trade.

If we can come to regard ourselves and be regarded as one section of the team which produces the towns, the roads, and moulds the countryside, rather than as a body superior and apart, we shall be able to find the direction in which we should move.

We are a learned society, and it would be still better if we came to be regarded as a creative society. If we can add the quality of imagination to our more sober virtues, we should not have to worry so much about stressing our importance. We should be needed.

PROFESSOR R. J. GARDNER-MEDWIN writes: Naturally I am interested in the RIBA and education. I shall use up my ration of words on three aspects of it.

1: *Full-time versus part-time education.* I am all for the full-time system, but if it is to ride the incredibly strong "back to apprenticeship" reaction it has to do much to strengthen itself. We hear that the school-trained student is impractical. Nonsense. The good one knows more of the really practical problems of design than the average architect who employs him. In my experience, a well-designed five-year course (which should include organized periods in offices, on sites and in workshops) can develop more practical "know-how"—combined, as it is in a school, with scientific and creative know-how—than any amount of apprenticeship and part-time lecturing. We need support for a higher standard of entry; for more

scientific teaching; for more grants to send students to full-time schools.

2: *Post-graduate study.* There should be more University Schools and they should all tackle this. Applied research and experimental building, in which members of staff as well as practising architects take part, should be the backbone of teaching. This would stimulate undergraduate work and at the same time help bridge the gap between the BRS basic research and practice. Necessary but difficult. We need support for it from the profession and from Government.

3: *Education in the underdeveloped territories of the Commonwealth.* The RIBA has a big responsibility here. The problem is to encourage a system of education fitted for the social, economic and scientific problems of design in these tropical regions, while helping the new Schools to maintain RIBA standards. This calls for sympathetic judgment and flexible administration: qualities which are fortunately present in the Council today.

L. W. HUTSON writes: There are many questions which affect the welfare of the profession of architecture and those who practise it in which the Council of the Royal Institute is rightly concerned. The recent trade union controversy is one example, while the proper balance between the local authority or official architects and the private practitioner is a perennial subject. But all these are domestic matters.

I am much more concerned with what I feel to be more urgent and fundamental considerations and feel strongly that the Council should devote a greater part of its time and energy to the position of the profession within the complex structure which constitutes the Building Industry and the contribution of that Industry to the increased efficiency of the nation. The Royal Institute should guide the profession in making its most effective contribution by improving the standard of professional service given by architects to the public, lest, unhappily, economic pressure impels us to relinquish a leading role in the Industry and to accept a subservient one.

It cannot be claimed that we enjoy the public confidence to the fullest extent. To do so, two things are necessary:—

(1) That we improve our Public Relations organization.

(2) That we see to it not only that our educational system is the best which can be contrived in widely varying and difficult circumstances but that we should work for improved professional training in all its aspects, including post-graduate and research work.

C R E A T I O N   W I T H   C R A F T S M A N S H I P



Accessory Bar at Messrs. Russell & Bromley Ltd., Eastbourne

Architects: Raglan Squire & Partners

Shopfitting Work by Courtney, Pope Limited

THE ASSOCIATED COMPANIES OF

## COURTNEY, POPE

COURTNEY, POPE LTD., Shopfitting, Architectural Joinery and Metalwork

COURTNEY, POPE (ELECTRICAL) LTD., Lighting Specialists

AMHURST PARK WORKS, TOTTENHAM, LONDON, N.15 • STAMFORD HILL 4266 (TEN LINES)

ARTHUR LING writes: (1) *Recognition*. Perhaps the most important job is to ensure that all buildings are designed by architects. Many local authorities still have no architect's department and extensive private building is taking place without architectural advice. "Outrage" is a challenge to the profession.

(2) *Remuneration*. Bound up with the question of 100 per cent. recognition is that of adequate remuneration. The impression given that the RIBA is unable to do anything itself and is not very enthusiastic about supporting other organizations needs dispelling. The recommendations of the Special Committee should be implemented as a matter of urgency but the desire of many members for trade union support has still to be met.

(3) *Civic Design*. In the past, architects have led the struggle to achieve large-scale architecture, i.e. town planning. Now there seems to be too great an inclination to leave it to others and criticize for their negative approach. It is time that architects once again gave a creative lead.

(4) *Education*. With the abolition of F.E.T. grants I think we should have another look at the whole question of selection of architectural students to ensure that those with the greatest potentialities for architecture enter the profession and get financial help, if necessary, for their training.

(5) *Research*. We need to take a comprehensive look at the architectural and building research being undertaken in the country as a whole. Is the research in universities, official and private organizations and offices related to any kind of plan and is financial support given on a consistent basis?

(6) *Practice*. Local experiments in closer collaboration with building contractors to reduce costs, make the best use of new techniques and find the right method of tendering should be paralleled by a similar collaboration and research at the National level with the RIBA taking the lead.

PROFESSOR ROBERT H. MATTHEW writes: I feel that it would be presumptuous for a candidate for election to the RIBA to attempt to lay down a policy line before he has had an opportunity to test by experience the feeling and atmosphere of the new Council. The policy can only be satisfactorily worked out in the Council itself. At the present stage in the evolution of the RIBA I believe there are a number of matters requiring attention and, indeed, some fundamental re-thinking of some of these has already taken place. These matters are:—

- (1) The structure of the RIBA itself.
- (2) The position of the younger architect, both in private and public offices.
- (3) The future relation of the RIBA to kindred bodies in countries formerly Dominions or Colonies in the Commonwealth, i.e., South Africa and India.
- (4) The relation between architecture and town planning. As we know, the tendency in the last few years has been for architects to turn their backs out of a sense of frustration on town planning, with disastrous results, as everyone can see. Here is an urgent matter for the RIBA to get to grips with once again and, if possible, without prejudice.
- (5) Some re-thinking of the whole field of architectural education is clearly required from the highest level of University education, including post-graduate study and research to the working out of part-time technical training in architectural schools whose governing bodies are satisfactorily constituted from the teaching point of view. The financing of post-graduate study is of particular importance at the present time and, as far as I know, the RIBA, through the Board of Architectural Education, has, in the past, given little thought to this matter. The constitution of the Board itself might also, with advantage, be reviewed.

F. J. M. ORMROD writes: I think the main issues concerning the RIBA are the structure of the profession, the status of the architect, remuneration and distribution of work. The RIBA is already engaged on these issues and is proceeding faster in some instances than in others. While some members may be more interested in one issue than another, I should say that a broad-minded attitude is to consider all question in relation one to another, with the intention of making the Royal Institute a completely unified body. This will produce the greatest scope of influence for the RIBA, which is the answer to most members' requirements. Structure is an internal affair and we must have our house in order if we are to effect the maximum influence elsewhere.

FREDERICK B. POOLEY writes: There are two very important issues which should be the immediate concern of the RIBA. They are:—

1. To continue the review of the profession started by the Shephard *ad hoc* committee, especially with a view to improving the position of qualified men in large offices. The aim should be to improve the status of the profession and not to lower it.
2. To start (even if it is only part of a long-term plan) a campaign for the re-

vision of the Architects' Registration Acts with a view to securing that all new buildings are undertaken by qualified architects. Whilst the unqualified are free to design and erect even the largest buildings, the status of the architectural profession must be lowered.

The pattern of employment in the architectural profession is changing, and more and more work is done in large offices and the number of small practices throughout the country is diminishing. Surely this is the time that the profession needs to be led by an active and progressive body; for these reasons I advocate common sense and more drive at the RIBA.

F. CHARLES SAXON writes: The immediate task of the Royal Institute will be to determine whether the profession can maintain its traditional status as leader of the building industry, and professional adviser—or alternatively whether it must accept as its role one of subservience to construction and engineering, thereby leading to salaried employment for all: and whether the architectural profession is merely a matter of business and negotiations for pay increases and mass production of members—or whether it still has that something more which made older architects so enjoy the profession. The Institute will too have to determine whether apathy and disinterestedness of members once qualified and accepted, can, or should be, overcome in the general interest of the profession. It is obviously wrong and bad for the profession that any major change should be attained by a *coup d'état* by a few, even in London, whilst the RIBA is so named.

It should be our endeavour to show the public that the profession is efficient, even if this means a higher standard of technological as well as architectural training.

To maintain the unity of the profession, whether one is in official public or private practice, is absolutely essential and the RIBA should discourage any tendency of any one part to form separate organizations or associations.

BRYAN P. WESTWOOD writes: As President of the AA I have served on the Council of the RIBA during the past year and have thus had an opportunity of forming my own opinion of what might be done from the top to improve the status of the profession. I believe the main issues at the present time come under the following headings:

- (1) *Design*. In matters of architecture which are of national concern the RIBA



**6,850 SQ. FT. OF BRILLIANT NEW LUMENATED CEILING**



*Photo by courtesy of  
Elliott Brothers (London) Ltd.*

With a Lumenated Ceiling, lighting is an integral part of the design of office, workshop or showroom. Light of even intensity is diffused from the whole ceiling area, free of shadows, glare or high spots. In premises of every size, this revolutionary lighting technique creates the conditions for improved efficiency. And the attractive, translucent surface of durable plastic modernises interiors by screening overhead piping and projections.

At Elliott Brothers (London) Limited, total Lumenated Ceiling area of 6,850 sq. ft. provides excellent lighting for three large working areas. In the small-part assembly shop of 3,150 sq. ft. shown here, a false ceiling has been erected above the Lumenated Ceiling. In the drawing office, of 3,700 sq. ft., the Lumenated Ceiling diffuses either natural daylight from the glazed roof or artificial lighting, to give an intensity of not less than 35 lumens at the drawing board.

*Write for illustrated leaflet  
which gives full details*



## **LUMENATED CEILINGS LIMITED**

*London Office : Alliance House, Caxton Street, S.W.1 Tel : Abbey 7113*

*Regd. Office : Thermotank Ltd., 150 Helen Street, Glasgow, S.W.1*

*South African Company : Thermotank S.A. (Pty) Ltd., Simmonds & Godfrey Street, Johannesburg*

TGA 19



should be the rallying point for opinion and should give a clear and definite lead. There is bound to be controversy over questions of design and a large measure of agreement may not be possible, but this should not be used as a cloak for inertia. The "Learned Society" aspect of the Institute needs a tonic.

(2) *The Profession.* In the building team the status of the architect is said to have dwindled. In dealing with his affairs *vis-à-vis* the other partners and particularly government departments, greater attention to general principles is needed and less timid, temporary measures engendered by expediency. It is vital that a wedge should not be driven between official and private architects; we all belong to the same profession.

(3) *Education.* The general level of competence in the profession is not high enough. In better education lies the main hope of improvement. Better ways of blending the complementary potentials

of school and office must be studied. Comparison with work on the continent would seem to show that this country does not lack technical skill so much as the imaginative approach to building. "Improvements" in education must not be at the expense of the artistic side of training.

Builders and architects should be trained together to the limits of practicability so that each may reap the advantages of improved technique and mutual understanding.

(4) *Working Conditions.* Since an architectural trade union does not seem to be practical politics, it is important that the welfare of junior members must be one of the major pre-occupations of the Council during the coming session.

In conclusion I would repeat that above all the RIBA should give a lead which the local societies can take up and develop in their own way.

is for the RIBA to take the initiative over the problems confronting it. And it must not only take the initiative but show for all the profession to see that it is taking it. The Council cannot act, however, without knowledge, it can only act with certainty and conviction when it is being supplied with the right information. Arrangements are now being put in hand to obtain that information.

The other subject which we must be constantly studying is education. We have got to ensure that the schools can produce architects trained so as to fit readily into the best type of office organization which can be devised—best, that is, both as regards the remuneration and responsibility of the architect and as regards the architectural profession's service to the community via a properly integrated building industry.

R. T. KENNEDY writes: 1. The architectural profession is growing in numbers, and the size of unit in the different sections of the profession, national and local government and private practice, is growing also. Within the next few years it will be important that differences of outlook between the different sections on such matters as (i) definition of responsibility of the architect, (ii) remuneration, (iii) training, are resolved within the RIBA, so that the profession is united to play its part in leading the building industry.

2. The future of the architectural profession is bound up with efficiency in building; any steps taken towards improving that efficiency should receive the wholehearted support of the RIBA.

3. Difficult as it is likely to be, the profession, through the Institute, should make a determined effort to raise the general level of competence in the design of buildings and their surroundings. This is an urgent matter, as neither architects nor the nation can afford to allow sub-topia to spread.

B. A. LE MARE writes: The main reason why I consented to stand for the Council is that I would welcome the opportunity of being able to effect the policy of the Institute with regard to the advancement of architecture as a whole. The architect must always have architecture as his primary objective. There is a tremendous need for good designers in this country when, in a period of intensive building, such a small proportion of the work is directed by qualified architects. The results of ill-conceived building are only too painfully obvious as suburbia spreads alarmingly across the countryside. Planning has often been a cause of frustration to individual architects, but faced

## REPLIES FROM ASSOCIATES

Nominated: A. W. CLEEVE BARR, RICHARD LLEWELLYN DAVIES, S. A. W. JOHNSON-MARSHALL, R. T. KENNEDY, BERNARD LE MARE, C. H. SIMMONS, JOHN STILLMAN, L. H. WILSON.

A. W. CLEEVE BARR writes: I am in favour of action on the following lines:

(1) A determined public relations campaign to raise the prestige of the profession in the eyes of the public:—exhibitions, advertisements, lectures, etc., Demonstrate that, in addition to providing a good-looking building, architects (official and private) can control costs can apply modern science to building by right choice of materials, right solutions of structure, heating, lighting, sound and other functional requirements, and can combine imagination with economy in the use of space.

(2) An equally determined campaign to raise the salaries (particularly of experienced staff) and improve the status and organization of architects in public offices. Break down big offices into groups of the size of small private offices, and delegate responsibility.

(3) Generally, positive action by the RIBA:—

(a) To raise standards in education and in architectural practice.

(b) To encourage the establishment of courses providing a common basic technical training, to a certain level, for architects, engineers, quantity surveyors' and contractors' supervisory staffs.

(c) To encourage a greater application of science to architecture by urging the provision of more research grants from the government, from universities, from

local authorities and from industry, and by taking all possible steps to help close the gap between research and its application.

(d) To encourage forms and methods of contract to facilitate design-stage collaboration between architects and contractors. Condemn the unlimited open tender system. Urge upon the RICS the need for changes in the form of bills of quantities to meet the needs of contemporary building.

R. LLEWELLYN DAVIES writes: I think there are two principal subjects which should concern the Royal Institute during the next few years. First, is the role, status and remuneration of architects, both private and official, under the changing circumstances under which the profession functions today. The other is the standard of entry to the profession and the methods by which architects are taught, both before and after qualification.

S. A. W. JOHNSON-MARSHALL writes: In recent years there have been at least two manifestations which suggest the possibility of disunity in the profession: the special motion passed at the AGM of 1955, and the creation of a society to look after the interests of private architects. The key problem today is to keep the profession together, and the best and only way to do that



## ... OLD PEOPLES' HOSTEL

(GOODWINS ROAD • KING'S LYNN)



Architect: C. H. Thurston, Esq., L.R.I.B.A., F.R.I.C.S.,  
County Architect, 25, Thorpe Road, Norwich.  
Contractors: Oliver Staines & Son, Station Street, Swaffham.

For the prevention of rising dampness in the floors of the above hostel, the County Architect specified the inclusion of 4% of 'PUDLO' Brand waterproofer to the cement in a 1.2.4. mix. The finishing screed 1" to 1½" thick will receive various patent floor tiles. 'PUDLO' Brand waterproofer, of the same composition, is also specified in the reinforced waterproofed concrete floor to the boiler house, and in the 2 to 1 waterproofed cement rendering to the walls of this structure. Write for the latest booklet containing specifications for all cement waterproofing work.



### CEMENT WATERPROOFING POWDER

Stocked by most Builders' Merchants.

The most reliable fire cement is 'FEUSOL'. Have you tried it?

The word 'PUDLO' is the registered Trade Brand of Kerner-Greenwood & Co. Ltd., by whom all articles bearing that Brand are manufactured. Sole Proprietors & Manufacturers:

**KERNER-GREENWOOD & COMPANY LTD., KING'S LYNN, NORFOLK**

with suburban sprawl I would strongly advocate energetic and concerted action by architects for the realization of good comprehensive development. The Institute is to be congratulated on its recent action on these lines when they made strong representations to the Minister of Housing and Local Government, pointing out the deleterious effect that certain clauses in the Housing Subsidies Bill would have on comprehensive redevelopment. Another course of action that should be taken now is to bring architects more before the public eye. Professional etiquette quite rightly does not allow individual architects to advertise, but the profession can do so as a whole. Attempts have been made in the past to bring architecture more into the public forum, obviously with some success. I would like to see a more energetic drive in this direction. I have always been concerned with the younger members of the profession, and as a member of the Board of Architectural Education I will be able to help in forming educational policy. In this connection I would strongly support education in the many schools of architecture in this country and would oppose *ad hoc* educational methods such as the outdated pupilage system. Salaries, and the proper recognition of assistants, is still one of the most urgent problems confronting the Institute today, and I hope that I will be able to assist in pressing forward to an equitable solution of this matter.

C. H. SIMMONS writes: I rate the standard of architectural design and the quality of building as the foremost of my interests. I am also concerned that the professional training of the architect should produce men capable of assuming direct and positive leadership of the present day expert building team. I am very interested in the work of the *ad hoc* Committee appointed by the RIBA in July, 1955, particularly its charge of assessing the grading of salaried architects and their responsibilities, although I feel quite strongly that much can be done by the personal effort of salaried architects to combat the present competitive trend of specialist pressure groups. As a raw nominee for election to the RIBA Council and without any experience of its work, I think it would be presumptuous of me to say what should concern the RIBA. I think however that this will give your readers an indication of where my interests lie.

JOHN STILLMAN writes: My views briefly are as follows:

1. The RIBA should generally be more

active both as a learned society and in doing what it can to help with the present-day problems facing its members.

2. As a particular short-term objective I would press for an extension of post-graduate education including more one-day symposia on planning problems, etc., and the introduction of three-day refresher courses on such subjects as building costs, structural theory, the use of materials, and services.

3. I would also recommend an enquiry into the working of the competition system since the end of the war. I suspect that the results would indicate some scope for improvement. There is no profession so enthusiastic and so willing to work for nothing. It would be a pity if the competition system, which has much to be said for it, were to fall into disrepute.

4. As a long-term objective I would like to see something done to give a more even distribution of work throughout the profession. I suggest the establishment of a register of design offices (both private and official) giving data of the work undertaken by them. The Royal Institute offers to advise the public on the selection of architects, and this important function is undertaken by the President and the presidents of allied societies who, as far as I know, do not have up-to-date information to help them. I would also suggest that the Council at least should be kept informed of the names of architects commissioned as a result of these recommendations.

L. HUGH WILSON writes: I think that the following issues should be the concern of the RIBA during the next two or three years:

1. The relationship of the architect to the other members of the building team. If the architect is to exert his influence as leader of the team the RIBA should act on many of the points discussed at the last RIBA Conference, including the question of management. The matter assumes significance in view of the employment of architects by contractors on a salaried basis and the spread of the "all-in tendering" system.

2. The remuneration of architects—by fees or salaries—and the structure of the profession.

3. The working of architectural control under the Town and Country Planning Act and consideration and action on the wider aspects of the problem of the appearance of town and country—Subtopia.

4. The extension of Public Relations work.

All these issues can be resolved into the single question of the advancement of

architecture and of the work of the architect.

## FROM LICENTIATES

Nominated: HARRY DURELL and G. H. MORRIS.

HARRY DURELL writes: Internally, the most vital issues before the RIBA are those reviewed in the two important reports published in the January *RIBA Journal* on salaried employment and the structure of the profession. It is fair to predict that the future well-being and prestige of the profession will largely depend upon the thoroughness and goodwill with which the aims recommended in these two reports are pursued.

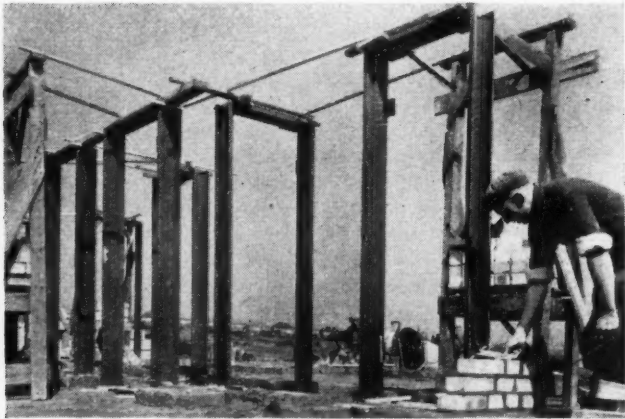

Externally, the important issue continues to be to endeavour to convince the public, in its capacities both of user of buildings and potential employer of architects, of the value of architecture and hence of the usefulness of the architect as the leader of the building team, not merely in the sense of his being a "co-ordinator" but an "inventor."

The Institute will also need to continue its valuable work in countering the increasing tendency for architectural and planning controls to be operated by lay committees without benefit of any architectural advice and all too often in a manner actively hostile to creative planning and design and original thought.

As a corollary to this some positive line of action is also needed to check the spread of Suptopia.

G. H. MORRIS writes: In the past three years a considerable change has taken place within the Council itself. The division once apparent between architects in public and private practice, and between principals and assistants has now gone. The Council has now a unity of outlook as regards the well-being of a profession as a whole which for a long time was absent. The *ad hoc* committee is making very great efforts on behalf of salaried architects, and as the recent AGM showed, there is no very serious criticism of the endeavours of either this committee or of the Council. Nevertheless, a great deal remains to be done. Factual information must be obtained to help the Council formulate policy for the continued improvement of the remuneration of architects, and to ensure that architects' services are used to the best advantage of the country as a whole. There is little doubt that our education system needs yet further study, and in the field of town and country planning the architect has not been properly utilized and has to a certain extent avoided his responsibilities.



	January		February		March		April								
1	<h1>HOPE'S</h1> <h2><i>Steel Door Frames</i></h2> <p><i>for lower cost and quicker delivery</i></p>  <p><i>Delivery ex-stock in standard sizes</i></p> <p><i>See Catalogue 254</i></p> <h3>HENRY HOPE &amp; SONS LTD</h3> <p><i>Smethwick, Birmingham &amp; 17 Berners St., London W.1</i></p> <p>MEMBER OF THE METAL  WINDOW ASSOCIATION</p>							7							
2								8							
3								9							
4								10							
5								11							
6								12							
								May		June		July		August	

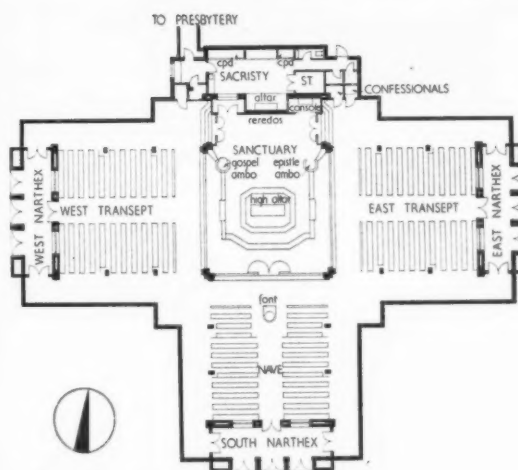
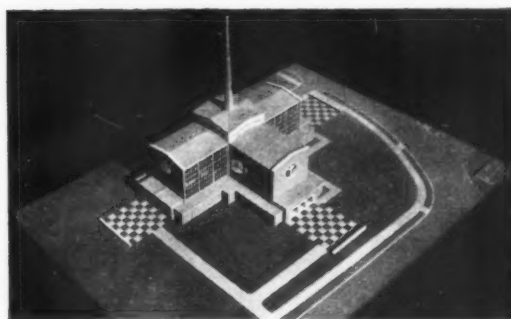


## BUILDINGS IN THE NEWS (continued)



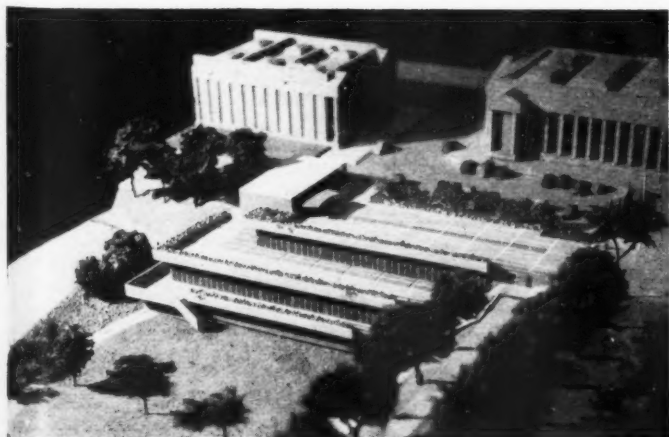
## Proposed Church at Harlow

Above and right are model photographs, from the south-west, of the proposed Roman Catholic Church of Our Lady of Fatima at Harlow New Town, designed by Gerard Goalen. The preliminary designs, which have been agreed to by the parish priest, have not yet received diocesan approval. The client required a church to seat 500, with provision for much larger congregations partly accommodated outside the building, to take part in services on special occasions. The client also asked for the seating to be arranged so that every member of the congregation will be reasonably close to the high altar. The congregation will be assembled round the altar, in the nave and two transepts, which are of equal dimensions. Seating for more than 500 people will be possible on the paved spaces outside the three narthices, with views of the high altar through the open doors.

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

## Proposed Civic Gallery, Edinburgh

Below (left) is a model photograph of the proposed Gallery of Modern Art designed for a site (below) near the National and R.S.A. Galleries in Princes Street Edinburgh. The gallery is designed below street level, to preserve the views of the Castle, and would have an area of 11,000 sq. ft. and an estimated cost of £120,000. The architect is Alan Reiach.



# *Interior Partitioning?*



## *Have you a problem?*

Can we help to solve it? We specialize in the manufacture of composite materials suitable for any type of partitioning. Our technical services are at your disposal.

**William Mallinson  
and Sons Ltd.**

TIMBER AND VENEER MERCHANTS  
MANUFACTURERS OF PLYWOOD, ARMOURPLY, PANELS, COMPOSITE PARTITIONING AND INSULATING BOARDS

130-150 HACKNEY ROAD  
LONDON, E.2

Telephone: Shoreditch 7654 (10 lines)

Telegrams: "Almoner," London

## FILE THIS WEEK



## THE INDUSTRY

*From the industry this week, Brian Grant reports on insulated asbestos-cement roof decking, prefabricated shelving, a new range of oil-fired boilers and a new gas cooker.*

## ASBESTOS-CEMENT DECKING

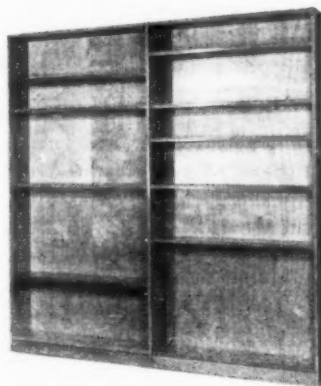
Hollow asbestos-cement roof decking was introduced by the Universal Asbestos Manufacturing Co. Ltd. two years ago and an insulated version was shown at last November's Building Exhibition. The standard units, which are made in lengths up to 10 ft., are formed from two similar moulded asbestos-cement components which are riveted together and bonded with a special adhesive giving a high degree of joint strength, and insulation is provided by a 1 in. thick layer of bitumen bonded fibre glass. A new type of filler unit has now been devised for use where the overall width of the roof does not fit with the 16 in. net cover provided by each unit or for use against abutments, parapet walls, lantern lights and in all instances where projections extend through the decking. The new filler unit consists of two asbestos-cement sections, similar to those used in the standard unit, but not bonded together. One section has a timber batten and a 90° asbestos-cement angle return fixed to it at the Works. Any width can be got by cutting the flat portions as required and, since the unit is not handed, it will fit adjacent standard units whichever way the latter are laid. The timber batten also provides a good hold for the screws of gutter brackets while the slightly rounded edge of the angle allows roofing felt to be dressed into the gutter without fear of cracking.

The same firm is also now producing Uniseal washers, which are made from a rubber and bitumen compound. They are

intended mainly for the fixing of asbestos-cement sheets, but would, it seems, be equally useful for fixing any other type of corrugated sheeting. The washers are  $\frac{1}{4}$  in. thick and should provide a better seal and greater flexibility than existing bituminous felt washers, and under pressure they tend to close round the neck of the bolt and adhere tightly to the sheeting. Both round and diamond washers are produced at a list price of 5s. 3d. a hundred, and although this is about two-and-a-half to three times the price of ordinary felt washers, the extra cost is almost negligible in proportion to the total cost of the roof, and should at least obviate return visits to attend to leaky fixings. (The Universal Asbestos Manufacturing Co. Ltd., Tolpits, Watford, Herts.)

## PREFABRICATED SHELVING

Lundia prefabricated adjustable shelving for use in the stores of Works and Offices has already been described in these notes and



One of the Lundia prefabricated shelving units.

the manufacturers have now produced a range of library shelving in hardwood which sells at an extremely reasonable price. The shelving is produced in standard units 3 ft. wide with heights of 6 ft. and 7 ft. and with standard shelf depths of 7½ in. and

9½ in. The units can be easily assembled as interlocking fixing bars secure the top, bottom and the centre fixed shelves, the other shelves being supported on spring clips which are adjustable at a vertical interval of 11/16 in. All the fixing clips and bars are completely concealed when the shelves are assembled and lateral bracing is provided by the plywood back. When additional bays of shelving are required an intermediate shelf support with fixing bars on both sides replaces the standard end support, and the shelving can be extended indefinitely. Prices are £10 10s. 0d. and £9 15s. 0d. for 7 ft. and 6 ft. units with 7½ in wide shelves, extra bays costing £9 0s. 0d. and £8 10s. 0d. Smaller bookcases 3 ft high and 3 ft. or 2 ft. wide are available at corresponding prices, but these smaller types carry a small amount of purchase tax. (Remploy Ltd., 25-28, Buckingham Gate, London, N.W.1.)

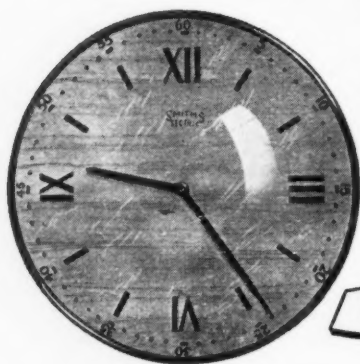
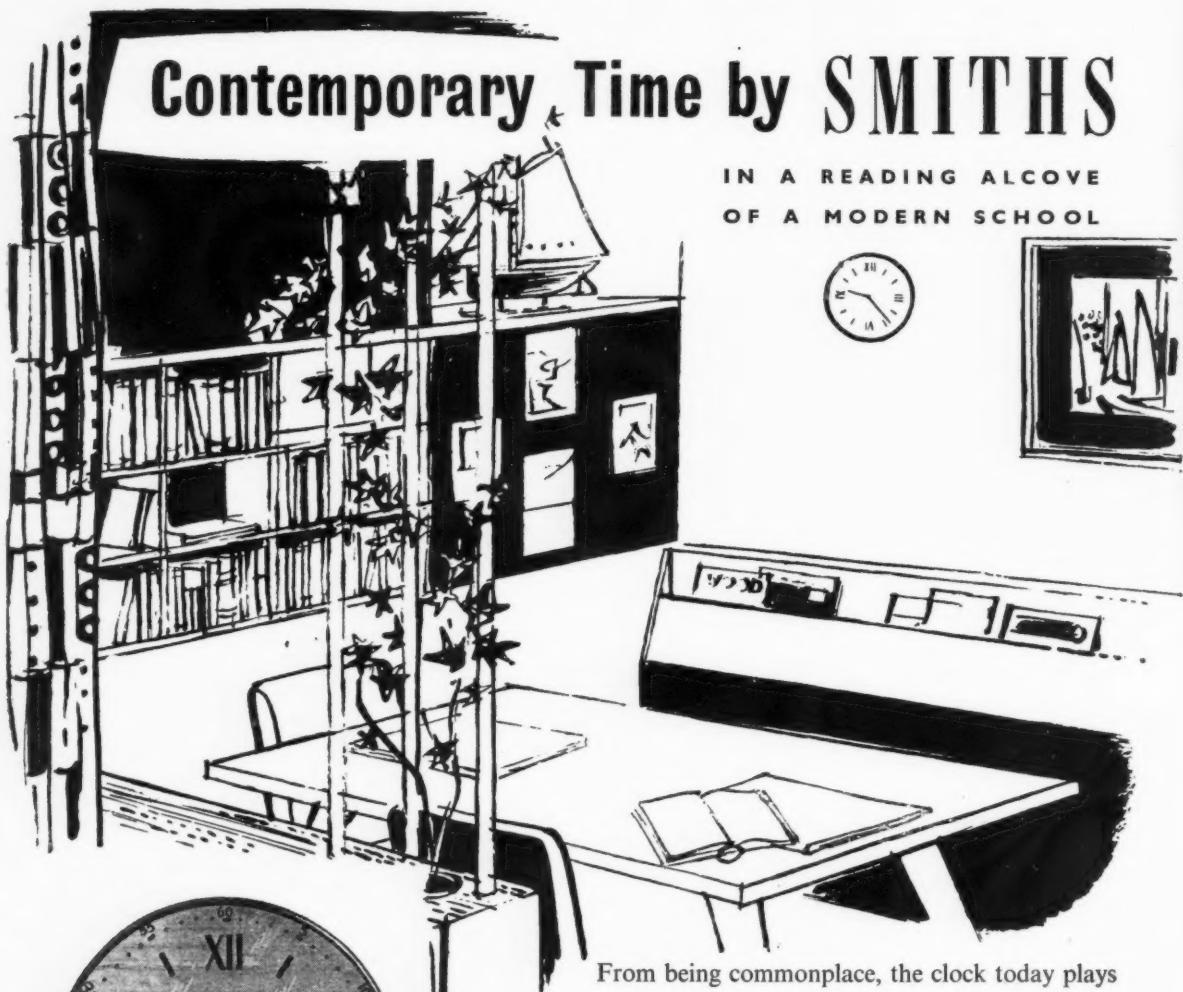
## OIL-FIRED BOILERS

The photograph overleaf shows one of the new range of oil-fired boilers now being produced by the Potterton division of Thomas de La Rue & Co. Ltd. This new series is the first addition to the De La Rue range of oil-fired boilers, and will cover outputs up to 1,000,000 Btu's per hour. The boilers are built up of cast iron sections and have an operating efficiency of 80 per cent, which is about the maximum that can be obtained from any boiler without risk of excessive condensation, and are enclosed in stove enamelled steel jackets (shown partly cut away in the photograph) and the controls are mounted externally so that maintenance is simplified. The boilers are produced with a variety of different makes of burner and are large enough to deal with the heating demands of small and medium sized factories, schools or large blocks of flats or office buildings.

An interesting departure from standard practice is the proposal to use an extractor fan, combined with a draught break, which will make the boilers completely independent of stack height and atmospheric conditions. Also, when a stack or flue has to be specially built, considerable savings can be made, as a smaller size flue can be used. (Thomas De La Rue & Co. Ltd.,

# Contemporary Time by SMITHS

IN A READING ALCOVE  
OF A MODERN SCHOOL



**BEDFORD**

'Sectric' wall clock, surface or flush fixing, in ice birch finish case. Applied bronze numerals. Overall diameter 18" £18.2.2.



**ADELPHI**

'Sectric' wall clock in moulded ivory or walnut finish case. Minor, 5½" dial, £4.4.6. Medium, 9" dial, £6.12.2. Major, 12" dial, £7.13.11.

From being commonplace, the clock today plays an increasingly important part in the decorative scheme of things, no matter what the architectural character of its surroundings. Smiths extremely wide range of models, from

which the clocks illustrated are drawn, gives a wide choice. It may not be generally known by Architects, however, that their own individual designs can be carried out in any

medium. At any time a representative will be pleased to discuss your requirements.

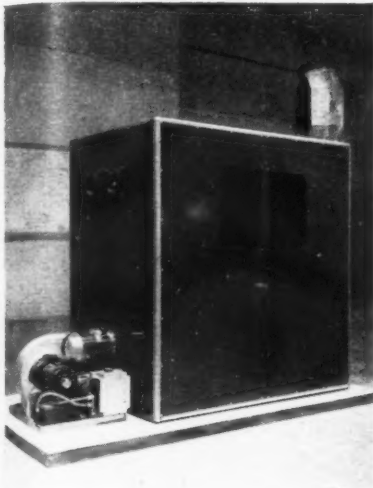
A  
'SMITHS OF ENGLAND  
PRODUCT

SMITHS CLOCKS & WATCHES LTD., LONDON, N.W.2. A Division of S. Smith & Sons (England) Ltd.



## technical section

(Potterton Division), Cavendish Works,  
20-30, Buckhold Road, London, S.W.18.)



One of the new range of oil-fired boilers produced by  
Thomas de La Rue & Co., Ltd.

## NEW GAS COOKER

The photograph below shows the Cannon A.130 cooker, which is a revised version of the previous model A.125. The new model is made either with an integral grill over the hotplate, or with a splashback only and a separate grill unit, which can be fitted over an adjacent kitchen cabinet or table. The grill can also be supplied as an entirely separate, self-contained unit for use



The new Cannon A-130 gas cooker.

as an auxiliary to existing cooker equipment. The price of the cooker with the integral grill is 62 guineas, or with the grill separate, 64 guineas; the grill itself, supplied separately, costs 12 guineas. The cooker hotplate has been redesigned to give increased efficiency and the splashback also contains a built-in tubular lamp. (Cannon (GA) Ltd., Deepfields, Bilston, Staffs.)

INFORMATION  
CENTRE

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

9.57 design: general

## WORK OF ROBERT MAILLART

Robert Maillart. Max Bill. (2nd Edition. Verlag, Girsberger, Zurich. Price in England approx. 66s.)

Robert Maillart, who died in 1940, remains the architect's ideal engineer. This book gives an admirable visual record of his work, supported by as much technical explanation as the intelligent but non-engineer reader is reputed to be able to take. This second edition (the first appeared in 1949) shows three works not formerly included: an early Maillart Bridge over the Arve at Marignier, and two bridges, at Lancy over the Aire and at Marchgraben, which were completed after his death by his successors. The publishers thank Mr. P. Morton Shand, Dr. James Hull and Mr. Maurice Goldring for improving the English text, but despite this distinguished assistance the English reader is still sure of some good laughs.

18.178 construction: theory  
STRUCTURAL DESIGN

*Applied Structural Design of Buildings.* T. H. McKaig. (Dodge Corporation, New York. 1956. \$12.50.)

Text Book of Structural and Building work for Architects and Engineers.

Although primarily written for the instruction of a group of architects and engineers preparing for American examinations under the supervision of the author, there is much in the book to commend it to British readers. Its standard corresponds to about Higher National standard in this country. It is actually presented more in the form of a designers' handbook rather than a textbook and covers quite a wide field. After a general introduction, steelwork, reinforced concrete, timber and masonry are dealt with. A chapter is devoted to connections which follows the trend of some recent British publications in expressing the idea that the strength of a structure is dependent on well detailed joints. There is a chapter on miscellaneous structures which also introduces wind loading, and a final chapter on office procedure. This is a very interesting chapter setting out a list of questions that the

designer should be asking both of the client and his own staff to cover every aspect of the job. Cost comparisons quoted are of course of little value in application in this country.

Many of the tables are essentially for use in American design only but are, nevertheless, useful when reading accounts of American work.

19.192 construction: theory

## WELDED STRUCTURAL STEELWORK

*Welded Details for Single Storey Portal Frames.* (BCSA, 1955.)

BCSA publication No. 9 gives guidance on constructional details for welded single storey portal frames. Of interest to architects and engineers.

One of the advantages of welded steelwork is the clean line of the structure made possible by the elimination of heavy splices. This publication will be particularly interesting to architects who use welded frames because they will see a variety of details for both shop joints and site joints at every part of the structure. The publication falls into five parts. Section A deals with knee joints and apex joints and provides 15 details using rolled sections and eight using built-up sections.

Section B deals with valley joints in frames of more than one bay. Nine details are for rolled sections and eight for built-up sections.

Section C covers rafter site joints and although the smallest section is in some ways the most important because the site joint can destroy much of the clean line of the structure. Both bolted and welded joints are shown in the eight details.

Section D shows details at column and base plate or base assembly and for various pinned or fixed conditions. The base plates are shown floating on 1 to 1½ in. of grout, a better detail would be 2 to 3 in. of dry concrete packed under the plate.

Section X deals with the actual preparation of the members for the weld and several photographs of prepared joists are shown.

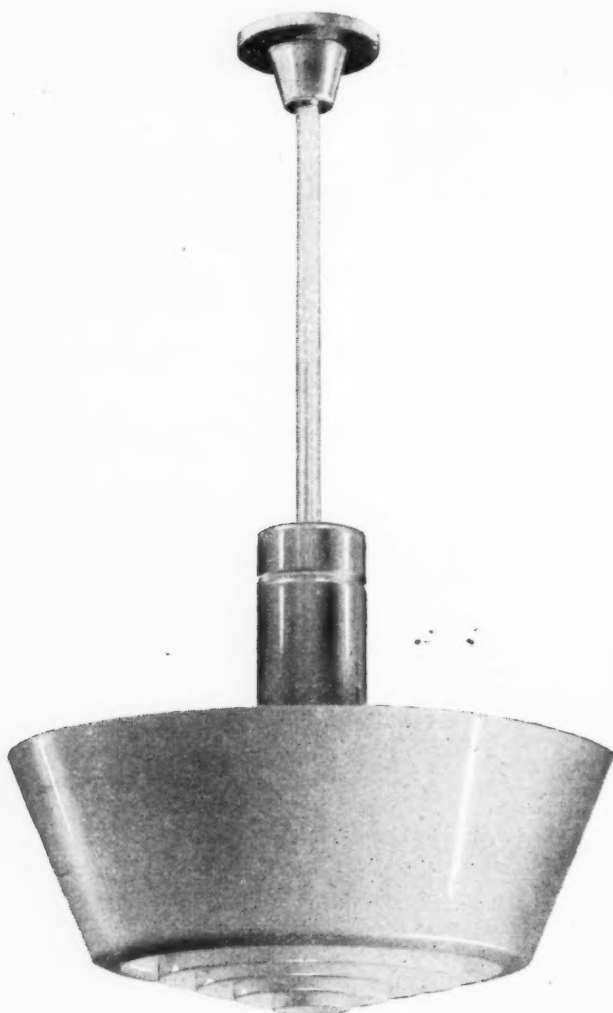
No calculations are made but a useful bibliography is given.

19.193 construction: details

## DAMP-PROOFING SOLID FLOORS

*Damp-proof Treatments for Solid Floors.* BRS Digest No. 86, March, 1956. (HMSO. 3d.)

With a floor covering which is permeable to rising moisture, complete damp-proofing is not important: with an impermeable floor covering it is. This Digest gives a table listing permeability and sensitiveness to moisture of all common floor coverings, and another listing the damp-proofing properties of all sandwiching materials. It shows a strong preference for hot as against cold applications and discusses the inconveniences on site to which the former give rise. Concludes with a note on damp-proofing of wood floors—a follow-up of the very first BRS Digest issued, No. 1, December, 1948.



Produced in quantity  
to a high standard  
at a new low cost

## VENTURA 80

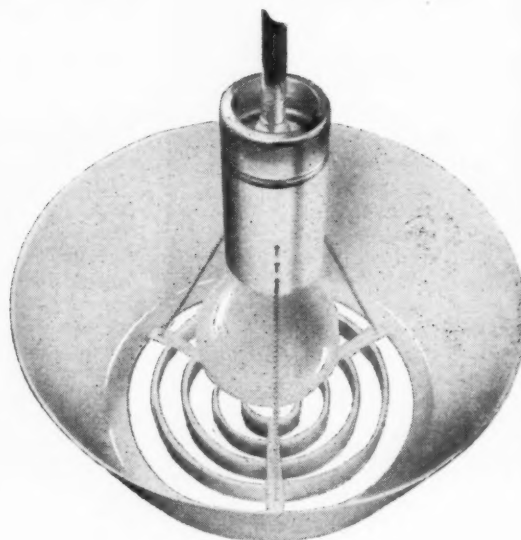
for full details ask for  
publication V.80.

**SPECIFICATION.** The 12" diameter louvred diffuser is moulded in a white translucent non-static high temperature plastic, and its position is adjustable for use with a 200w, 150w, or 100w. lamp.

Direct downward lighting is obtained through the louvred aperture, the top is open giving shadowless ceiling illumination. Diffused general lighting with low brightness is obtained through the translucent sides.

Metalwork is in anodised aluminium, finished satin silver.

	V.80. Basic Type for attachment to existing suspensions	22/8 + 5/2 P.T.
	V.82. Ceiling Type	26/8 + 6/0 P.T.
	V.84. Flex Suspension Type	28/0 + 6/4 P.T.
	V.86. Tubular Suspension Type	30/8 + 6/11 P.T.



**MERCHANT ADVENTURERS LTD**

43 PORTLAND ROAD, LONDON, W.11. PARK 5617/8/9.

**VENTURA DIVISION**

'GRAMS MERCHADVEN LONDON

## technical section

## 13 MATERIALS: TIMBER

## DESIGN AND PRACTICE OF JOINERY

by John Eastwick-Field and John Stillman

## 10 PLYWOODS, BOARDS AND VENEERS, 3

In our last two issues John Eastwick-Field and John Stillman have been describing the various grades of plywood, blockboard, chipboard and hardboard and have discussed the techniques of handling them. This week they conclude their study of this subject with an account of the craft of veneering and with advice on the use of the various plastic veneers and panels which have now elbowed their way into joinery practice.

Veneering, which has been mentioned several times already, is nowadays closely related to the production of plywood and other laminated boards. Plywood, in fact, consists of a number of veneers, and together with blockboards, laminboards and hardboards is made in presses which are similar to those used for decorative veneering. All of these boards provide better grounds on which to apply veneers than solid timber especially when large panels are required. Furthermore, unless they are to be painted, their appearance may require that they should be veneered.

However, in contrast with boards which are of comparatively recent invention, veneers have been used since ancient times: the Egyptians used, not only rare woods, but also gold, pearl and ivory veneers. The present practice of veneering in decorative woods, however, stems mainly from the eighteenth century. Used at first mostly for furniture, then for panelling in ships and railway carriages, and for pianos, it has been done more and more and is today employed in nearly all furniture manufacture and to an increasing extent in joinery. Wood is still the principal material of veneers, although it is not the only one: plastic sheets, as described later in this article, are also common.

There are, of course, very sound reasons for veneering; it is not just a matter of making an inferior wood look like a better one. For instance:

1. Some of the most beautiful woods come from rare trees and the best figured pieces from burrs which are rarer still. Quite apart from the cost, if these woods were used in the solid the supply would soon be exhausted.
2. The woods which are the most beautiful to look at in figure and colour are not always reliable for use in the ordinary way. Burrs, which are the diseased growths at the foot of the trunk, are an example. Some trees, such as Kingwood and Tulipwood, are also too small to give useful sized boards.
3. A veneered panel on a core of ply or laminated

board is more stable than a solid wood panel made in the traditional way.

It will be seen that whilst there is emphasis on the use of woods which have exceptionally decorative figure or exceptional colouring—these provide what are known as "exotic," "rare" or "fancy" veneers—there are sound arguments for veneering even with ordinary joinery hardwoods, and such veneers are those mostly used today. It is, in any event, no longer fashionable to make elaborate patterns out of contrasting exotic veneers.

There is a large number of veneers from ordinary timbers to choose from, but there are many others which come from woods which are not readily obtainable except as veneers. One must therefore be careful if one wishes to match, say, the solid framing of a cupboard with veneered doors or drawer fronts.



Fig. 1, top: a veneer splicing machine. The veneers are glued edge to edge during the course of their travel through the machine. This method is used in making plywood. Thin veneers used for decoration are joined before application by a taping machine. The veneers are fed into the machine which draws them together and applies a strip of gummed paper along the joint. The paper is removed by sanding after the veneer is glued to its core. Fig. 2, above: a view of a typical store of veneers. It is here that the architect should select and inspect the veneers he is proposing to use so that he will know the effect of the figure over the whole area of the veneer. It is not enough to choose from a small sample which may be most misleading.

technical section

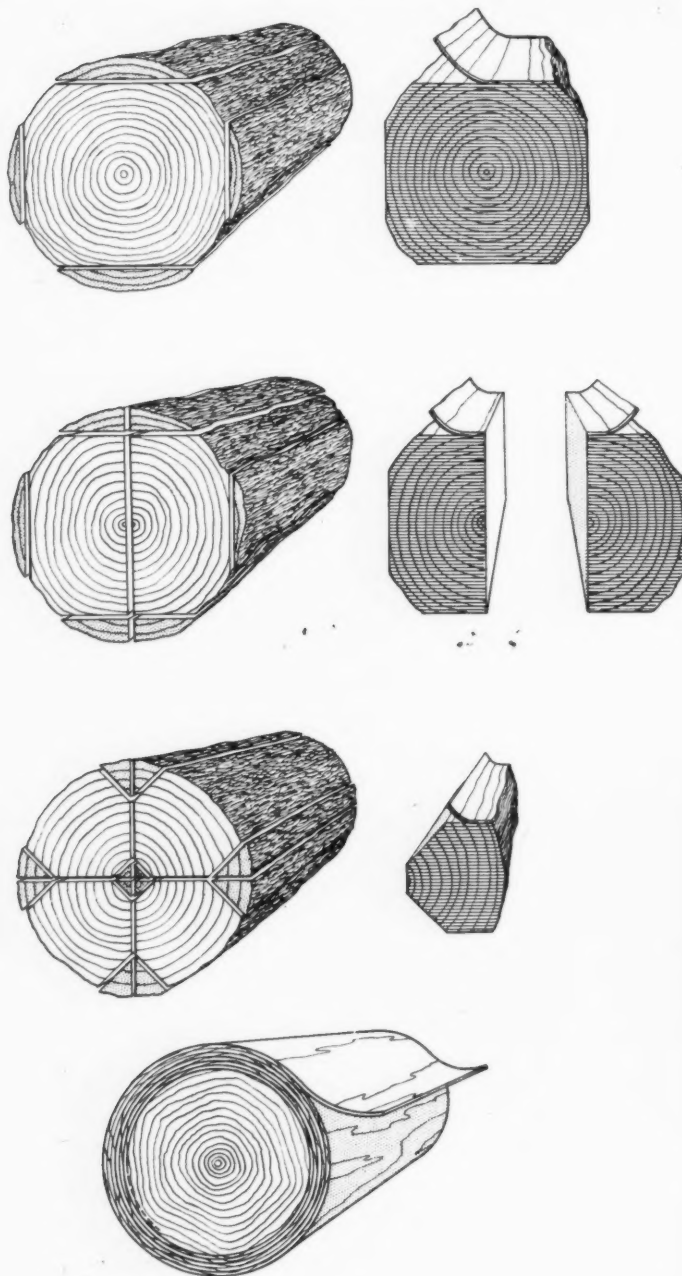


Fig. 3: three typical methods of "flitching" or preparing logs for cutting into veneers by slicing. The logs are cleaned, sometimes de-barked, and then flitched. Top, left, squared up: with the veneer cut in one direction through the whole log. Centre left, half quartered: producing the same kind of veneer as the squared up flitch but half as wide. Cutting can take place in opposite directions, which is an advantage in some kinds of wood. Both the squared up and half quartered flitches show "heart" grain. Below left, quartered: the pattern of the grain differs in veneers cut in this manner from those of the veneers from half quartered and squared up logs by the absence of "heart" grain; the grain in quartered logs is straight and the figure which some woods show on the radial face is exposed.

Fig. 4, bottom left: an indication of the way in which a "peeled" or "rotary cut" veneer is produced from the log. Rotary cut veneers are produced mainly for the manufacture of plywood; most decorative veneers being sliced from flitched logs. Some decorative veneers are, however, rotary cut and special effects are sometimes obtained by rotating the log eccentrically.

Fig. 5, below: an example of rotary cut or "peeled" birch. This should be compared with the illustration of the Paldao veneer Fig. 6, bottom, which is sliced.



#### Grades, cost and selection

Although the main centre of the trade is Paris, veneers are produced in this country and many other parts of the world. Unfortunately there is no universally accepted system of grading. An architect, however, should expect veneers free from knots, shakes, patches or other defects and can indicate this by specifying "prime quality."

The selection of a veneer requires much care. The cost of the material itself varies from as little as 2d. to as much as 1s. 9d. a square foot and some rare veneers



## technical section



*Fig. 7: an example of the application of veneering to wall panelling and to fitments. The whole of these veneers are here applied to one of the chipboards which has been used both for the panelling and in the construction of the fitments.*

may command up to 8s. a square foot. Even the difference between 2d. and 1s. 9d. might mean as much as £1 on the cost of a veneered door so that the choice must partly depend on cost as well as on appearance. Incidentally, the cost of the application of the veneer will be approximately 6d. to 1s. sq. ft. or slightly more if there is much selection and "matching" to be done. Also, veneered panels will usually require lipping, and this costs about 1s. 6d. to 2s. ft. run depending on the size of the lipping and on the kind of wood used for it.

The intended use must be considered, particularly if the veneer is to be used externally: a stable oily wood such as teak would, for instance, be more satisfactory on an external door than say elm.

Size may also be important: veneers vary considerably

in this respect, there being no standard dimensions. Lengths range from about 9 to 17 ft., each piece being about 9 in. wide. The thickness to which decorative veneers are cut may be from 1/250 m. to 1/4 m. but long experience of those in the trade suggest that the best thickness is from 1/28 in. to 1/30 in.

When considering appearance it is dangerous to rely on a sample. Whilst mahogany or beech would perhaps be fairly represented by a small sample it would be impossible to judge the total effect of walnut or other woods having a strong figure. It is therefore advisable wherever possible to inspect the stock and select the actual material to be used, remembering that when polished the veneer will have a different appearance from the material seen in its natural state. Ideally samples should be polished, but an indication of the final colour can be obtained by wetting the surface. It is not our intention to write at length about the processes by which veneers are produced, but it is of help to have some elementary knowledge of what happens. This is explained in Figs. 3 and 4 (opposite). The veneer may be produced either by "slicing" with a knife or by "peeling" (rotary cutting) and occasionally by sawing. Contrary to common belief most veneers are sliced and not peeled. Peeling is in fact restricted to cutting for plywood, and for veneers from birds eye maple and burrs and generally for woods which would either yield uneconomical widths if sliced, or which display characteristic figure or marking on the tangential face.

Most veneers are sliced, and in order to carry out this operation the log is cut up into "flitches." The illustrations show three common methods of flitching: squared up, half quartered and quartered. The half quartered gives narrower width, but allows the veneers to be cut in opposite directions which produces better results in some woods. The quartered flitches produce straight grain and the figure associated with radial cutting.

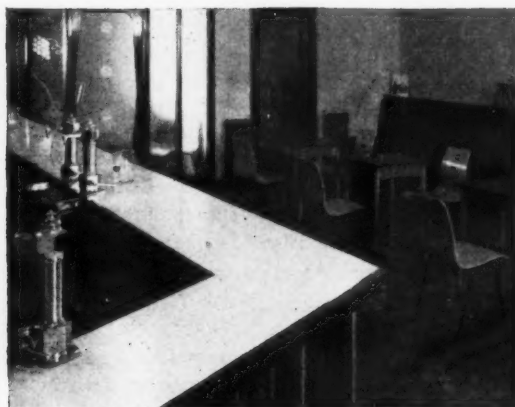
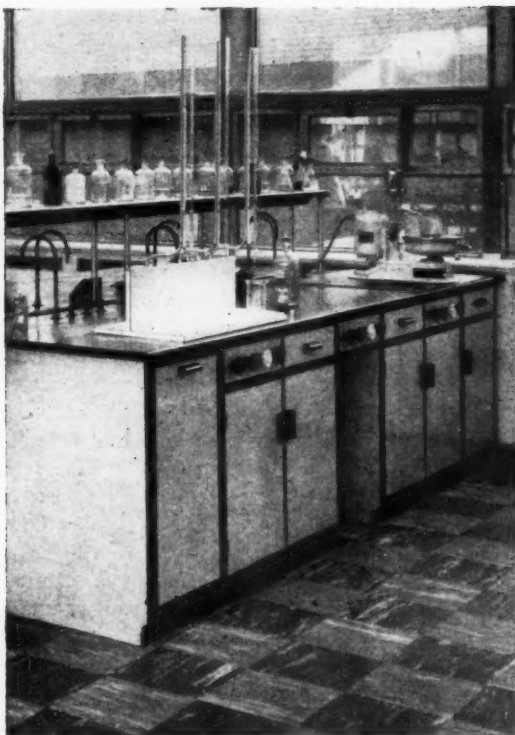
#### Technique for veneering

Whether or not conscious patterning with veneers is required, the architect must be aware of the very different effects obtained by the way the relatively narrow widths of veneer are laid on the core: particularly when highly figured veneers are chosen. The whole subject of the arrangement of veneers is somewhat complicated and is best dealt with in practice by consultation, but even if the architect is not acquainted with the definitions employed in the trade he would do well to submit a sketch with his detail to show what he expects to get.

Briefly, the most important arrangements are: (a) "side-matched": the "leaves" as they are cut are placed side by side; (b) "book-matched": every other leaf is mirrored by turning it over. If there is a diagonal stripe in the grain this will produce a herring bone effect; (c) "quartered": four panels are arranged symmetrically to produce a diamond shaped pattern.

For all forms of veneering the first essential is a table

## technical section



*Fig. 8, top left: plastic veneers used in a metallurgical laboratory, where easily maintained surfaces which will not stain are required. Fig. 9, above left: part of a bar in which plastic veneers have been used in a characteristic manner for bar and table tops where their resistance to alcohol and fruit juices and their cleanliness are of great value. The use of bent ply in the chairs is also to be noted. Fig. 10, bottom right: a kitchen table with plastic veneered*

*top and edges. The dark edge of the chamfer on the veneer—a feature which is recommended to prevent chipping—is noticeable. Fig. 11, above right: murals and table tops in veneered plastic. The murals, which form part of the general scheme of panelling and are used in conjunction with natural timber, are carried out by an interlaminated printing process and the panels have the same hard clean surface as the ordinary decorative plastic veneers.*

flat panel. If the core has a wood surface, the direction of the grain of the veneers should be at right angles to the grain of the core. This frequently involves cross veneering, which may also be necessary with coarse grained plywoods and some chipboards whose surface texture can show through a fine veneer.

Even if the moisture content of the veneer is the same as that of the core, as it should be, there is a tendency for the latter to warp when the veneer has been laid, and even on thick boards it is advisable to apply a compensating veneer on the reverse side. Ideally this should be of the same wood as the face veneer, but

## technical section

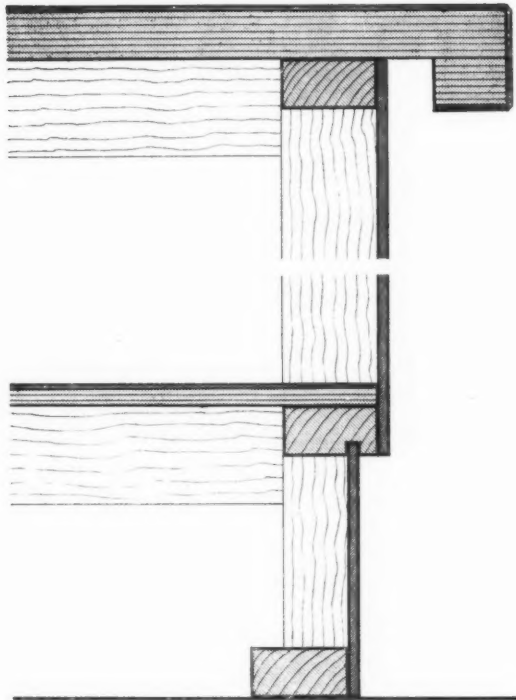


Fig. 12: a typical counter construction showing two ways of using plastic sheets: the top veneered to a core and the front of thicker panel of plastic fixed to stout framing of well seasoned wood. The top has no compensating veneer since it is adequately restrained by the framing and is not likely to be of large dimensions.

expense often dictates that it should be of a cheaper wood.

Until the introduction of plywood and the methods of manufacture associated with it, veneering was done by hand. The veneer was warmed by an iron and then stuck to the core with Scotch glue and pressed with a veneer hammer. In intricate work handwork is still resorted to today, but the cost may be as much as four times that of using panels ready veneered in a press before fabrication. It is important nevertheless to note that the phenolic glues nowadays associated with factory production of laminated boards are known to stain light coloured decorative veneers, and for them at least it is preferable to use other glues.

There are two matters of practical interest associated with veneering which deserve mention. The first relates to ready veneered panels which are machined and assembled afterwards. In order to avoid any unveneered wood showing on the outside corners of panels jointed at right angles, mitred joints are necessary as distinct from rebated joints or dovetails. The second is concerned with lippings. There is some difference of opinion about whether a veneer should be stopped before the lipping or taken over it. There seems no reason why the veneer should not be taken over unless the corner is likely to receive exceptional wear.

Finally, veneers can be applied to curved surfaces of

even small radii, and by "tailoring" can be fitted to shapes curved in two planes.

### Plastic veneers, boards and panels

One of the few disadvantages of natural timber is the failure of most finishes applied to it to withstand the many and varied hazards to which they are put when exposed on counter tops and other positions where water, acids, and alkalis may be spilt, cigarettes stubbed out, or where they may be scratched.

Decorative plastic veneers which withstand most of these hazards and which require only washing with soap and water for maintenance are now almost universally used in the construction of such fittings as are formed in kitchens and bars and so on. There are grades other than the "decorative," which are cheaper and are used for "balancing" veneers, linings and industrial uses and which are usually brown or black and some of them are less resistant to wear.

The most usual way in which the material, "decorative" or otherwise, is used is as a veneer about  $\frac{1}{16}$  in. thick, which is sold either in sheets or ready glued to plywood or other cores of any required thickness. Sheets of plastic called "panels"  $\frac{1}{8}$  in. and  $\frac{3}{16}$  in. thick are also available which are thick enough to be mounted on framing without any continuous backing. Both the thin veneers and the ready-veneered boards and the "panels" are produced in sheets of 8 ft. or 9 ft.  $\times$  4 ft. in size, the exact dimensions depending on the manufacturer.

The "decorative" plastics are expensive: a  $\frac{1}{16}$  in. veneer unmounted and unfixed costing about 4s. sq. ft. (1956), the  $\frac{1}{8}$  in. panel about 6s. 2d. sq. ft., and a  $\frac{3}{16}$  in. ready-veneered blockboard about 10s. sq. ft. Obviously it is important to avoid wastage and to design accordingly.

Although the  $\frac{1}{16}$  in. sheets are called "veneers," they and all decorative plastic sheets are built up of a series of veneers or laminations, the top one designed to produce a variety of gay colours and patterns with a finish which may be glossy, satin or matt. The sheets are made from layers of paper impregnated with phenolic resins and overlaid with a sheet of decorative paper, fabric, or thin veneer of wood on top of which is laid a transparent resin melamine sheet to give a very hard wearing surface. The laminates are subjected to pressures up to 5,000 tons and are cured at temperatures of about 160° C. The method of manufacture gives an opportunity for individual designs to be prepared on the paper incorporated in the sheet. They can be hand painted in special inks, silk screened or photographically reproduced.

It is a characteristic of many of the sheets that they are heat resistant up to a temperature of approximately 265° F. A special grade which incorporates a sheet of aluminium foil as a conductor is produced to overcome the common complaint of cigarette burns on counter and bar tops, but even this grade will not withstand temperatures over 265° F. if they are applied in large areas.

There are two other properties which ought to be men-

## technical section

tioned. First, the materials only resist water above freezing point, and therefore they should not be used outside since the surface and colour may deteriorate. Second, although like all other joinery materials they move with changes in moisture content they are, by comparison with normal timber, relatively stable.

Besides the now standard forms in which the veneers and panels are marketed, there are plain coloured ribbed core panels 1 in. and  $1\frac{5}{8}$  in. thick, 8 ft.  $\times$  4 ft., which can be used structurally: also hardboards and chipboards faced with a variety of thin plastic surfaces incorporated in manufacture. The latter are not so hardwearing as decorative plastics, but would be suitable for counter and cupboard front and doors, if not for work tops.

**Technique for plastics**

The first thing to decide is whether to use the plastic in its veneer form on a solid core, or whether to design for the thicker panel which is structurally self-supporting. The illustration in Fig. 12, page 519, shows two ways of using plastics on a counter. The best practice, however, is to use the veneer on a core, especially since this eliminates the fixing screws and cover strips associated with the thick panels.

The problem then arises as to who is to bond the veneer to the board. Some manufacturers market ready-veneered boards, whereas others sell the veneers only, which then have to be bonded either by agents who in turn sell the composite boards, or by the joinery manufacturer himself.

A joinery firm might obtain the veneer and stick it to the core in his shop, but there is some danger in this since he may not be expert in choosing the correct

glues and he may not have the appropriate presses which are desirable. It is true that the material is widely sold for amateur application, but usually for simple table tops and with a special "impact" glue which, whilst it does not require pressure, is nevertheless a less efficient bond. It is preferable therefore to see that ready-veneered boards are obtained from specialists, even if cutting and fitting is subsequently done by the joiner. Just as with other forms of veneering compensating veneers are necessary, unless the panel is to be firmly restrained, and it is likely that the specialist firms would see that this is done.

Although ordinary woodworking tools can be used, this material is very much harder than wood and better results are obtained if high-speed woodworking machinery and powered tools are used. Because the technique is different from ordinary woodworking the manufacturers issue detailed instructions.

The material can be bent: there is no general rule, but certain makes of the  $\frac{1}{8}$  in. veneer can be curved to small radii of 3 in. and even less. Curves of these small radii generally require that the material should be heated, and the ready-veneered panels will need to be treated or made up by the methods described when discussing plywood.

We show in Fig. 14 various methods of finishing the edge of plastic covered cores, from which it can be seen that veneering the edge grain of ply with some plastic veneer is common practice, though it should be observed that the edges of the veneer itself should be chamfered to prevent chipping of the decorative face. In addition, of course, there is a whole range of aluminium and other extruded sections which are used as trim.

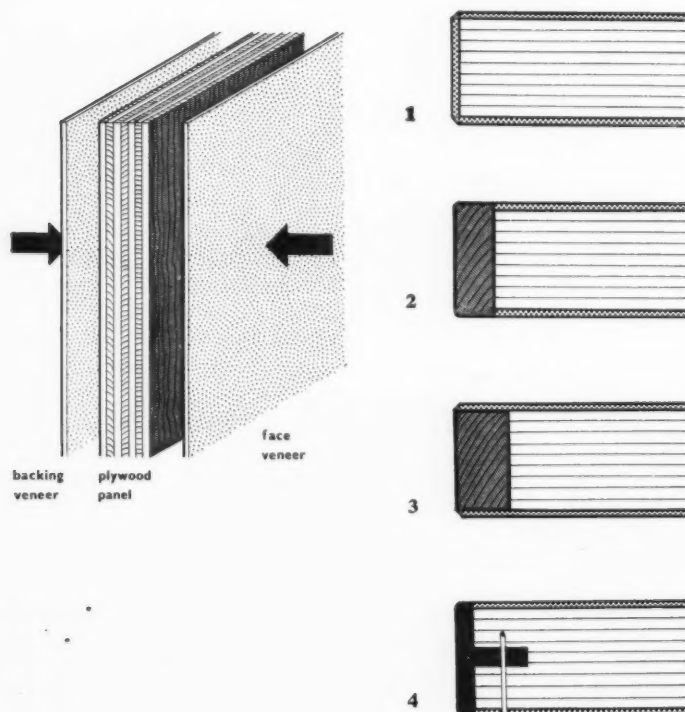


Fig. 13, extreme left: method of using thin plastic veneer by glueing to stout core at least  $\frac{3}{8}$  in. thick, with compensating veneer on back to prevent warping and keep out moisture.

Fig. 14, left: four typical methods of edging plastic veneered boards. 1. With plastic veneer glued to edge. Note that the edge is bevelled to save chipping and that this should preferably be the vertical edge. The bevel shows as a dark line. 2. With hardwood mastering the veneers. 3. With a hardwood insert between the veneers. 4. With a metal extrusion.



FILE THIS WEEK



building illustrated

Factory at Poole, Dorset

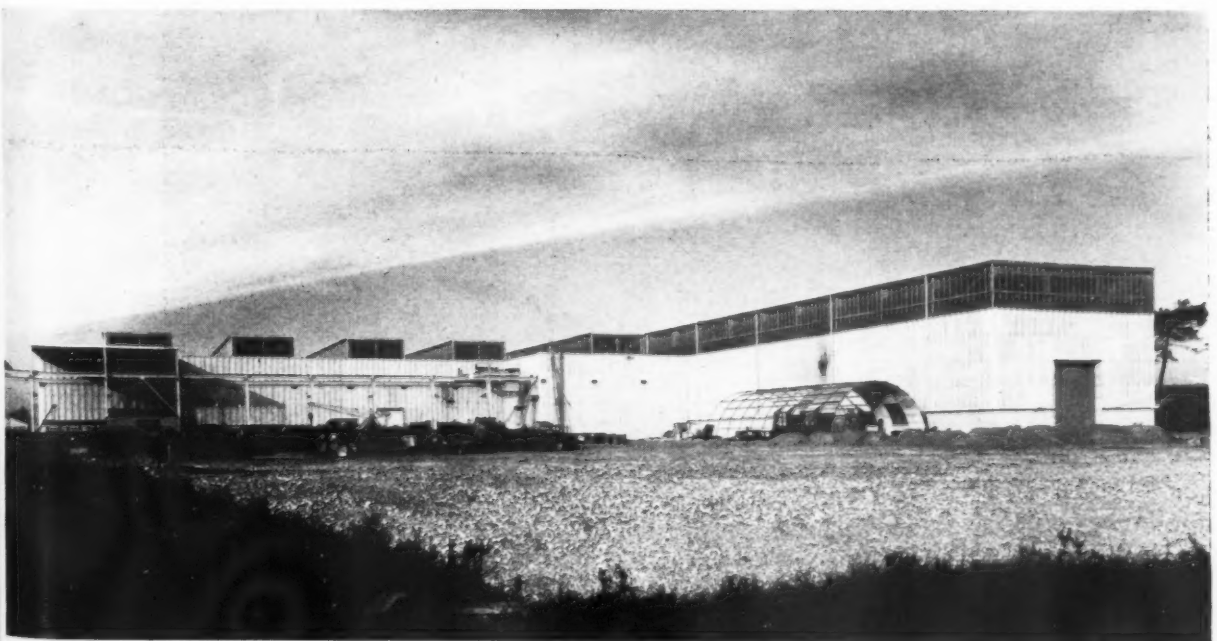
## FACTORY

at WALLISDOWN ROAD, POOLE, DORSET

designed by FARMER and DARK; assistant architect-in-charge E. M. C. BUTCHER  
assistants E. G. HUTCHINSON, S. J. HUGHES, G. M. COPE  
consultants (structural) S. JAMPOL; (electrical) A. H. BARKER and PARTNERS  
quantity surveyors E. C. HARRIS and PARTNERS

This building, for the Loewy Engineering Co. Ltd., shares the site with an office block by the same architects (illustrated in the JOURNAL on March 10, 1955). To meet the client's requirements it was completed and in full occupation less than eight months after the tenders were received. A simple, direct solution has been achieved, readily capable of expansion. This workshop block is the first building devoted entirely to production to be analysed in the JOURNAL. Administrative offices, canteen and lavatories are provided elsewhere on the site. The workshop lavatories are at present in a temporary structure, which has been priced separately in the cost analysis.

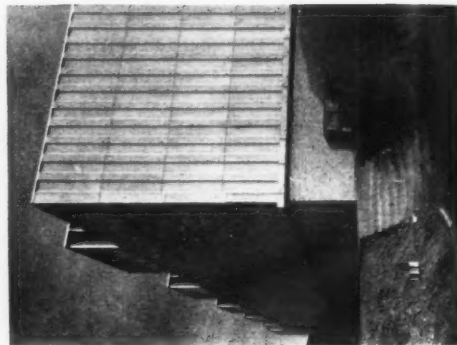
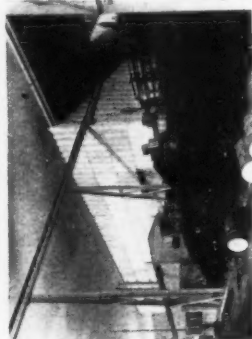
Viewpoint 1: the factory from the south.



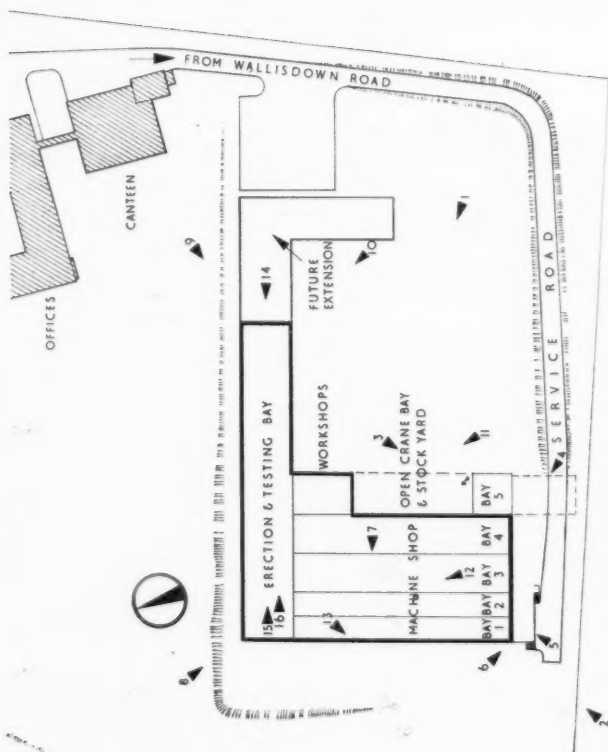
problems of foundation settlement. An existing prefabricated building has been re-sited to the west of the factory to form a temporary office block. A similar building on the south side of the factory houses lavatories and cloak-rooms. The new structure itself is therefore entirely production and store space. It consists of five crane bays running north and south forming machine shops, which are lit by monitor roof lights spanning across them at right angles. At the north end of these shops is a larger crane bay running east and west for the assembly and testing of products. The crane bay on the eastern side of the machine shops has been left largely open, to form an external stockyard (viewpoint 3, top left) and it has been extended to span over the service road (viewpoint 4, centre left) for the handling of raw materials and components. The machine shops on the south and west sides are clad externally with 11-in. cavity brickwork up to 7 ft. above floor level (viewpoint 5, below left). Above this height asbestos cement corrugated sheeting has been attached to the structure on light steel angle cladding rails. At the request of the clients there are no low level view windows. The design of the external walling has been based on the need to minimize accidents from swinging loads carried by the cranes, and damage to the structure at low level. A continuous rainwater gutter has been provided at the junction between the asbestos sheeting and the brickwork (view-



point 6, above). This precaution has been taken in view of the non-absorbent character of the sheet cladding, on an exposed site.



building illustrated



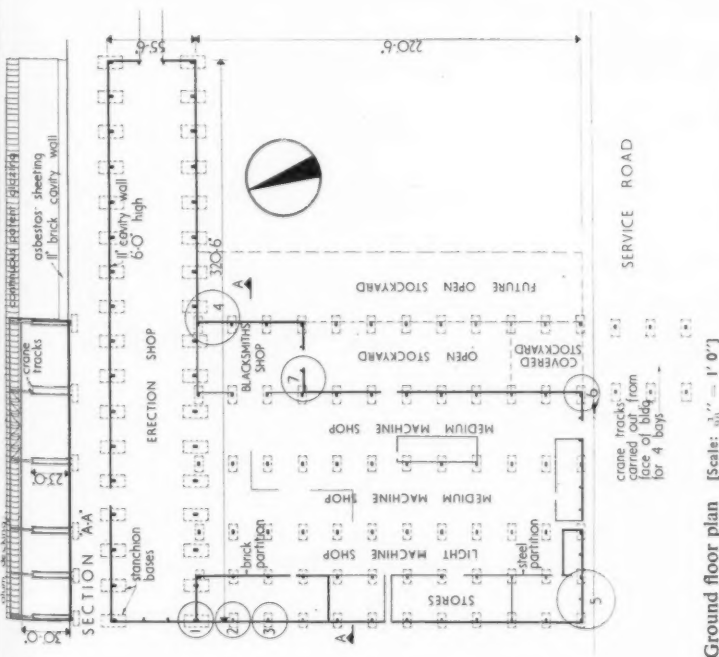
Key plan showing photographic viewpoints



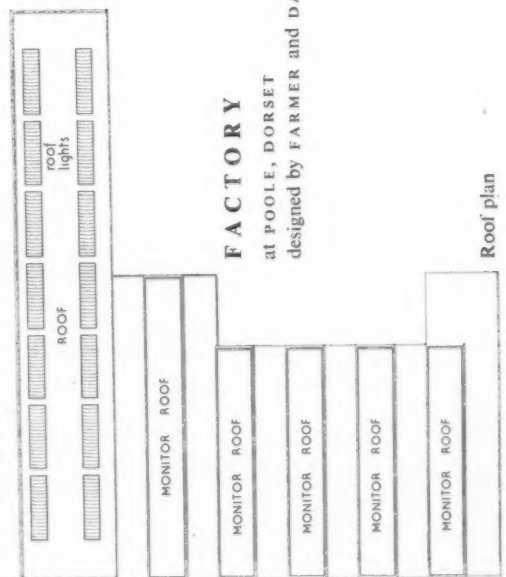
A site was cleared and levelled for the building from ground sloping down from Wallisdown Road (viewpoint 2, above). The present factory only partially occupies this area, the remainder being left for future expansion. The building has been placed at the west side of the levelled area, where the site has been excavated, to minimize

above). The present factory only partially occupies this area, the remainder being left for future expansion. The building has been placed at the west side of the levelled area, where the site has been excavated, to minimize

point 6, above). This precaution has been taken in view of the non-absorbent character of the sheet cladding, on an exposed site.



Ground floor plan [Scale: 1/8" = 1' 0"]



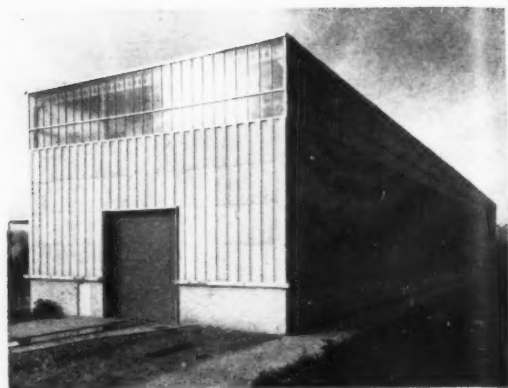
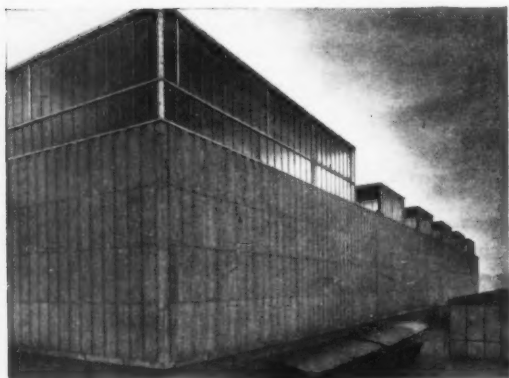
Roof plan



The machine shops are naturally lit by monitor roof lights. The roof profile is created by applying patent glazing directly to the light steel lattice girders which form the supporting structure. The ends of the monitors are also glazed. They are shown under construction in viewpoint 7 above.

The roof is formed by aluminium decking carried on steel channel purlins, which is covered with two layers of bituminous roofing felt, spar finish, laid on 1-in. insulation board. The edge of the monitors is formed with an aluminium drip and fascia, giving weather protection.

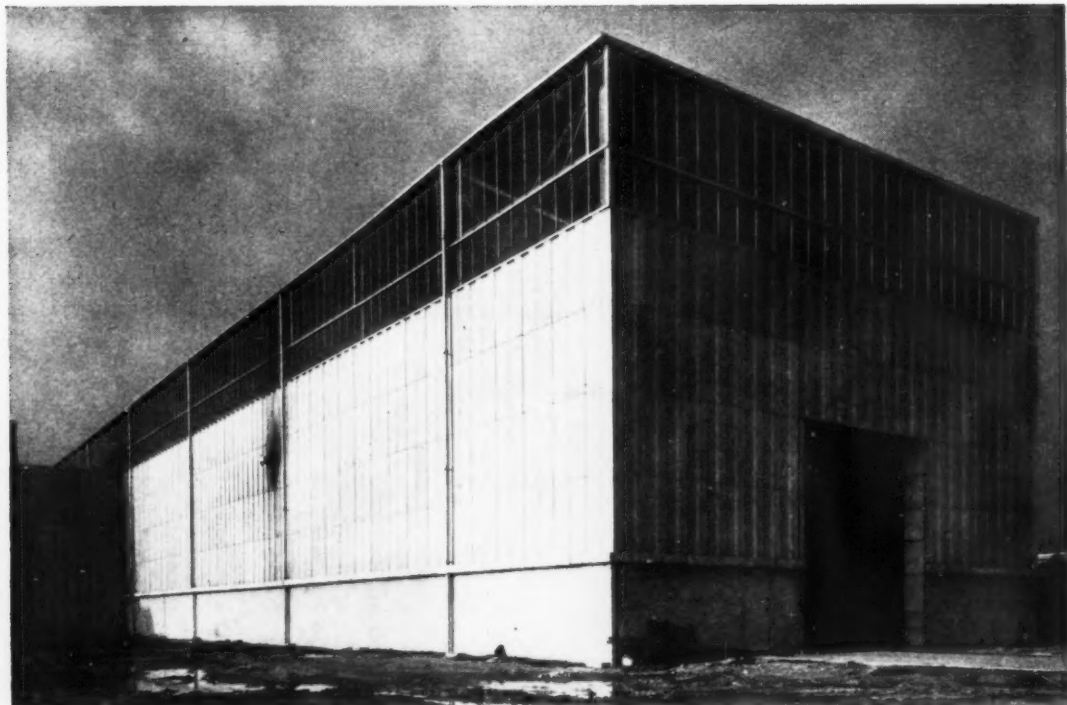
building illustrated



FACTORY

at POOLE, DORSET

designed by FARMER and DARK

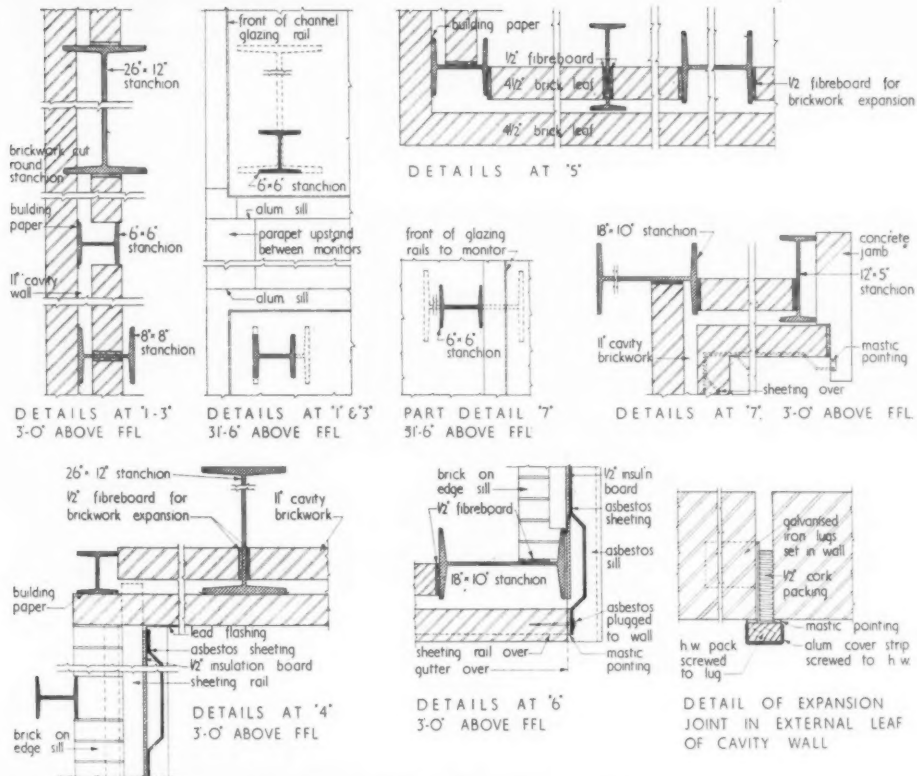


The large erection and testing bay has similar external cladding (viewpoint 8, top left). The increased roof level has permitted this shop to have continuous patent glazing on all four sides above the level of the crane rails. At the eastern end of the bay is an 18-ft. by 12-ft. roller shutter for the despatch of completed products, and for the delivery of exceptionally large components such as castings (viewpoint 9, top right). The jambs to this opening are formed by precast concrete blocks left fair-faced. A rail track

embedded in the shop floor runs out under the shutter as an aid to handling. The erection and testing shop projects well beyond the machine shops in an easterly direction (viewpoint 10, above). On this face of the block the asbestos cement rainwater pipes have been carried down externally from the aluminium gutter, to avoid the heavier structure in this crane bay. In general, falls have been created on the roof by slightly varying the heights of stanchions and trusses in setting out the steelwork.



## building illustrated



Detail plans of external stanchions (see plan on page 523) [Scale: 1/4" = 1' 0"]

The external cladding on the east face of the machine shops (viewpoint 11, below) has been varied to allow for future expansion, the brickwork being carried up only to 1 ft. 6 in. above floor level. The cleats carrying the external crane gantry penetrate the asbestos cladding, the junction between the two elements being protected by lead flashings. There are also cleats on the exposed stan-

chions of the external crane bay, so that a further "bay" can be added with facility on the eastern side if required. Except for external doors, and the roller shutter, which are picked out in primary colours, and the external gantry which is grey (Munsell reference N.5), there is an almost complete absence of external paintwork, which will help to minimize maintenance costs.

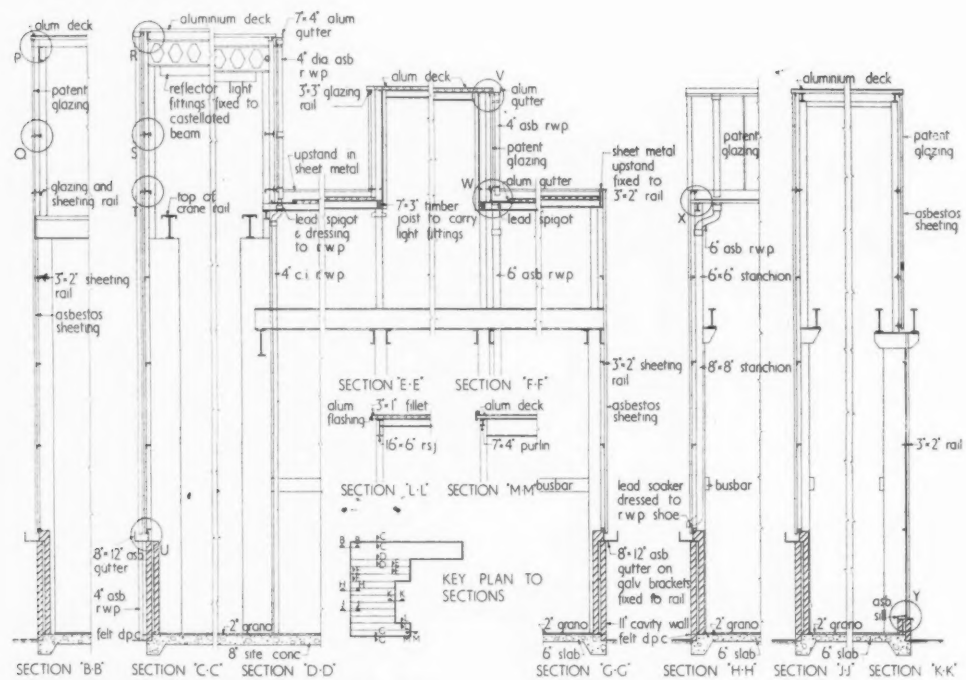


## building illustrated

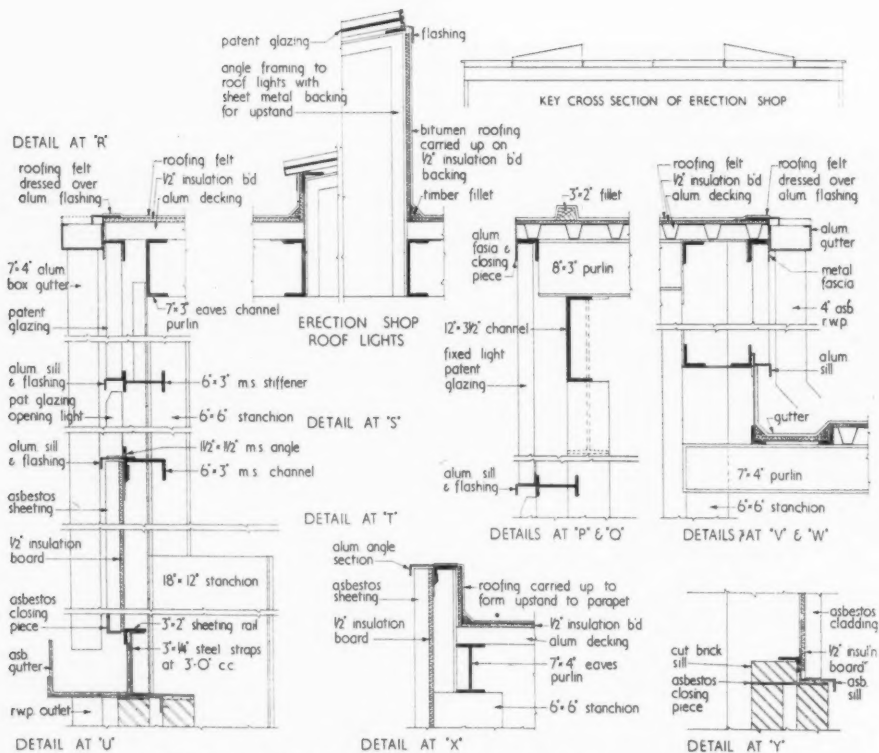
## FACTORY

at POOLE, DORSET

designed by FARMER and DARK

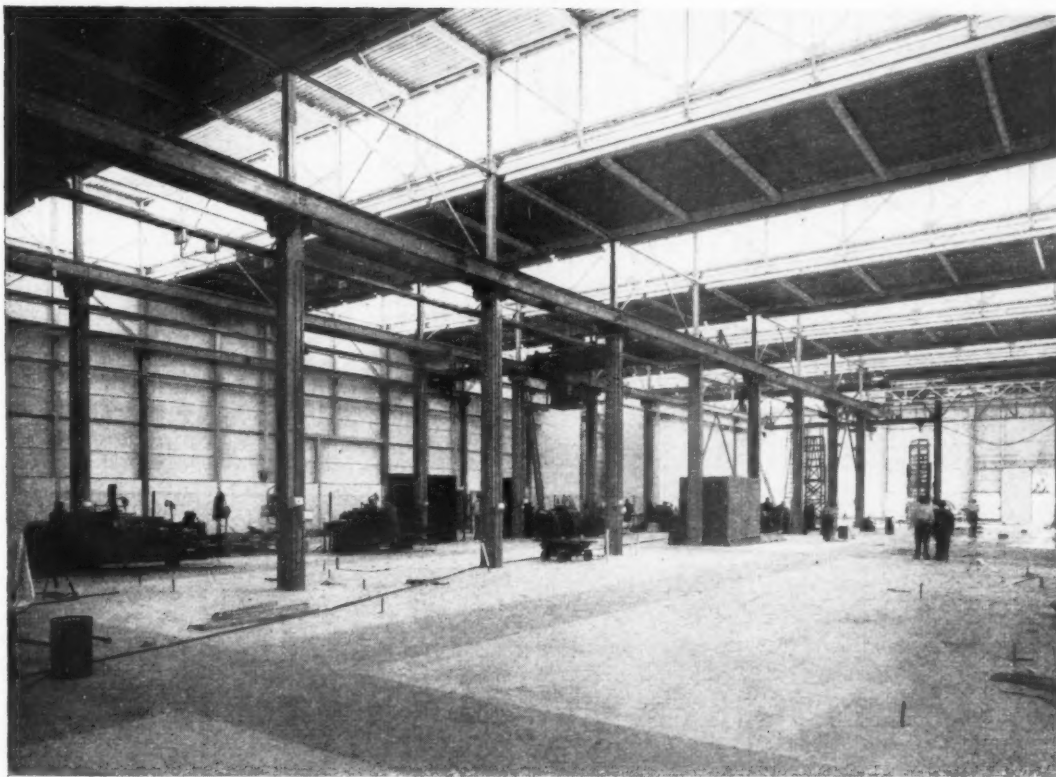


External wall details and key plan (Scale: 1/4" = 1' 0")



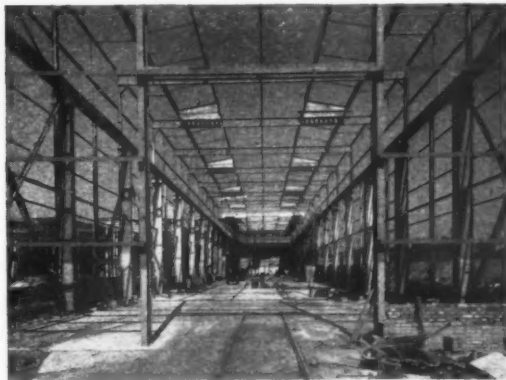
Cladding and roof details, see circles in top drawing (Scale: 1/4" = 1' 0")

## building illustrated



Viewpoint 12, top, shows bays 1, 2 and 3 of the machine shops, during construction, about seven months after commencement on the site. At this stage in the completion of the building, bays 1 and 2 had already been handed over, and were in occupation. The cladding and finishes were carried out progressively across the building so that this partial handing over could be achieved. Each of the machine shop bays has a crane gantry running its full length. A two-inch granolithic screed has been used as an overall floor finish, the gangways being delineated by a change in colour from grey to red. The asbestos cement cladding has been lined with  $\frac{1}{2}$ -in. insulation board, to increase thermal insulation. Warm air is circulated by fans through directional grilles

from free standing oil fired heaters, forming independent units. This method has avoided the necessity for a boiler house and for any complex system of pipe runs, which might have delayed completion of the contract. Natural ventilation is provided by opening lights in the patent glazing which are remotely controlled (viewpoint 13, left). Multiple tube fluorescent fittings run continuously across the bays on trunking fixed to the bottom members of the lattice beams, and give approximately 30 lumens per square foot on the working plane. The erection and testing shop is seen under construction in view 14 (below). The roof span of 52 ft. is carried on castellated beams, which in cases such as this



have the advantage of reducing the weight of steelwork where there are very light loads, and where deflection is the critical design factor, without unduly increasing the depth of the structure. Elsewhere the sizing of the steelwork has been as far as possible restricted to readily available sections.

building illustrated



This bay [also has two overhead travelling cranes running its entire length (viewpoint 15, left). The high level vertical glazing, seen at night, is supplemented, in view of the wider span, by shallow-pitched top lights, the cheeks of which are formed in sheet steel (viewpoint 16, below). Colour internally is subdued in character, except for doors which are painted in primary colours. The under face of the aluminium decking has been left exposed and unpainted. The steelwork at roof level is white to reduce visual contrasts with the bright glass, which might otherwise be glaring. Elsewhere the light steelwork members are pale grey (Munsell reference N.7) and the heavier members medium grey (Munsell reference approximately 10 Y.R. 8/2) has been used as a background colour on the insulation board and internal brickwork. The cranes, as moving objects and thereby potentially dangerous, have been picked out in amber. No special precautions have been taken to reduce noise.





## analysis

## FACTORY

at POOLE, DORSET

designed by FARMER and DARK

## CLIENT'S BRIEF: his stated requirements

A factory to be completed as quickly as possible within twelve months of commencement of drawings. Accommodation to include a large erection shop and a sufficient area of machine shop bays to house plant and stores. In addition an external stockyard, and existing prefabricated buildings to be resited to form temporary offices. The factory to have good natural and artificial lighting, and to be readily adaptable for future expansion as required.

## SITE: topography, surroundings, access, planting

Sloping heathland with heather scrub, with a subsoil of sandy gravel and patches of clay. Clumps of Scots pine. A new industrial area, associated with local authority housing. An internal service road from Wallisdown Road, which passes the existing offices. No special provision beyond that existing.

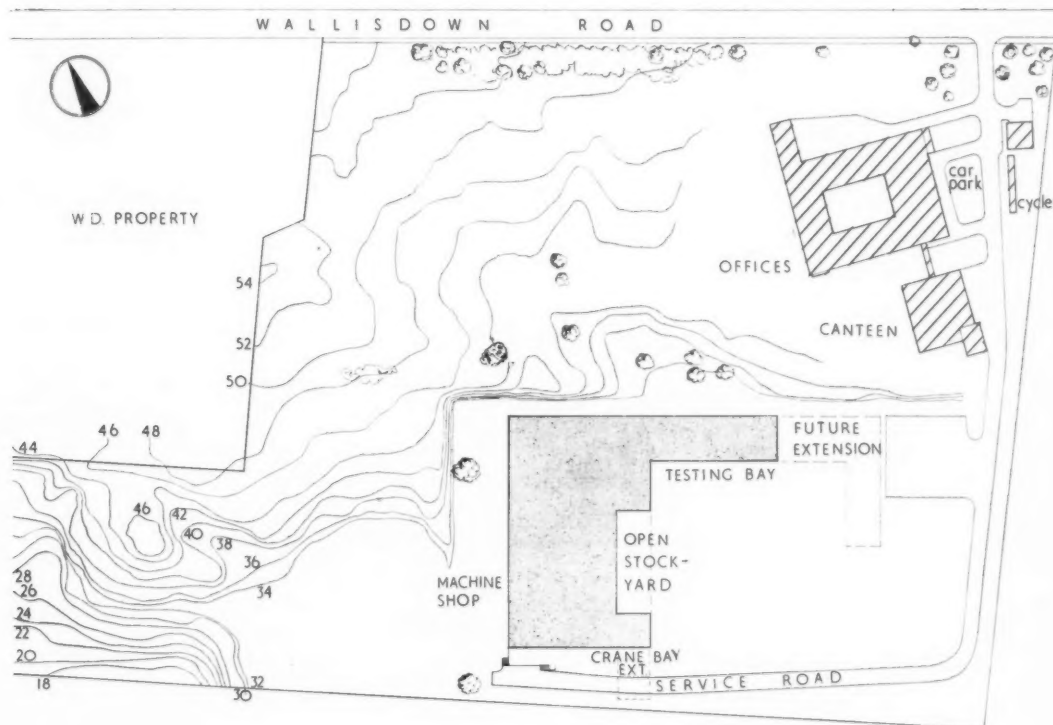
## PLAN: general appreciation and relation of units

The machine shop bays and stores run north-south at right angles to the large erection shop. Employees and goods enter from the south, off the service road. Finished products leave the east end of the erection shop by means of a large roller shuttered door. The stockyard is placed on the east side of the machine shops, its gantry also

running over the service road. The yard is capable, if required, of being converted into an additional machine shop. Generally, Bay 1 houses stores and a "Magnethermic" shop, Bays 2 and 3 are machine shops, Bay 4 a small erection shop, and Bay 5 a blacksmith and welding shop leading off the open stockyard. All these bays feed parts to the large erection shop on the north side, where the machinery is erected for testing, and usually subsequently dismantled for despatch. Bays in south block number left to right on plan.

## MAIN CONSTRUCTION: general appreciation

Reinforced concrete floor slab, and steel frame on mass concrete footings. Asbestos cement corrugated sheet cladding above 7 ft. 6 in. level, with 11-in. cavity brickwork below. Patent glazed monitor roof lights, and insulated aluminium roof deck, with two layers of bitumen felt.



Site plan

cost per sq. ft.	s	d
preliminaries and insurances	3	0
contingencies	1	6½

## STRUCTURAL ELEMENTS

Work below ground floor level: foundation type	Location	Materials	Finish	Reasons and comments
Stanchion bases	Generally	Mass concrete		Holding-down bolts cast in
Machine bases	Generally	Reinforced concrete		Only two isolated, remainder being cast in with floor
Erection pits	Large erection shop	Reinforced concrete	Fairfaced, painted	Two large pits 8 ft. 6 in. deep with stepped sides tanked in asphalt
		stanchion bases	6	0
		machine bases	0	5½
		erection pits	1	4

## analysis

<i>External walls and facings</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Perimeter walls below 7 ft. height	General except on east face	4½-in. facing bricks; 2-in. cavity, 4½-in. commons	Fairfaced externally, painted internally	Generally to avoid mechanical damage at low level. Omitted above 1 ft. 6 in. on east face to allow for future expansion		
Perimeter walls above brickwork	Generally	Asbestos-cement corrugated sheeting with ½-in. insulation board lining	Natural externally, painted internally	Speed of erection, low cost, and ease of replacement if damaged. Flexibility for future expansion		
<b>perimeter walls below 7 ft. height</b>					<b>1</b>	<b>2</b>
<b>perimeter walls above brickwork</b>					<b>1</b>	<b>6</b>

<i>Frame or load bearing element</i>	<i>Location</i>	<i>Materials</i>	<i>Beam spans</i>	<i>Column grid</i>	<i>Reasons and comments</i>		
Main structure	Machine shop bays	Steel stanchions, lattice trusses	Bays 1 and 2, 25 ft. Bays 3, 4 and 5, 40 ft.	20 ft. 20 ft.	The trusses run the full depth of the monitor roof lights at 20 ft. centres		
	Large erection shop	Steel stanchions, castellated beams	52 ft. 4 in.	2 ft. 7½ in.	Greater span based on functional requirements		
<b>frame or load bearing element, main structure</b>						<b>15</b>	<b>0</b>

<i>Roof construction</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Flat	Generally	Aluminium decking spanning 8 ft. 6 in. on to steel channel purlins	Spar on two layers of bituminous felt on ½-in. insulation board. Natural finish internally	Speed of erection, light weight, good natural finish internally		
<b>roof construction</b>					<b>6</b>	<b>0</b>

<i>Roof lights</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Monitor	Machine shops	Patent glazing	Wired cast glass	The lights form the external facing to the lattice beams forming the roof structure		
Top lights	Large erection shop	Patent glazing with sheet steel upstand	Wired cast glass	To supplement high level side glazing		
<b>roof lights: monitor</b>					<b>2</b>	<b>1½</b>
<b>top lights</b>					<b>0</b>	<b>10½</b>

<i>External doors</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Sliding	West, east and south walls	Exterior quality plywood on timber frames	Gloss paint	12 ft. doors on overhead tracks in two leaves to give a clear opening of 12 ft. wide		
Side hung	West and east walls	Timber	Gloss paint			
Roller shutter	Large erection shop	Metal		To provide a clear opening of 18 ft. by 12 ft.		
<b>external doors: sliding and side hung</b>					<b>0</b>	<b>3½</b>
<b>roller shutter</b>					<b>0</b>	<b>1½</b>

<i>Glazing</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Side wall patent glazing	Large erection shop and ends of monitor lights	Patent glazing	Wired cast glass	Kept at high level to avoid damage from swinging loads on cranes. Speed of erection and economy		
<b>glazing</b>					<b>0</b>	<b>9</b>

## PARTITIONING

<i>Internal partitions</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Full height to Bay 1	"Magnethermic" shop	9 in. common brickwork to 24 ft. patent glazing above	Emulsion paint	Required for dust exclusion. "Magnethermic" shop refers to the process of manufacture of low frequency induction furnaces		
<b>internal partitions</b>					<b>0</b>	<b>3½</b>

## analysis

<i>Screens</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
Half height	Bay 5	3-in. concrete block	Emulsion	6-ft. screen required round welding shop
Three-quarter full height	Bay 2	9-in. common brick-work to 10 ft.	Emulsion paint	A screen to prevent general access to furnaces and cyanide tank

screens: half height      0      0 $\frac{1}{2}$   
 three quarter full height      0      0 $\frac{3}{4}$

<i>W.C. doors and partitions</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
Doors	Lavatory block	1 $\frac{3}{4}$ -in. plywood faced	Gloss paint	
Partitions	Lavatory block	3-in. hollow clay	Plaster, painted	

cost included with total cost of temporary lavatory block

<i>Internal doors</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
Sliding, solid	"Magnethermic" shop	Plywood on timber frame	Gloss paint	Dust exclusion
Sliding, open mesh	Heat treatment	Mesh on steel angle frame	Gloss paint	

cost included under internal partitions

<i>Ironmongery to internal doors</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
Sliding	Throughout	Steel	Galvanized	
Side hung	Throughout	Brass lever handles	BMA	

## FINISHINGS

<i>Floor finishes</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Cost per sq. yd. s. d.</i>	<i>Reasons and comments</i>
Working floor	Generally	2-in. grey granolithic screed	Hand trowelled	15 4 $\frac{1}{2}$	Durable low cost finish
Walkways	Between machines	2-in. red granolithic screed	Hand trowelled		

floor finishes      1      8 $\frac{1}{2}$

<i>Wall finishes</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
Low level	Generally	Common brickwork	Painted	
High level	Generally	$\frac{1}{2}$ -in. insulation board	Painted	

<i>Decorations</i>	<i>Location</i>	<i>Paint types</i>	<i>Munsell or other reference</i>	<i>Colour scheme and comments</i>
Steelwork	Crane rail level and below	Hard gloss enamel	N.5 Grey	Larger steel members are painted the darker grey, the general steelwork being lighter. White at roof levels avoids excessive contrasts
	Above-crane level	Hard gloss enamel	N.7 Grey	
	Roof level	Hard gloss enamel	White	
Walls	Throughout	Two coats emulsion and clear glaze	Oyster and white	Neutral colours to reflect light without causing discomfort or distraction
Doors	Throughout	Hard gloss enamel	Yellow	
Roller shutter	Large erection shop	Hard gloss enamel	Forget-me-not blue	
Cranes	All bays	Hard gloss enamel	Amber	A warning colour on potentially dangerous moving objects

decorations      2      1 $\frac{1}{2}$

## FITTINGS

<i>Lockers and changing benches</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>
	Locker room	Steel	Stove enamel	Proprietary steel lockers and benches, with heating and extract system

## analysis

## SERVICES

<i>Rain water disposal</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Machine shop	R.w.p.'s. at west side	Asbestos cement	Natural	Internal down pipes discharge through wall into low level perimeter gutter		
Erection shop	South side	Cast iron	Gloss paint			
Low level perimeter gutter	North, west and south side	Asbestos cement	Natural			
<b>rain water disposal</b>						
<i>Plumbing internal: waste disposal</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
	Lavatory block	Earthenware	Salt glazed		<b>plumbing internal</b>	<b>0 0½</b>
<i>Hot water storage</i>	<i>Location</i>	<i>Materials</i>	<i>Capacity</i>	<i>Reasons and comments</i>		
Cylinder	Lavatory block	Galvanised steel	100 gallons	Lagged, thermostatically controlled immersion heater	<b>cost included under plumbing internal</b>	
<i>Cold water storage</i>	<i>Location</i>	<i>Materials</i>	<i>Capacity</i>	<i>Reasons and comments</i>		
Tanks	Above heat treatment	Galvanised	2 tanks each holding 800 gallons	These also supply the lavatory block	<b>cost included under plumbing internal</b>	
<i>Plumbing: sanitary fittings</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Slab urinals		Fireclay	Glazed		<b>cost included under plumbing internal</b>	
Basins and washing troughs		Fireclay	Glazed			
W.C.s		Fireclay	Glazed			
<i>Heating installation</i>	<i>Location</i>	<i>Criteria temperature</i>	<i>Air change rate</i>	<i>Reasons and comments</i>		
Four free standing oil fired heaters, blowing warm air through directional outlets	Placed to cover whole area	Thermostatic control set at 60° day temperature and 35° night		No boiler house required, and pipe runs almost entirely eliminated	<b>heating installation</b>	<b>2 6½</b>
<i>Boiler type and capacity</i>	<i>Location</i>	<i>Heat load and fuel type</i>	<i>Stoking method</i>	<i>Reasons and comments</i>		
Burner	Each unit	Low viscosity oil	Pump	Fully automatic	<b>cost included under heating installation</b>	
<i>Drainage: type of system</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Surface water	Roof drainage	Stoneware	Salt glazed	Discharge into adjacent stream	<b>drainage system</b>	<b>1 5½</b>
Subsoil	North and west perimeter of site	Unjointed field drains		To drain water from banks		
Soil	South side	Stoneware	Salt glazed	Connected to existing sewer		
<i>Gas installation</i>	<i>Location</i>	<i>Materials</i>	<i>Finish</i>	<i>Reasons and comments</i>		
Supply for heat treatment	Outlets in machine shops				<b>gas installation</b>	<b>0 3½</b>
<i>Electrical installation: source and fitting type</i>	<i>Location</i>	<i>Illumination level</i>	<i>Quality</i>	<i>Reasons and comments</i>		
Multi-tube fluorescent	Underside of trusses	30-35 lumens per sq. ft. at working planes	Direct	A high level of illumination required for precision work	<b>electrical installation</b>	<b>4 3</b>



## analysis

<i>Wiring and switching types</i>	<i>Location</i>	<i>Reasons and comments</i>
Special switch boards	West end of erection shop and south entrance	All lights are controlled from these two boards

## cost included under electrical installation

<i>Power supply type</i>	<i>Location</i>	<i>How distributed</i>	<i>Reasons and comments</i>
400 volts	Each bay	Metal box trunking	In machine shop bays the supply is fed to machines from trunking suspended from crane girders. In the large erection shop, runs are between the structure and the cladding. Four large testboards are fed direct from main switchboard by overhead cables. The supply is carried from an external 750 KVA transformer to the switchboard by an underground duct

	<i>power supply type</i>	<i>8</i>	<i>5</i>
<b>total net cost of elements, excluding extra cost items</b>	<b>62</b>	<b>1</b>	

## THERMAL INSULATION

<i>Type</i>	<i>Location</i>	<i>U-value</i>	<i>Reasons and comments</i>
1-in. insulation board	Roof	Approximately 0.40	Element of roof system
	Walls	Approximately 0.40	Lining to external cladding

## FIRE

<i>Structural precautions</i>	<i>Grade of protection apparatus</i>	<i>Sprinklers</i>	<i>Reasons and comments</i>
None	Fire hose points designed to cover the factory without exceeding 100 ft. hose lengths. Two external fire hydrants on access road	None	No requirements for structural precautions or special equipment but hose points installed on advice of County Fire Prevention Officer

<i>Planning precautions</i>	<i>Access for fighting</i>	<i>Means of escape</i>	<i>Reasons and comments</i>
	Access road for fire fighting appliances on north and west sides	All doors open directly to the open air	

## REFUSE DISPOSAL

<i>Method</i>	<i>Type of refuse</i>	<i>Waste recovery</i>	<i>Materials and installation</i>	<i>Reasons and comments</i>
	Metal swarf	By lorry	17 ft. square swarf pit on south side	The drop in level across the site allows the pit to be at tailboard level

## EXTRA COST ITEMS

<i>Cost items not included in form but included in tender cost:</i>	<i>Cost per sq. ft.</i>	<i>Cost per sq. ft.</i>
	<i>s. d.</i>	<i>s. d.</i>
Compressed air supply	3½	0½
Weighbridge	4½	1 0½
Process water supply	1½	5½
Rail tracks in floor	5	2 1
Water main	2	
		<b>5 11½</b>
<b>Total</b>		<b>£3 8 0½</b>
<b>Total net cost per square foot of floor</b>		

## TIME SCHEDULE

<i>Drawings</i>	<i>Tender date</i>	<i>Contract signed</i>	<i>Work commenced</i>	<i>Work completed</i>	<i>Type of contract</i>
September 1954	December 7 1954	January 1955	December 20 1954	August 31 1955	RIBA with quantities

The final handing over was on August 31 1955, but each bay was in fact handed over as completed. Bays 1 and 2 being occupied and in production in early July, and Bays 3 and 4 at the end of July

## RATIOS

<i>Area of enclosing walls</i>	<i>=</i>	<i>Area of windows (including ext. doors)</i>	<i>=</i>
Total floor area	1'5 : 1	Total floor area	0'6 : 1
Area of solid wall		Total roof area	
Total floor area	0'9 : 1	Total floor area	1'0 : 1

## analysis

## COST ANALYSIS

Total ground floor area of superstructure	54,360 sq. ft.	Tender cost of foundations	£22,196 0 0
Total floor area (excluding basement)	54,360 sq. ft.	Tender cost of ancillary buildings and external works	£18,504 0 0
Tender date	7.12.54	Gross total cost	£184,976 0 0
Tender cost of superstructure	£144,276 0 0	Cost per ft. super of floor	£3 8 04
Installations and finishings	—	Cost per ft. cube	15. 10d.

## COST COMMENTS

It is possible to compare this analysis with that of the production area of the Hilmor factory at Stevenage (AJ, March 31, 1955), but account must be taken of the underlying factors which have influenced the tender figure. These will include, inter alia: (a) *Size of contract*: gross cost, Stevenage £47,020; Poole £184,976. (b) *Speed of erection*: both erected in nine months notwithstanding the difference in size. (c) *Functional requirements*: the Poole factory is equipped with a travelling gantry; equipment which was omitted from the Stevenage scheme on the grounds of economy. (d) *The availability of site labour*: both factories were erected in new industrial areas, thus conditions were probably similar. (e) *Demand for future extensions*. (f) *Tender date, etc.* Taking these factors into account and comparing both analyses one can see more easily that the foundations and steel frame at Poole, which include the weight

and the steel of travelling gantry, are much greater than those elements at Stevenage. Without the ratio of solid wall and floor area (not given for Stevenage) little comment can be made on the comparative elements of external walls and facings. The specifications given show a marked similarity and therefore other things being equal one would expect that the unit cost of each of these elements would be similar. *Roof construction*: both factories used felt roof covering and insulation board ceilings, but asbestos decking is used at Stevenage, and aluminium decking at Poole. Cost per foot super: 6s. 6½d. and 6s. respectively. Both forms of construction giving speed of erection by eliminating wet trades. *Floor finishes*: Poole shows a better specification and therefore a higher cost per foot super than Stevenage. *Heating installation*: approximately the same criteria temperature was required in both cases.

The Stevenage factory was heated by a low pressure hot water system, Poole by oil fired warm air heaters. When comparing the costs of 2s. 2½d. and 2s. 6½d. respectively one must remember the greater cubic capacity to be heated at Poole and that the Stevenage factory carries only a proportion of the boilerhouse cost, the remainder of which is carried by the office block. *Lighting*: the increased ceiling height at Poole, together with the higher level of illumination required, helps to explain the difference in the costs of this element. (Poole: 4s. 3d. and Stevenage: 1s. 6d.). The Poole analysis might well be compared with the factory at Crawley (AJ, October 6, 1955), but with other factories published comparison is difficult because of the inclusion of office blocks with their relatively high finishing costs.

## SITE ORGANIZATION

In the JOURNAL for May 3, answers were given by the general contractors concerning site organisation at the Cattle Market, Gloucester. Below is the second series of replies to these questions to be published.

**SITE LABOUR AND EQUIPMENT**: work on the site was supervised by an agent and, bearing in mind that the essence of the contract was speed, two general foremen were appointed who took control of different sections of the work, to enable the outbuildings and the main factory building to proceed simultaneously. A ganger was employed supervising the whole of the drainage work, and a further ganger was utilised to supervise the mixing and placing of all concrete work in the foundations. For site excavation work and removal of spoil a Caterpillar H.T.4

Shovel was used effectively, and for certain excavation work in waterlogged and boggy ground a Priestman Wolf Excavator with drag line equipment was found to be the best machine. Material deposited on the site was moved with 2 yd. cube Muirhill Dumpers and 5 yd. cube tipping trucks were used for spoil that had to be carted away. The material was, of course, all mechanically loaded by either the H.T.4 Shovel or the excavators. A concrete mixing bay was set up to deal with the mixing of some 2,500 yds. cube of concrete, two 10,7 mixers being used side by side with separate weigh batching equipment. A fleet of four 15 cwt. dumpers were used for transporting the concrete to different parts of the site.

**SUB-LETTING**: all trades were in the direct

employ of the main contractor on an hourly basis with the exception of a small amount of the brickwork. This had to be sub-let to a "labour-only" brickwork sub-contractor to speed up work when bricklayers at an hourly rate were not available.

**JOB MANAGEMENT**: The liaison between the agent and head office, including the general supervision of the contract, was by the main contractor, personal visits being made on an average two or three times per week. A progress chart was prepared by the architects. Bearing in mind the vital necessity of completing the work on time, fortnightly site meetings were held to discuss progress. The architects, main contractor, all sub-contractors' representatives and clerk of works were present at these meetings.

## CONTRACTORS

*Clerk of works*: R. Edwards. *General Contractors*: James Drewitt & Son Ltd. *Sub-contractors (structure)*: Excavations: Whitelock & Co. Ltd. and James Drewitt & Son Ltd. *Asphalt*: Ragusa Asphalte Paving Co. *Bricks*: Sykes & Son (Poole) Ltd. *Special roofings, roofing felt*: Wm. Briggs & Sons Ltd. (Bitumetal roofing). *Patent glazing*: The Standard Patent Glazing Co. Ltd. *Structural steel*:

Wright, Anderson & Co. Ltd. *Asbestos cement cladding*: Asbestos Cement Roofings Ltd. *Patent flooring*: Stuart's Granolithic Co. *Sub-contractors (equipment)*: Central heating: "Dravo" heaters supplied and installed by Weatherfoil Heating Systems Ltd. *Gas fixtures and fitting*: Southern Gas Board. *Electric wiring*: Aish & Co. *Electric light fixtures*: Ecco Ensign Ltd. *Electric heating*: Weatherfoil

Heating Systems Ltd. *Roller shutters*: G. Brady & Co. Ltd. *Sanitary fittings*: B. Finch & Co. Ltd.

*Sub-contractors (decorations and specialities)*: *Cranes*: John Smith (Keighley) Ltd. *Cloak-room fittings (lockers)*: Rubery Owen & Co. Ltd. *Paint*: Leyland Paint & Varnish Co. Ltd.

196 0 0  
504 0 0  
976 0 0  
13 8 0 1/2  
15. 10d.

by a low  
y oil fired  
ne costs of  
one must  
ity to be  
age factory  
house cost,  
the office  
g height at  
of illumin-  
difference  
4s. 3d. and  
lysis might  
at Crawley  
er factories  
cause of the  
r relatively

an hourly  
l amount of  
sub-let to a  
contractor to  
at an hourly

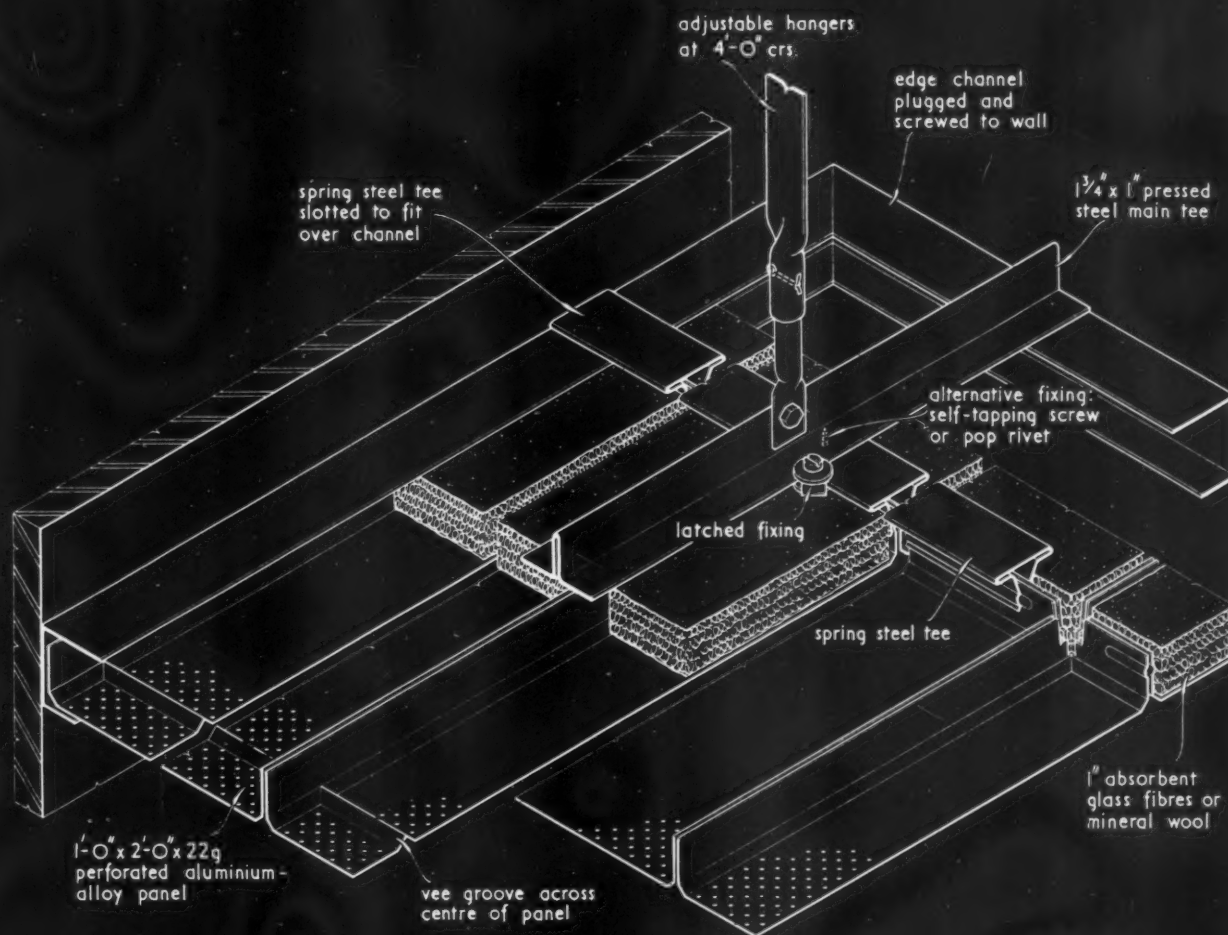
between the  
the general  
by the main  
made on an  
k. A progress  
s. Bearing in  
mpleting the  
ngs were held  
itects, main  
representatives  
ese meetings.

shutters: G.  
gs: B. Finch

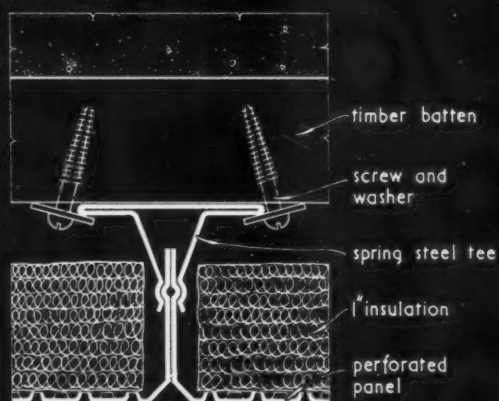
specialities):  
Ltd. Cloak-  
Owen & Co.  
nish Co. Ltd.



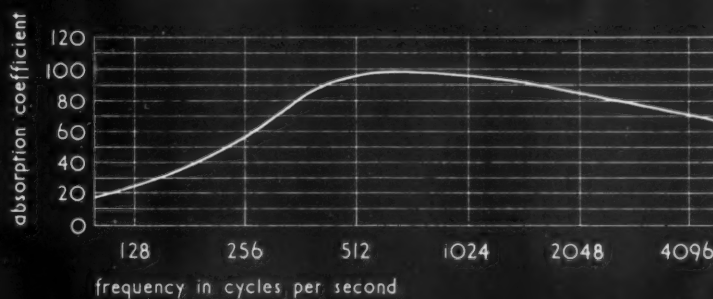




GENERAL ASSEMBLY OF COMPONENT PARTS.



SECTION SHOWING ALTERNATIVE FIXING.



SOUND-ABSORPTION CURVE.

## 27.B12 · SANACOUSTIC · CEILING

**This Sheet** describes an acoustic ceiling consisting of perforated metal trays, filled with absorbent material, which may be suspended or fixed directly to the structural ceiling.

### Components

**Tiles:** The trays are 2 ft. 0 in. long by 1 ft. 0 in. wide by  $1\frac{1}{4}$  in. deep and are manufactured in 22g. half-hard aluminium. They are stove-baked by a special process before they are formed and perforated, so that the colour is completely controlled. All arrises on the underside are bevelled and a vee groove across the centre of each tile gives the finished ceiling an appearance of 12 in. by 12 in. squares. The perforations are punch-pierced: unperforated tiles may be used where it is desirable to vary the degree of sound-absorption.

**Spring steel tees:** These hold the ends of the trays together by clipping over the beads in the upstands. They are sherardized.

**Main tees:** Where the ceiling is to be suspended the spring steel tees are drilled and screwed or latched to  $1\frac{3}{4}$  in. by 1 in. main tees which run at right angles to them at 4 ft. 0 in. centres. These main tees are bolted to adjustable hangers.

**Edge channels:** These are of aluminium alloy and are  $1\frac{9}{16}$  in. by  $\frac{7}{8}$  in.

**Adjustable hangers:** The telescopic hangers are of sherardized mild steel and are spaced at 4 ft. 0 in. centres.

**Sound-absorbent material:** This may be mineral rockwool or glass fibre and is normally 1 in. in thickness. It may be enclosed in polythene envelopes: this does not affect its efficiency and the polythene can be cleaned. The absorbent material rests on the raised edges of the perforations so that no spacers are required to keep it clear of the tray surface.

### Weight

The tile weighs approximately 1 lb. per tray, and the insulating material 4 oz. per sq. ft.

### Installation

The complete ceiling assembly is installed by the manufacturer, but the following design considerations should be noted. Trays can be cut for filling in at edges, the edge channel masking the cut edge. Perforated and unperforated trays can be arranged in patterns where a completely perforated ceiling would give too much sound absorption for a particular application. The tiles can be used in conjunction with lighting or ventilation, and for heating-ceilings they may be installed in collaboration with a heating engineer. The ceiling can be demounted without loss.

### Sound Absorption

The graph on the face of the Sheet shows the sound-absorption curve for a Sanacoustic ceiling.

### Colour and Finish

The standard colour for the tiles is white, but any other colour may be obtained to order. If required the tiles may be anodised at additional cost.

### Maintenance

Tiles may be washed with soap and water. They may be spray- or brush-painted if required.

### Further Information

The manufacturer maintains a technical advisory service and will submit acoustical reports and analyses, and quotations for installations. The tiles cannot be supplied apart from the ceiling assembly.

*Compiled from information supplied by:*

**John Dale Limited.**

Address: New Southgate, London, N.11.

Telephone: Enterprise 1272.

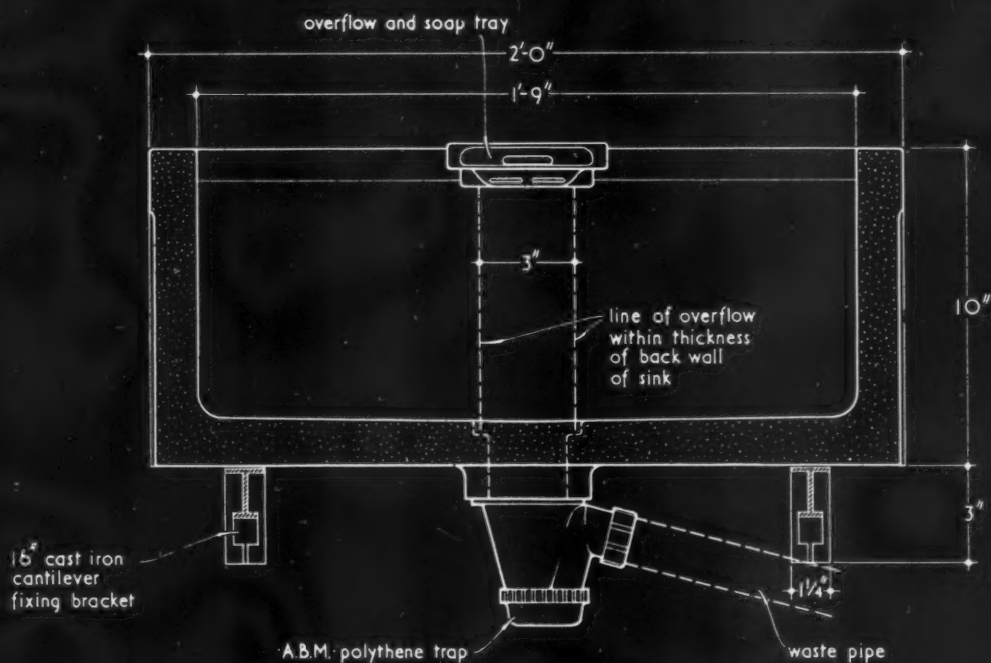
Copyright Reserved.

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

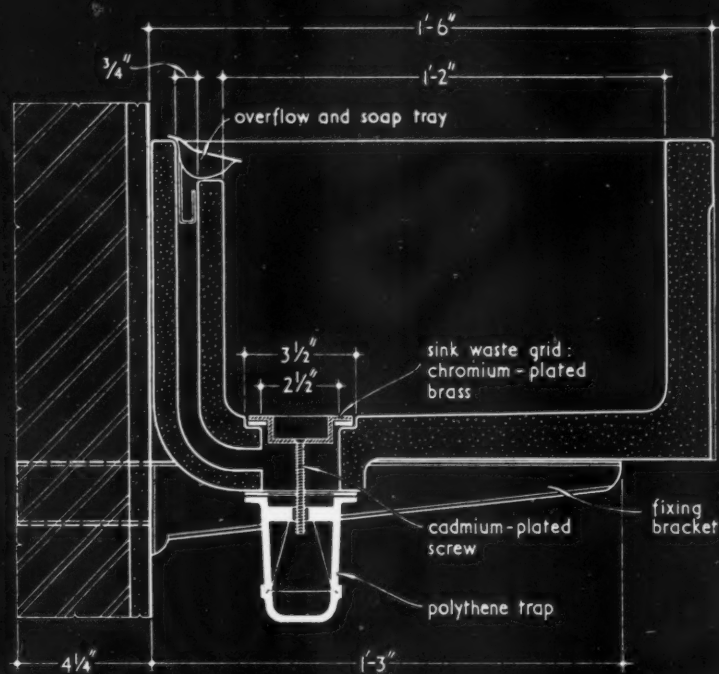








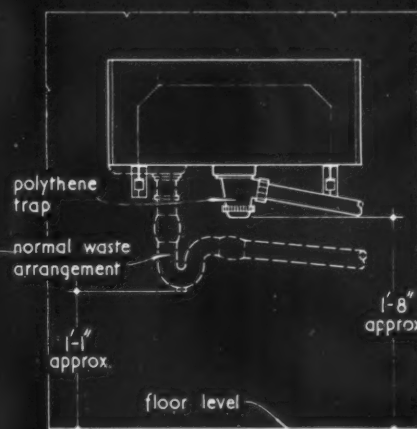
LONGITUDINAL SECTION THROUGH SINK.



CROSS SECTION THROUGH SINK.



A.B.M. SOAP TRAY.



TYPICAL ARRANGEMENT.

### 33.T1 · A.B.M. PARSALL · FIRECLAY SINK

This Sheet describes the A.B.M. Parsall white fireclay sink. Its advantages include an overflow which is flush with the back of the sink and a central outlet which allows for a steeper fall to the waste and at the same time means less obstruction of the space beneath the sink.

#### Material and Construction

The sink is of white glazed fireclay with a rebated waste outlet at the centre back. The overflow is accommodated in the thickness of the back of the sink so that it does not project into the usable sink area. A removable chromium-plated soap tray can be supplied, at small extra cost, to fit over the overflow, if required.

*Polythene trap:* The drawings show the A.B.M. polythene trap which has a  $1\frac{1}{2}$ -in. seal and a cross-sectional area throughout equal to a  $1\frac{1}{2}$ -in. pipe. It is proof against the action of detergents and weak acids and takes up a very small amount of space under the sink. The trap, which is for use with lavatory basins, baths and sinks, is described in detail on Sheet 33.P2.

#### Sizes

The sink is 2 ft. 0 in. by 1 ft. 6 in. by 10 in. deep overall. The internal dimensions of the overflow

are 3 in. by  $\frac{3}{4}$  in. throughout its entire length to conform to BS.1206: 1945. The design of the A.B.M. polythene trap assembly makes full use of this feature obviating the restrictions associated with slotted wastes.

#### Fixing

The sink is designed to rest on two plain standard 16-in. cast-iron cantilever brackets. It is flush on the underside so that it is not necessary to use one plain and one recessed bracket as is essential in most cases where the waste is at the side. Standard draining boards may be fitted. The drawing on the right-hand lower part of the Sheet shows the saving of space under the sink by the use of the A.B.M. polythene trap and by the central position of the waste.

*Compiled from information supplied by:*

**Associated Builders Merchants Limited.**

**Address:** Peters Hill, Upper Thames Street, London, E.C.4.

o  
f.  
is  
h

d  
n  
e  
st  
d  
e  
g  
f.  
e

.  
n,





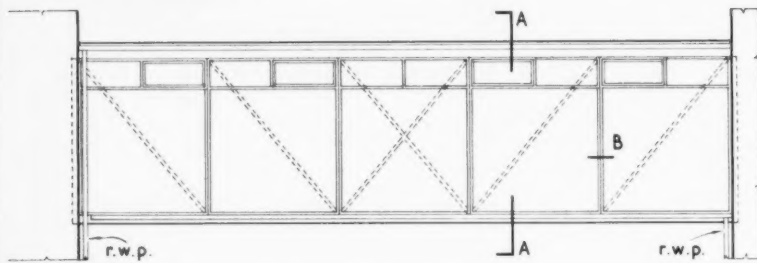
## CONNECTING BRIDGE: SCHOOL AT GREAT MISSENDEN, BUCKINGHAMSHIRE

*Frederick B. Pooley, Architect to the Buckinghamshire County Council*

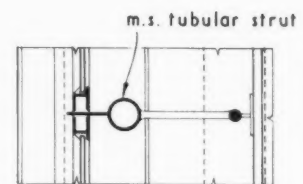
*The bridge is supported at each end by two stanchions which are independent of either block so that the junction between bridge and main structure is an expansion joint. The tubular steel frames which form the side structures and the handrail brackets and core, and the 5 in. by 3 in. r.s.j. on which they rest, were shop-welded and were bolted to the stanchions. The roof structure comprises 4 in. by 3 in. r.s.j.'s. running crosswise and  $\frac{3}{8}$  in. o.d. tubular diagonal bracing on which rest m.s. tee purlins and straw slabs: the floor structure comprises a grid of 5 in. by 3 in. r.s.j.'s. within which 5 in. by 2 in. joists have been scribed.*

CONNECTING BRIDGE: SCHOOL AT GREAT MISSENDEN, BUCKINGHAMSHIRE

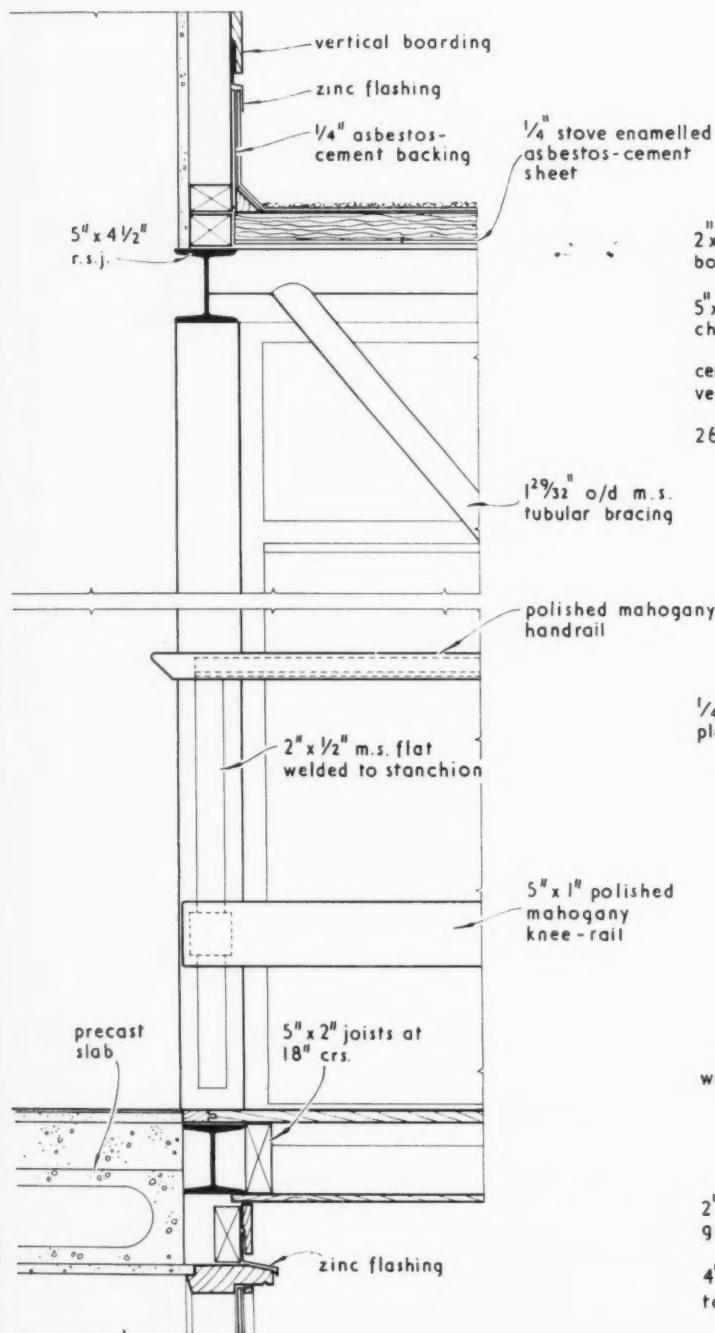
Frederick B. Pooley, Architect to the Buckinghamshire County Council



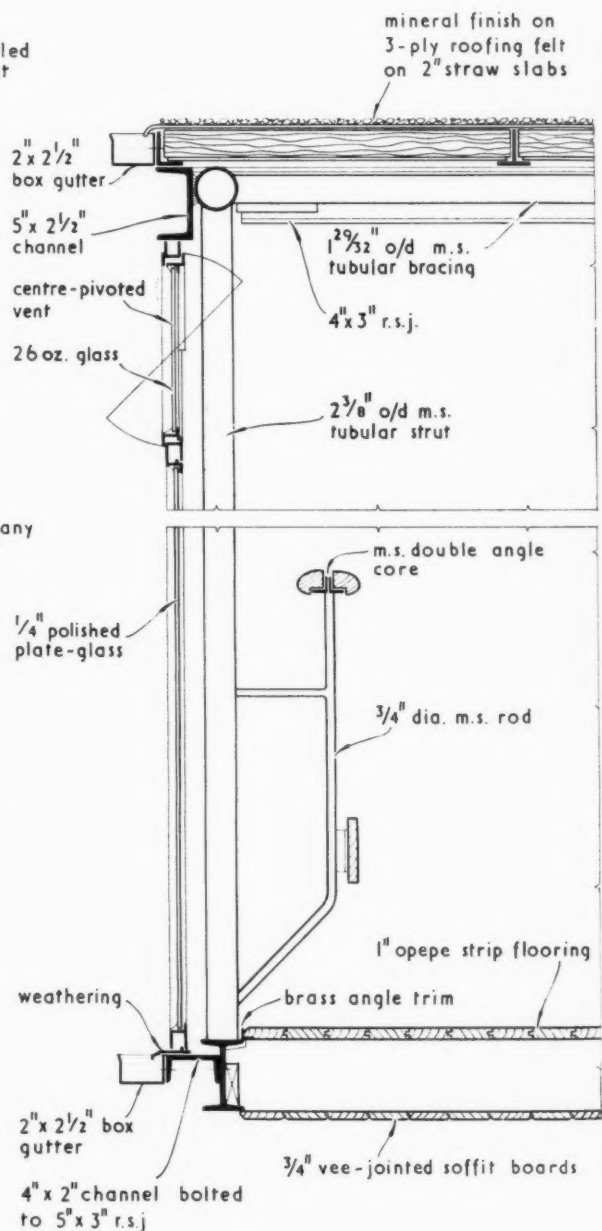
KEY ELEVATION. scale  $\frac{1}{8}'' = 1'-0''$



PLAN AT B.



SECTION AT JUNCTION WITH BUILDING.



SECTION A-A. scale  $1'' = 1'-0''$







## Announcements

### PROFESSIONAL

Robert Potter and Richard Hare, F/A.R.I.B.A. of De Vaux House, Salisbury, have taken into association Jeffery Ashenden, A.R.I.B.A. and Douglas Tennent, A.R.I.B.A. The title of the firm remains unchanged.

J. Granger-Taylor, A.R.I.B.A., has moved his office to 6, Fitzroy Square, W.1. (Tel: EUSon 6250). His home address remains 22, Park Village East, N.W.1. (Tel: EUSon 1731).

J. M. Austin-Smith & Partner, A/A.R.I.B.A. of 29 Sackville Street, London, W.1, have taken into partnership P. J. Lord and Geoffrey Salmon, A/A.R.I.B.A. The practice will be carried on under the title of J. M. Austin-Smith and Partners.

### TRADE

Expandite Ltd. of Chase Road, N.W.10 have made the following appointments: T. G. Grant, Sales Office Manager to be Home Sales Manager; R. A. Bickham, Technical Representative to be Area Manager and K. G. Whittle, Technical Representative to be Area Manager.

Charles J. King, A.M.I.E.E. has been appointed Midlands area manager of Lumenated Ceilings Ltd. He can be contacted through the Birmingham Engineering Centre and Exchange, Stephenson Place, Birmingham. (Tel: Birmingham Midland 1914).

### GENERAL

The Post Office, in appealing for good size letter-box apertures for new houses, is seeking the co-operation of architects, builders and local authorities. Many of the existing apertures are too small, and for private

residences the Post Office suggests 8 in.  $\times$  1½ in. This size has recently been adopted as a standard by the British Standards Institution.

The LCC will shortly publish its annual volume of housing statistics giving for the year 1954-55 a comprehensive account of the Council's housing activities, with details of the housing position at March 31, 1955. The volume will contain: (1) An outline of the Council's housing operations with a diagram illustrating the growth since 1900 in this important aspect of the Council's work. (2) A description of the broad outlines of the Council's system of management with some notes on points of interest in the year under review. (3) Explanatory notes and observations on the statistical tables which give detailed figures for slum clearance work in London and for housing accommodation provided by London housing authorities, including details concerning various types and location of housing accommodation, the rents charged, and other information. (4) A summary of housing legislation as it applies to London, with brief notes on the financial provisions of the various Housing Acts. In 1954-55 the Council built 8,598 new homes (a contrast with the first year of the Council's housing activities, 1892, when 56 dwellings were provided). At the end of March, 1955, the Council managed 174,863 homes for about 709,000 people. Total rent received was £10,503,172, including local charges for rates and water. In addition to the 174,863 dwellings, Council lettings included some 1,453 shops, 123 workshops, 2,244 garages, 5,691 allotments and garden plots, 57 club-rooms, and many thousands of stores, sheds and other miscellaneous properties. "London Housing Statistics, 1954-55" can be obtained from the Information Bureau at County Hall, S.E.1, and directly, or through

any bookseller, from Staples Press Ltd. (Bookshop—14, Great Smith Street, S.W.1), price 2s. 6d., post extra.

Richard Edmonds, the chairman of the L.C.C.'s town planning committee, has this to say in a recent Council agenda paper:—The exact position of high buildings is extremely important. There are in London a number of situations where a high building might make a positive contribution to the urban scene, for example, at civic centres and other focal points, and on suitable sites in the central area and along the river. In other places the introduction of high buildings might be detrimental, for example, where they would spoil an existing urban group. There are a large number of urban groups such as the London Squares, where a badly sited high building, even some considerable distance away, might do lasting damage and we consider it to be the Council's duty as planning authority to keep a very close watch on such proposals. Elsewhere, where the street pattern is not regular and the development is haphazard it may well be that high buildings would not be visible over wide areas and would not complete with national monuments and other significant groups. Provided high buildings in such areas conform to planning standards and do not affect their close neighbours detrimentally, there need be no objection to them. In fact, the open treatment at ground level rendered possible by building high may prove an added amenity. We consider that it is not possible to prescribe rules to govern proposals for the erection of high buildings, but that each proposal must be considered on its merits, and that an assessment of these might be approaching by posing a series of questions, as, for example: (1) Whether the building will disrupt the pattern of existing development or obtrude itself on the skyline to



## CONJURING WITH SPACE!

The liberties you can take with space are endless when you enlist the help of the ESAVIAN principle of partitioning. The doors and partitions slide quickly and smoothly, causing no obstructions, and can be made in the most attractive and appropriate materials for the job. They are as much at home in houses, schools, or offices as they are in factories, aircraft hangers or ships.

If you have any space partitioning problems which you think the ESAVIAN principle might be able to solve, may we suggest you get in touch with us?

These two sound-deadened Partitions (Type 700) in pencil-striped sapele mahogany show the flexible use of space at the Students Union Building Council Chamber, University of London. Architects: Adams, Holden & Pearson, F.F.R.I.B.A.

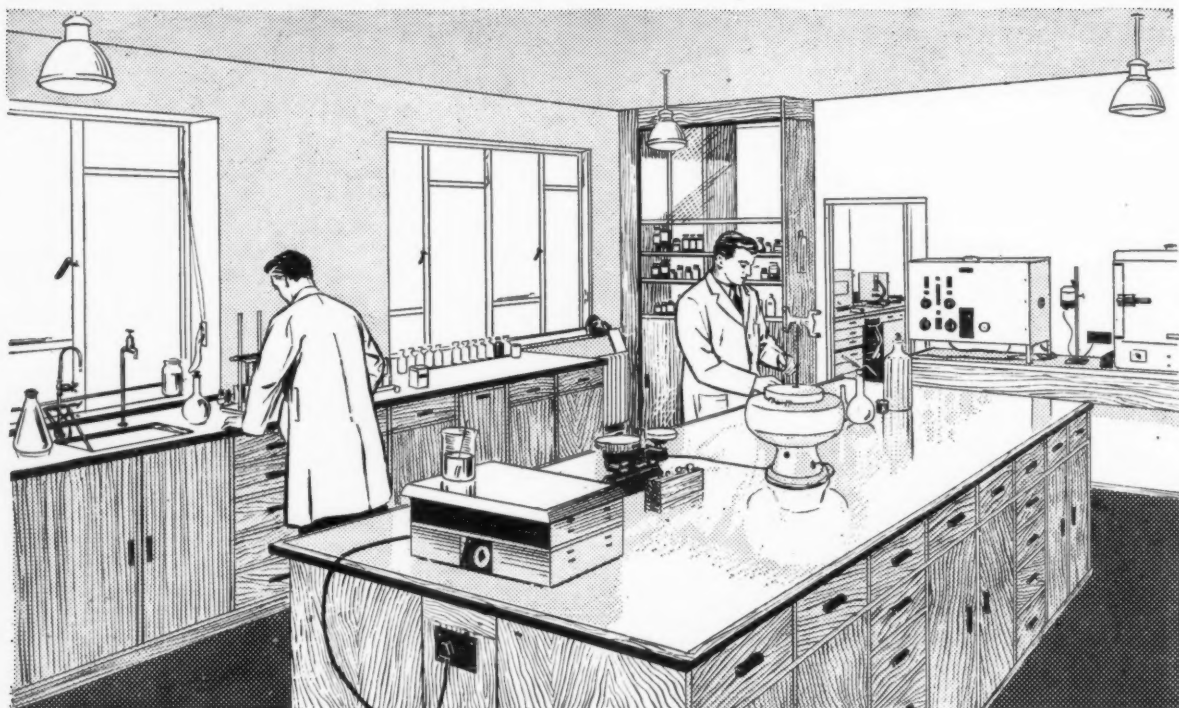
Esavian Ltd., Esavian Works, Stevenage, Herts. Tel.: Stevenage 500  
Esavian Works, Carfin, Lanarkshire. Tel.: Holytown 391.

THE

ESAVIAN

PRINCIPLE

FOR FOLDING AND SLIDING DOORS, WINDOWS, PARTITIONS AND SCREENS



## Scientific protection

To safeguard your goodwill you must have paints which embody scientific protection. The answer is STORRILUX.

STORRILUX, a durable, full bodied paint, containing alkyd synthetic resins with Titanium oxide.

Washable without gloss deterioration. To all work, interior or exterior, on land or seagoing, STORRILUX imparts beauty and lasting power.

Our Research Division keeps STORRILUX ahead; our Production Laboratory checks every batch. Your reputation is safe with a House that has served the trade since 1831.

### STORRY SMITHSON & CO. LTD.,

BANKSIDE WORKS, HULL. Tel. 34734

PAINT, ENAMEL & VARNISH SPECIALISTS SINCE 1831



LONDON. LIVERPOOL, GLASGOW, NEWCASTLE, CARDIFF & NEW YORK

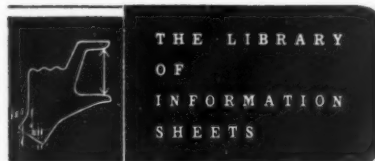
the detriment of existing architectural groups and landscape. (2) Whether its position has any positive visual or civic significance in relation to the town as a whole. (3) Whether the site is large enough in relation to its surroundings to allow the erection of a suitable designed base of lower buildings or the provision of an open space. (4) The degree of overshadowing of the adjoining area and the extent to which the building would detract from the development possibilities of the adjoining area. (5) Whether the building makes a better contribution to the general character of the area than possible alternatives and whether it relates satisfactorily to any other existing or proposed high building in the vicinity. (6) The relationship of the proposed building to existing and proposed open spaces and to the River Thames. (7) Whether, in view of its prominence, the design and materials proposed for the building are of sufficiently high quality. (8) Whether its illumination at night could detract from London's night scene. We consider also that it should be made clear to developers that the Council does not recognize any right to erect high buildings; that besides the Council's normal planning standards, including plot ratio, the provisions of the London Building Acts, mainly relating to fire-precautions and to the rights of the owners in the vicinity, will have an important bearing upon the design of the building and will involve seeking separate consents; and that before the Council gives planning permission for the erection of buildings which appreciably exceed the height of surrounding development, the applicant must make a case based on the considerations mentioned above. In deliberating upon this subject we have had the benefit of the views of the Royal Fine Art Commission who are at one with us in thinking that there can be no hard-and-fast rule and that each proposed building must be considered on its merits.

## Corrections



This design for offices for the London Electricity Board at Bethnal Green was incorrectly attributed in last week's issue to Basil Spence, A.R.A. The architects were, in fact, L. K. Watson and H. J. Coates.

The Conder Engineering Co. Ltd. regret that the acknowledgment to W. H. Saunders and Son, of Southampton, as architects for the building illustrated in their advertisement in the JOURNAL of April 26, was omitted.



### 36.D2, 42.E1 REFERENCE BACK

36.D2. Readers are asked to note that the heading to the last paragraph is amended to "Regulations governing installation and types" and that the following should be added at the end of the paragraph.

The following notes show the types and sizes acceptable to each authority.

#### London County Council:

Hand operated, with fusible link release.  
Not exceeding 8 ft. 0 in. in width and 7 ft. 0 in. in height.

Mechanically operated, including fusible link release.

Not exceeding 144 sq. ft. in area or 14 ft. 0 in. in width and 12 ft. 0 in. in height.

Application for exceeding these sizes will be considered.

#### Fire Offices Committee:

Hand operated, without fusible link release.

Not exceeding 56 sq. ft. in area or 8 ft. 0 in. in width and 7 ft. 0 in. in height.

Special application for exceeding these sizes and for use of mechanical winding gear will be considered.

#### Ministry of Transport:

Hand operated, with fusible link release.

Not exceeding 7 ft. 0 in. in width and 7 ft. 0 in. in height and suitable for the steel structure of ships.

Special application for exceeding these sizes and for use of mechanical winding gear will be considered.

42.E1. Readers are asked to note that the address of the manufacturer's Coventry office is now Needlers End Lane, Balsall Common, nr. Coventry. The telephone number remains the same.

## NEOCAST for modern interiors (CASTEX) and exteriors

ACTUAL SIZE  
of the WIDE REED  
design.

Durable, hard-surfaced "NEOCAST" is hardboard . . . PLUS. It offers an excellent surface for paint, enamel, varnish and cellulose finishes and is ideal for natural clear polishing.

It is cleanly and easily worked with ordinary carpenter's tools; can be fixed by normal woodworking methods, and its fine, smooth surface will adapt itself to curvatures as easily as it will to flat areas. Its fine clean-cut edges, too, meet perfectly without need for cover strips or joint mouldings.

"NEOCAST" of  $\frac{1}{8}$  in. (3.5 mm.) standard thickness is available in:—

★ NARROW REED ★ WIDE REED  
Standard sizes: 7ft. 5in. by 4ft. 3in.

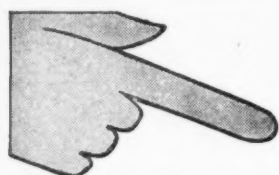
**NEOCAST**  
(CASTEX)  
reeded  
hardboard

**J. EIDELMAN**

28 BISHOPSGATE, LONDON, E.C.2.  
LONDON WALL 6656

"NEOCAST" may be rendered flameproof up to standard required by local councils.





*Facts about*

**plastaweld**

Another **MANGER** product

## PERMANENT BONDING FLUID FOR GYPSUM PLASTERS



**What it is** PLASTAWELD is a non-toxic fluid used straight from the can. Does NOT require stippling or blinding with sand.



**What it does** Permanently bonds gypsum plasters to all sound surfaces, however smooth, WITHOUT PRELIMINARY HACKING.



**How much it costs** 46/9 per gallon for 70 to 120 sq. yards coverage, according to type of surface.



**Advantages** NO HACKING, NOISE, DUST OR DIRT. Very simple to apply with brush or spraygun.



**How we can help** Our technical department is at your service to assist in particular problems.

Technical Representatives are ready to call on you or visit your sites.

Telephone or write to:  
Dept. A.J.



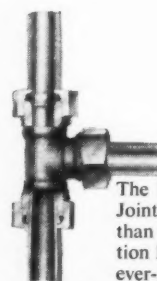
**J. MANGER & SON LTD.**  
57d KINGSLAND  
HIGH STREET  
LONDON E.8

Phone • CLEsold 5307/10

**Prestex Joints  
NOW  
cost less than  
any others**



**Send for  
the 1956  
Catalogue**



Full range of  
patterns and sizes  
1/2 in. - 2 ins.

The high quality of Prestex Compression Joints is unchanged. But they now cost less than any comparable joint because production has been greatly increased to meet the ever-growing demand. Simple to assemble, fitted with only a spanner, they can be made and re-made with the same copper cone. They are completely safe, do not weaken the copper tube, or restrict the bore. Approved by the Ministry of Works, Metropolitan Water Board and leading authorities.

# PEGLERS LIMITED

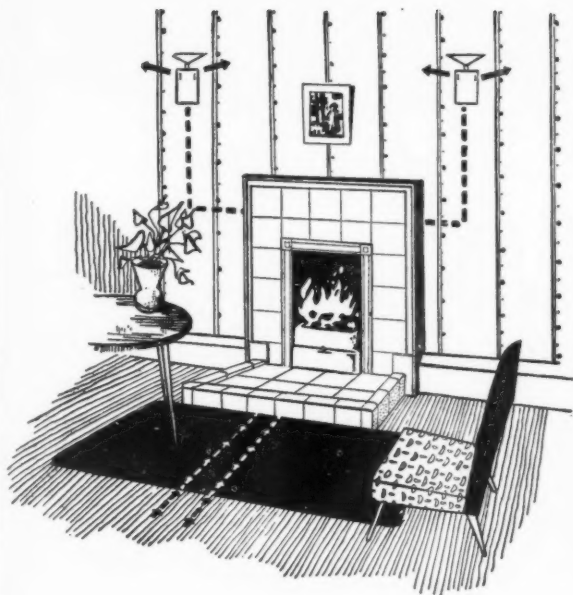
BELMONT WORKS, DONCASTER

London Office and Warehouse:

**PRESTEX HOUSE, MARSHALSEA ROAD, S.E.1**

TGA C





## Open fire radiation uniform space heating...

With Dunn's AIRDUN Convector Fire you have the best of two systems of heating. Primarily, you have all the advantages of the traditional open fire—including radiant heating and economy control. In addition to this, you have a continuous flow of warm convected air entering the room from grilles situated in the wall or fireplace. (In the example illustrated the grilles are concealed behind light fittings in the wall). The AIRDUN Convector has several applications and is especially suited for heating other parts of the house from the one fire.

**AIRDUN** CONVECTOR FIRE

*For full technical details write to the  
manufacturers who will be pleased to advise  
you on your specific heating problems*

**ALEXANDER DUNN LIMITED**

Bothwell Road, Uddingston, Lanarkshire.

Tel. Uddingston 500

## In your office



## use STEEL Desks and Tables

- 70 different types of Sankey-Sheldon steel desks to choose from.
- Fire-resisting, will not warp, easy to clean.
- Alternative drawer arrangements to suit your filing needs.
- Automatic locking for security.
- Neutral Grey or Olive Green baked enamel finish, linoleum tops in several standard colours.
- In dealing with Sankey-Sheldon you buy direct from the manufacturer. Offices and showrooms throughout Great Britain carry stocks ensuring prompt delivery and local service.
- Send for catalogue DT254/AJ3.



**The people  
to see are  
SANKEY-  
SHELDON,  
of course!**

**4-drawer foolscap  
non-locking £15.0.0  
P.T. £3.7.6d.  
automatic lock £16.0.0  
P.T. £3.12.0d.**

# Sankey-Sheldon

SANKEY-SHELDON LTD., 46 CANNON STREET  
LONDON, E.C.4

Telegrams: Sankeshel, Cannon, London. Telephone: CITY 4477 (14 lines)

STEEL FILING CABINETS • SHELVING  
STORAGE BINS • PARTITIONS • MOVABLE WALLS  
CUPBOARDS • CLOTHES LOCKERS • LIBRARY SHELVING



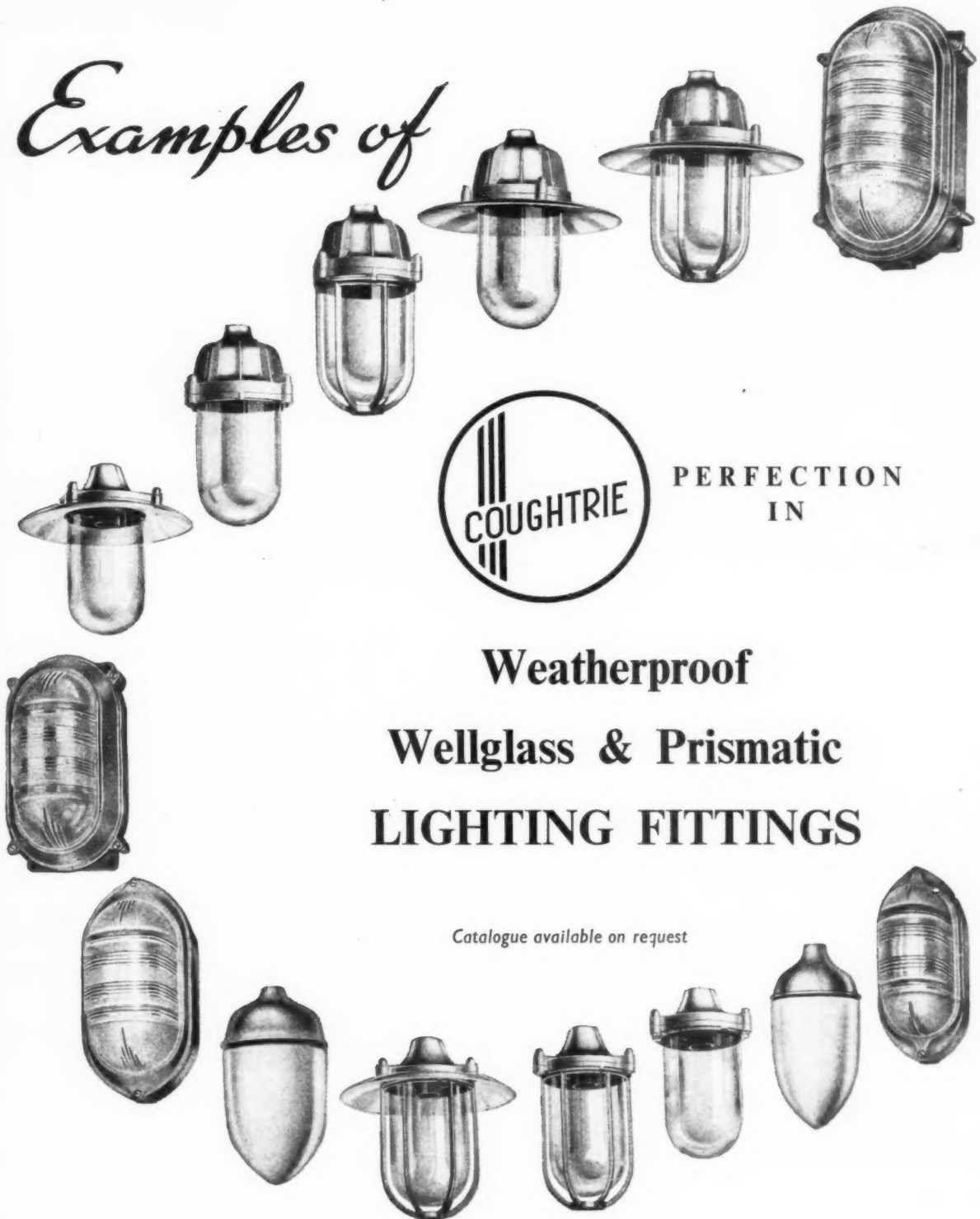
**CATESBYS**  
**and lino make**  
**an entrance !**

Making this entrance hall for Hohner Concessionaires\* is the kind of job the craftsmen at Catesbys relish. For they are craftsmen, skilled and experienced in lino laying of all kinds. If you have some new ideas for lino let Catesbys put them into shape.

\* Architects : Whimney, Son & Austen Hall, 37 Norfolk Street, Strand

**Catesbys** **LINOLEUM CONTRACTS**  
TOTTENHAM COURT ROAD · LONDON · W1 · MUSEUM 7777

*Examples of*



PERFECTION  
IN

**Weatherproof  
Wellglass & Prismatic  
LIGHTING FITTINGS**

*Catalogue available on request*

*Manufactured by*

**J. & G. COUGHTRIE LTD.**  
HILLINGTON • GLASGOW, S.W.2



**Don't  
go  
round  
in  
circles**

**DON'T FALL INTO THE TRAP OF THE CHEAP DOOR**

Buy on price alone and you will find yourself back where you started. You get just what you pay for  
**NOTHING IS AS CHEAP AS THE BEST.**  
Leaderflush put quality before price; but their mass-precision methods of manufacture keep their prices down to a competitive level.

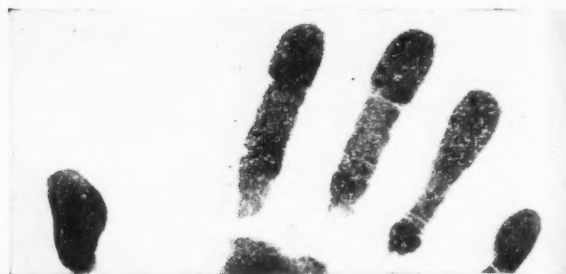
*We don't make revolving doors but . . .*

**MAKE NO MISTAKE . . .**

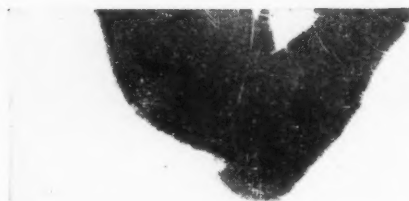
**LEADERFLUSH**  
LTD.

**ARE BRITAIN'S FINEST  
FLUSH DOORS**

LEADERFLUSH LTD., TROWELL, NOTTINGHAM  
Telephone: ILKESTON 623 (4 lines) Telegrams: LEADAFLUSH ILKESTON



**FOO-3-4**



*-the*  
**TOUGHEST PAINT**  
*of all*

For longer life—even three years longer than the finest pre-war enamels, harder wear and damage resistance, nothing compares with FOO-3-4 Synthetic Enamel. This hard drying paint withstands hot water, disinfectants, dilute acids, alkalis, steam, grease, etc. FOO-3-4 is ideal for hospitals, factories, schools, offices—anywhere where bright appearance, hygienic cleanliness and strong wearability are essential. It is available in many attractive modern colours, all of which are fast and permanent and can be washed and scrubbed without damage to the surface. Its competitive price gives it a lower cost per year of effective service than any other material. Write or 'phone now for test panels to:

-----  
**DONALD MACPHERSON & CO. LTD.**  
ALBION ST., MANCHESTER 1, And MITCHAM, LONDON.  
ALSO AT BIRMINGHAM, BELFAST, GLASGOW, NEWPORT (MON.) AND DUBLIN.





## *Something to crow about!*

Fordham pioneered the Seamless Steel Cistern about a quarter of a century ago and since then have stayed right on top, perfecting every worthwhile development. Users have been known to go into symphonic raptures about it—but that's only to be expected of a Cistern that never broadcasts its presence. Allied to its distinctively quiet operation is its quietly distinguished appearance which puts it "at home" in any household. Moreover, Fordhams are available in any colour to match any scheme of decoration.

FLUSHED WITH SUCCESS — BY

# **Fordham**

FORDHAM PRESSINGS LTD., HEAD OFFICE & WORKS: DUDLEY ROAD, WOLVERHAMPTON. Telephone: 23861/2  
Other factories at London, Hinckley (Leics) Sedgley (Staffs) and Dudley



Today an increasing number of responsible people are turning to the professional man for advice on questions, in relation to their personal affairs, which call for up-to-date knowledge of specialised subjects.

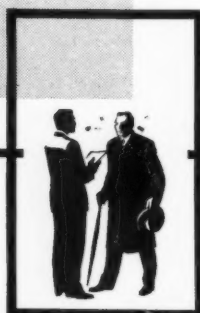
## **SAFEGUARD YOUR CLIENTS INTERESTS**

The United Kingdom Provident is in a particularly strong position to provide you with information on all topics relating to Life Assurance. We have been in business for 115 years and our latest figures are the highest ever. Current bonus rates are 45/- and 46/- per cent per annum *and they are compound.*

We have booklets which will prove helpful and, may be, profitable. Send for them today.



UNITED KINGDOM



PROVIDENT INSTITUTION



33 Gracechurch Street, London, E.C.3  
Mansion House 6543

# Ready Soon.

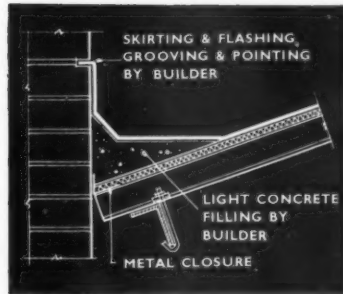
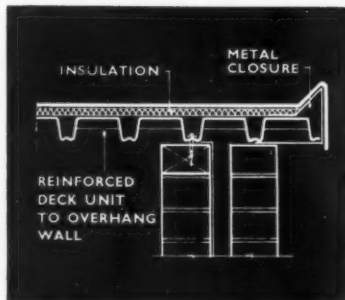
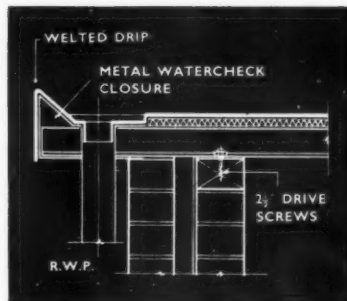
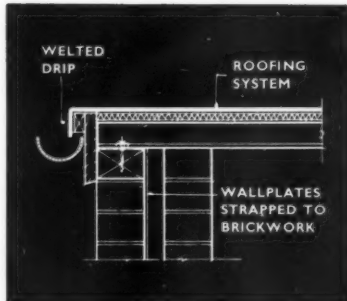
## THE NEW REVISED **MARRYAT-SCOTT** LIFT PLANNING RULE

★ *Architects are invited to apply now for FREE copies of the new improved revised Marryat-Scott Lift Planning Rule. First published in 1936 and reprinted five times, the new Rule incorporates all that is new in Lift Planning and gives the answers to most questions commonly asked by Architects.*

**MARRYAT & SCOTT LTD.** Wellington Works, Hounslow, Middx.  
Telephone: Hounslow 6284  
Telegrams: Marryat, London.  
Branches in Liverpool - Manchester - Birmingham - Brighton - Bristol - Glasgow

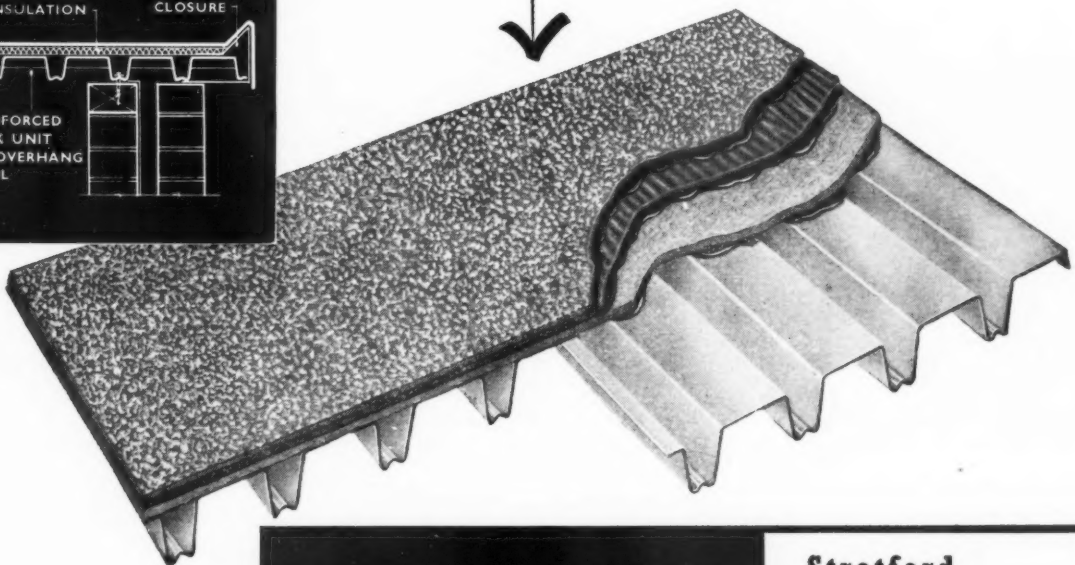
## TYPICAL DETAILS OF FINISH

eaves and verge details



## ANDERSON *aluminium* 'E' decking

'E' Decking is a complete roof incorporating aluminium deck units, insulation and weatherproofing by an Anderson system of built-up roofing. The roof is lightweight combined with maximum strength for all purposes, has good insulation value, high reflectivity and is adaptable to most roofs. Full technical details of the system are available on request.



**D. ANDERSON & SON LTD**

**Stretford  
Manchester**

e new  
lished  
hat is  
monly

Middx.  
London.  
Glasgow

# Another VOLEX installation . . .



Reproduced by courtesy of Messrs. F. Perkins Ltd. of Peterborough

## The VOLEX WARM AIR SYSTEM

is recognised as the most efficient and economical system of Heating and Ventilation for Offices, Factories, Workshops and all buildings where a pleasant equable atmosphere—essential to health and efficiency—is required. It maintains an even temperature and draughtless ventilation all

the year round, and the air in the building can be changed as often as desired according to the processes carried on. The heaters are made either for gas-firing, hand-firing, worm feed stokers or oil-firing.

*Ventilate as you heat*

Sole Makers: T. E. SALTER LIMITED TIPTON STAFFS.

Telephone: TIPTON 1657/1658

**"silent Salesmen"**  
always at your service



**easilyne**



**easilyne**



**easilyne**



**No. 5301 ELM.**  
Upright Pillarcock.  $\frac{1}{2}$ " (for lavatory basin) and  $\frac{3}{4}$ " (for bath).



**No. 5371 ELM.**  
Inclined-head high-necked Pillarcock.  $\frac{1}{2}$ " only for sink.



**Sanbra**

Where literature is concerned, ONLY THE BEST IS GOOD ENOUGH for 'Easilyne' products.

The range of Folders, Leaflets, Showcards, etc., which describe these well-known Taps and Shower Units reflects the modern design and tasteful lines of the products themselves.

They are truly "silent salesman" you can't afford to be without—they render 'Easilyne' sales even easier!

Be sure you have ample supplies.

**Sanbra LTD**  
ON HALL RD.

**easilyne**

**TAPS**  
in the modern manner

**WE HAVE AN EXPERT AT THE BUILDING CENTRE**  
26 SPUR STREET W.C.1

**SANBRA LTD • ASTON HALL RD • BIRMINGHAM • 6**

Designers & Manufacturers of Fine Quality Plumbers' Brassfoundry



ARTOLAC • PRIMO • ARTESCO • BAUMATTE • ROGART • RUSTRATION • DUROLENE • DUROCOL • MONSTO



SURFACE-PAINTS FOR EVERY PURPOSE & SURFACE-PAINTS /

It is with the highest confidence that our "Paints for every purpose and surface" can be specified.

Please get in touch with us — our laboratories, together with our technical and service departments are at your call to assist in solving your problems when paint specifications are up for discussion. We are continually developing and testing new paint mediums to meet the ever increasing demands for new surfaces and conditions.

# MONTGOMERIE, STOBO & CO., LTD

MAKERS OF FINE PAINTS, ENAMELS & VARNISHES

52 - 72 ROGART ST.  
GLASGOW S.E.

ALSO AT  
BELFAST & SLOUGH

DEESIDE, SALTNEY  
NR. CHESTER

## A Flexible P.V.C. TILE FREE FROM RUBBER

As now being laid at the new Imperial Chemical Industries Limited works at Hill House, Nr. Thornton, Lancs.

Fibrolene Flooring has proved, after rigorous tests, to give complete satisfaction. Judge for yourself from these outstanding qualities.

High resistance to acids, alkalies, oils and greases. Hard wearing, warm to the tread, fadeless, resilient, non-absorbent.

FOR HOSPITALS	KITCHENS
LABORATORIES	BATHROOMS
CAR SHOWROOMS	OFFICES

# FIBROLENE FLOOR TILES

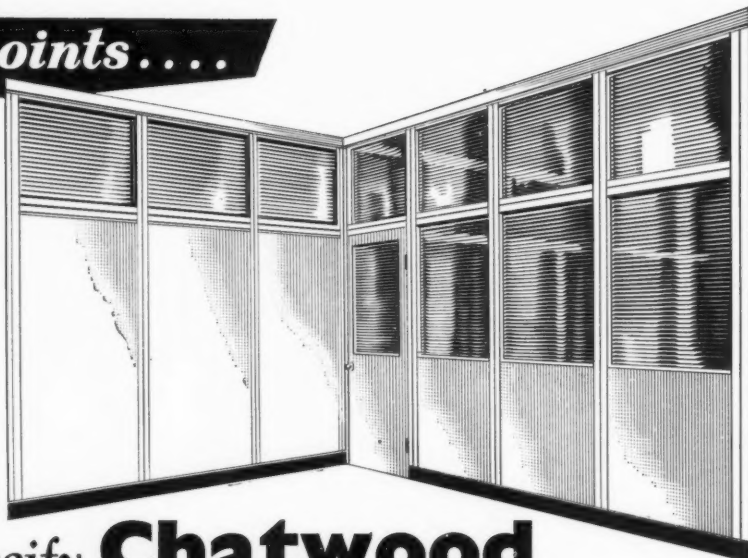


Imperial Chemical Industries Limited, Billingham Division Staff Canteen. Service Floor behind Cafeteria Counter

FIBROLENE, HARTFORD MILL, WESTON STREET, BOLTON, LANCS. PHONE: BOLTON 5000

## Check these points....

- ✓ Completely flush surfaces. All sections entirely interchangeable.
- ✓ Deep section gives rigidity, fire resistance, and freedom from 'drumming'.
- ✓ Wide colour choice in hard, stove enamelled finish.
- ✓ Exceptional sound resistance. Rubber mounted along entire length.
- ✓ Resistant to corrosion. Special electrolytic zinc coating process makes Chatwood partitioning especially suitable for tropical or other humid conditions.
- ✓ Flexible and convenient to install or move. Range of panel sizes and tailoring to suit special circumstances makes Chatwood partitioning adaptable to every architectural surrounding.



## -then specify **Chatwood** STEEL PARTITIONING

For further details write, call or phone: Central 0041

**CHATWOOD-MILNER LTD.**

The Chatwood Safe and Engineering Co. Ltd.

Milners Safe Co. Ltd.

Central Sales Office : 58 Holborn Viaduct, London, E.C.1

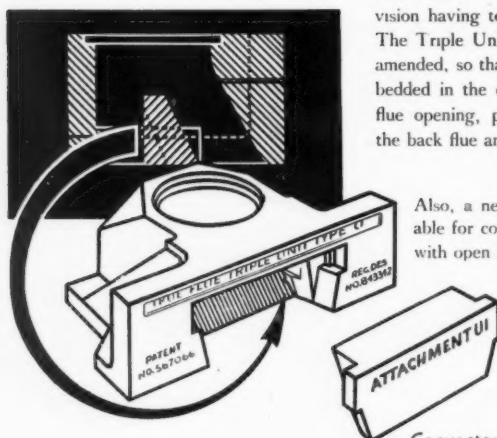
## *First in the field - and still the best* **TRUE FLUE** *TRIPLE UNITS*

# NEW!

### MEMBRANE ATTACHMENT *for back boiler flues*

Difficulty has been experienced in the past in adequately throating the "gather-over" above a back boiler appliance owing to provision having to be made for the back flue. The Triple Unit Type "U" has now been amended, so that the Membrane Unit can be bedded in the correct position spanning the flue opening, providing adequate space for the back flue and correctly throating the fire.

Also, a new Back Attachment is available for converting Triple Units for use with open fires.



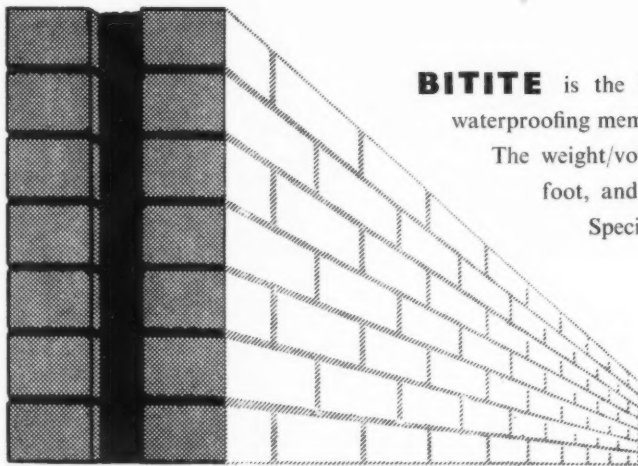
PATENT NO 567066  
REGD. DES NO 843342

Send for complete catalogue

## **TRUE FLUE LTD** *-anything in refractory concrete*

Convactor House • Acacia Road • St. John's Wood, N.W.8 Tele : Primrose 7161/2

## In the waterproofing of cavity walls . . .



**BITITE** is the bitumen compound best able to provide a waterproofing membrane between outside and inner brickwork.

The weight/volume ratio is approximately 84 lb. per cubic foot, and the Temperature for pouring 350°—400°F.

Specify a Dussek product if you want a sound job.

PLASPHALT AND BITROL  
PLASBESTOS BITUMEN EMULSIONS  
COLADE BITUMEN EMULSIONS  
LACOL RUBBER/BITUMEN EMULSIONS  
WATERPROOFER P.B.7.



### **DUSSEK BITUMEN & TAROLEUM LTD.**

EMPRESS WHARF, BROMLEY-BY-BOW, LONDON, E.3.  
Telephone ADVance 4127 Telegrams: TRINIDITE Bochurch London

Warrington: Loushers Lane, Wilderspool,

Glasgow: Barrhead South Goods Station.

Cardiff: 12 Cathedral Road.

Branches, Associated Companies and Agents in Australia, Belgium, British East Africa, Denmark, Malta G.C., New Zealand, Norway, South Africa, Sweden and West Africa.

dmDB207C

## **HOW LITTLE DOES A GOOD ROOF COST?**

Clay tiles from the range made by

**JOHN BROWNE & CO (BRIDGWATER) LTD**  
OLD TAUNTON ROAD, BRIDGWATER,  
SOMERSET

TELEPHONE : 2251/2

*Assure the best cover at the right price*

**Somerset—Homestead—Rainbar—Rectory**

**Your  
best  
connection  
for...**



**BEST  
MATERIALS**

**EXPERIENCED  
CRAFTSMEN**

**COMPLETION  
ON TIME**

**FINAL  
SATISFACTION**



**REGISTERED ELECTRICAL  
INSTALLATION CONTRACTORS**

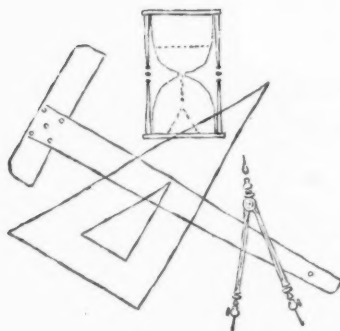
**RAWLINGS BROS.**  
**LIMITED**

Head Office:

85 GLOUCESTER ROAD, SOUTH KENSINGTON,  
LONDON, S.W.7. Telephone: **FRE**mantle 8161 (10 lines)

**...all  
Electrical  
work**

**The canteen took sixty years planning...**



... but now the knowledge, born of sixty years experience, is at your immediate disposal. By our expert advice in planning, layout and equipping—in fact in all matters relating to canteens—your difficulties are resolved and success becomes a certainty.

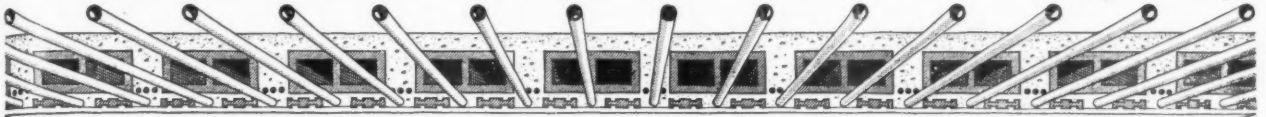
**RIVerside 2040**

**J. LYONS & CO. LTD.  
INDUSTRIAL CANTEENS  
ADVISORY SERVICE  
CADBY HALL, LONDON, W.14.**

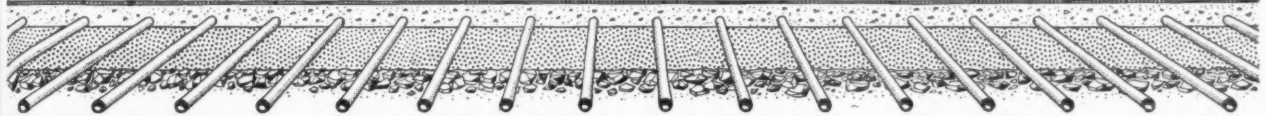
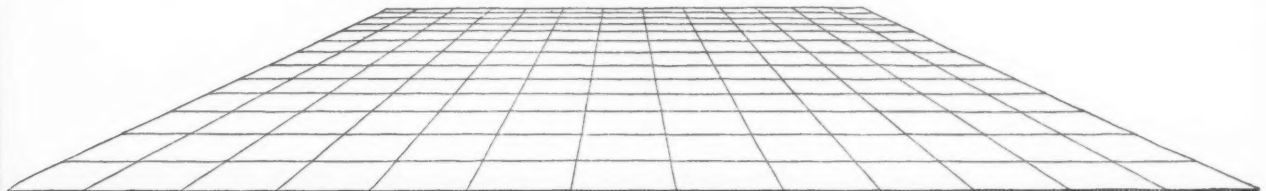
★ This Advisory Service is at the disposal of principals and architects. After consultation quotations can be made for the work to be undertaken.



A reminder that **PANEL WARMING** can be completely



**INVISIBLE**



**INVISIBLE PANEL WARMING ASSOCIATION**  
GRAND BUILDINGS, TRAFALGAR SQUARE, LONDON, W.C.2

Write for information on floor and ceiling heating

**No need to climb to dizzy heights-**



**When doors slide as easily  
as this they are running on  
KING SLIDING DOOR GEAR**

Doors that fold, doors that run around corners, doors on single or multiple tracks, all of these move easily and obediently at a touch when they run on King Sliding Door Gear.

The perfectly balanced precision engineering of KING ensures smooth, trouble-free performance. That's why you find King Sliding Door Gear in factories, public buildings, farm buildings and private homes.

*Send for illustrated booklets showing the range and applications of King Sliding Door Gear. Our experts are glad to advise on special installations.*




**SLIDING  
DOOR GEAR**

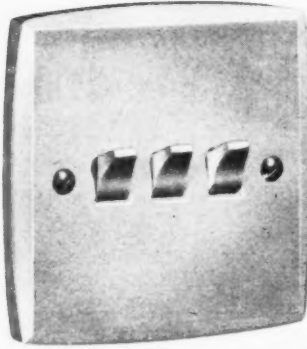
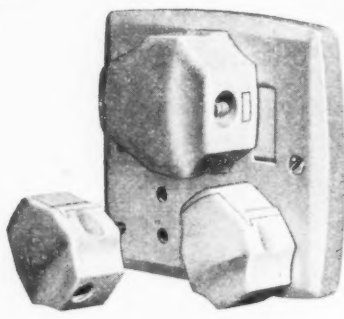
*Covered by British Patents*

WRITE FOR BOOKLET 201  
STEVENAGE, HERTS.

GEO. W. KING ARGYLE WORKS.  
TELEPHONE STEVENAGE 440

**NEW DAY**



*Range of Matched Accessories with many new features*

SEE ALL OUR RANGE ON STAND E.5, BEPC.  
**NEWDAY ELECTRICAL ACCESSORIES LIMITED**  
 136/8 MARY STREET • BIRMINGHAM 12 • Tel: CALTHORPE 2621  
 One of the COMPANIES ASSOCIATED with SOUTHERN AREAS ELECTRIC CORPORATION LTD.

*A Specialist Service  
for design...*

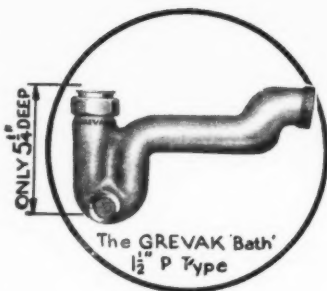
*...for supply*



**BURN BROS**  
(LONDON) LIMITED

**Cast Iron pipes & fittings**

*We design and supply, for home and abroad, installations for plumbing, drainage, and sewage pumping and disposal plants. Consultation before plans are settled can reduce costs and avoid delays. Large stocks, covering a wide range, support this important service with good deliveries. Please ask for our catalogue.*



# GREVAK

ANTI-SIPHON

GREVAK 'Bath' traps with overflow connections were fitted on a simplified one-pipe system at Alice Gilliatt Court, part of the Star Road (Fane Street) Redevelopment Area, Fulham — another recent example of the extensive specification of GREVAK patent anti-siphon traps to comply with the need for high standards of efficiency and hygiene on all plumbing systems.



Borough Architect & Director of Housing: J. Pritchard Lovell, Esq.,  
F.R.I.B.A., F.I.Arb., P.P.I. Hsg.  
Contractor: Messrs. John Laing & Son Ltd.

Fully illustrated literature and prices of the full range of 'GREVAK' traps available on request



ANTI-SIPHON TRAPS MAINTAIN THEIR SEAL

GREENWOOD AND HUGHES LIMITED · BEACON HOUSE · KINGSWAY · LONDON · W.C.2  
CHANCERY 8135 (4 LINES) · ANTIVACU WESTCENT, LONDON



service to **A**rchitects

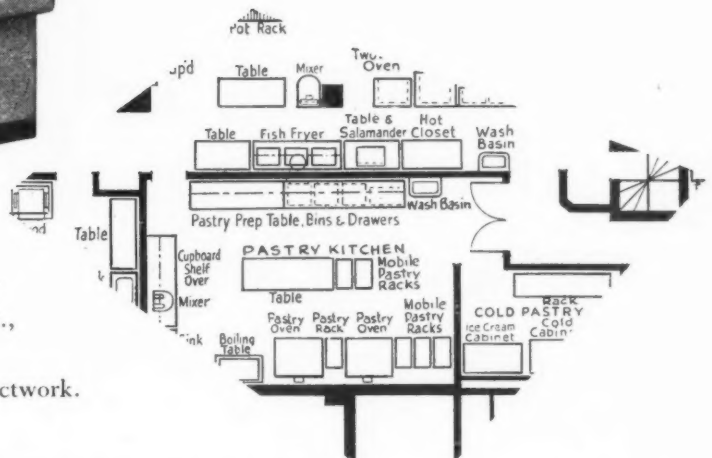
Kitchen Planning.

Manufacture of cooking apparatus (all fuels).

Manufacture of sinks, drainers, tables etc., in timber, stainless steel.

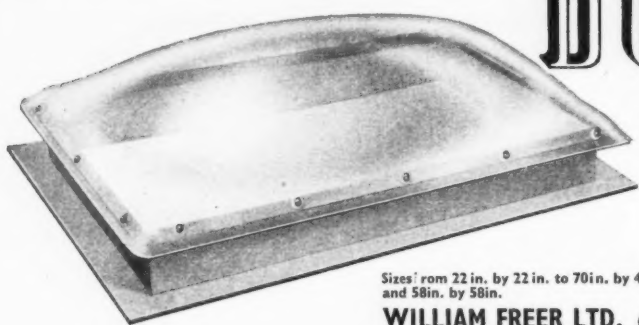
Kitchen ventilation, including hoods and ductwork.

All hot water and/or steam services etc.



**BENHAM & SONS LIMITED 66 WIGMORE ST., LONDON, W.1.** Telephone: WELbeck 9253 (17 lines)

Birmingham • Bournemouth • Brighton • Cardiff • Glasgow • Manchester • York  
DHB/2318



# DUPLUS Domelights

in 'PERSPEX'

The Duplus Domelight has a special weathered edge and is available in clear, opal or tinted Perspex. Aluminium curb reduces preparation work to a minimum. Leaflet showing fixing details, etc., on request.

Sizes from 22 in. by 22 in. to 70 in. by 46 in. and 58 in. by 58 in.

**WILLIAM FREER LTD. (PLASTICS FOR BUILDING DEPT.)**  
CHATHAM STREET LEICESTER  
LONDON. KINGDOM INDUSTRIES. 173 BROMPTON RD., S.W.3.

(Phone 22771, Ext. 12)

## R. SMITH (Horley) LTD.

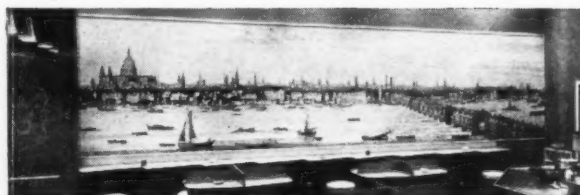
*Design and Supply*

**STEEL REINFORCEMENT  
STRUCTURAL STEEL  
HANDRAILS & BALUSTRADES**

*Excellent Stocks*

**Head Office and Works:  
BALCOMBE RD., HORLEY, SURREY**

Telephone: HORLEY 3882-3-4



## photo murals

are the vogue for interior décor of all buildings—municipal and business, restaurants, clubs, schools, shops, the home, etc. They are hung like wallpaper. Autotype (established 1869) specialises in their production and can submit subjects to choice.

Full details and illustrated folder from

**AUTOTYPE**

AUTOTYPE CO. LTD., BROWNLOW ROAD, W.13. EALing 2691-2-3

*Parsons*

## Phaltic Bituminous Paints

*specially formulated to give maximum protection to all structural iron and steelwork.*

*cover well in one coat, are easy to use, dry quickly, and give a hard, flexible, firmly-adherent film.*

*supplied in six colours and three types of black—Weatherproof Black, Acid and Alkali Resisting Black, and Heat Resisting Black.*

**THOS PARSONS & SONS LTD**

ESTABLISHED 1802

Manufacturers of Paints, Varnishes and Cellulose Lacquers

70 GROSVENOR STREET, LONDON, W.1 MAYfair 7951 (10 lines)

BRANCHES THROUGHOUT THE COUNTRY

## Trinidad LAKE ASPHALT FOR PERFECT FLOORING

**LAKE ASPHALT**

is a valuable component of good mastic on account of its remarkable consistency and is provided for in

**BRITISH STANDARDS 1076: 1942, 1410: 1947, 1451: 1948.**

Further particulars on request from

**PREVITÉ  
& CO. LTD.**

CAPEL HOUSE 54 NEW BROAD ST  
LONDON E.C.2 Tel: LONDON Wall 4313

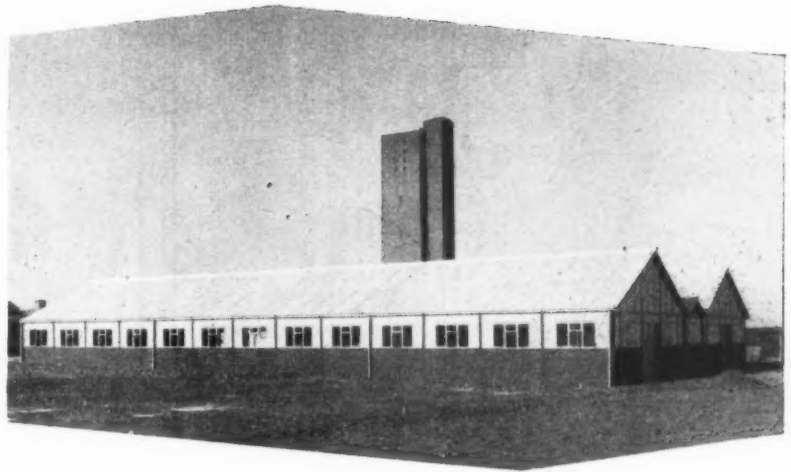




*provide cover for impatience*

HOSPITAL ANNEXE, SIZE 104' x 70'  
SUPPLIED TO :—  
STOKE MANDEVILLE HOSPITAL, BUCKS.

OTHER TIMBER BUILDINGS  
8' 10' 12' 15' 20' 25' & 30' WIDE,  
FOR INDUSTRY & COMMERCE,  
SCHOOLS, CANTEENS,  
SOCIAL ACTIVITIES,  
SPORTS,  
ETC.



## THORNS

**BUILDINGS** *provide cover for in-patients*

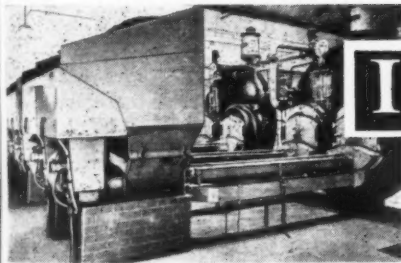
PLEASE WRITE FOR CATALOGUE AND QUOTATION

GIVING DETAILS OR DRAWING OF BUILDING REQUIRED, TO :—

**J. THORN & SONS LTD., (DEPT. 188), BRAMPTON ROAD, BEXLEYHEATH, KENT**

*Quickly!*

BD 756

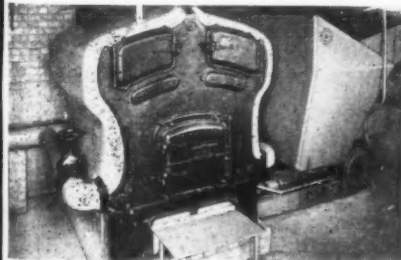


### INDUSTRIAL

The Iron Fireman has brought smokeless combustion and fuel economy to many of Britain's famous industries.

### HORTICULTURAL

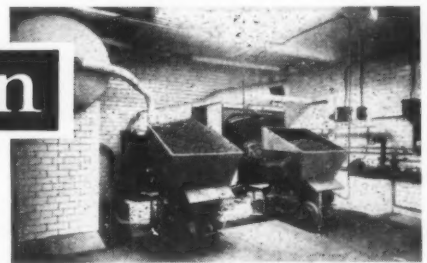
The Iron Fireman will maintain constant day and night growing and ensure earlier, more valuable crops.



## Iron Fireman

*Automatic*  
**Coal Stokers**

**ANSWER  
EVERY  
BURNING  
QUESTION**

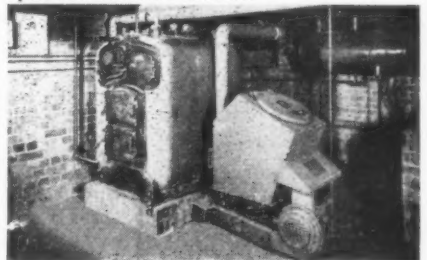


### INSTITUTIONAL

Numerous institutions have installed Iron Fireman Stokers to reduce fuel costs and save labour.

### DOMESTIC

The domestic type Iron Fireman is designed especially for combined heating and hot water systems in the modern home.



**ASHWELL & NESBIT LTD.,  
BARKBY ROAD • LEICESTER.**

LONDON W.C.1., 12 Great James St.  
MANCHESTER 13, 182 & 184 Oxford Road.  
GLASGOW C.3., 15 Fitzroy Place, Sauchiehall St.

BIRMINGHAM 4., 12 Whittall St.  
LEEDS 6, 32 Headingley Lane  
BELFAST, 14 Corporation St.



Write for full details to :-  
**ECONA MODERN PRODUCTS LIMITED**  
 AQUA WORKS · HIGHLANDS ROAD · SHIRLEY · BIRMINGHAM  
 Telephone & Telegrams: Solihull 3078.

## THE FACULTY OF ARCHITECTS AND SURVEYORS

(with which is incorporated the Faculty of Surveyors of England)  
 Incorporated (1926) as a Professional Centre

### ARCHITECTS

Corporate membership is available to Architects registered in the United Kingdom and Overseas

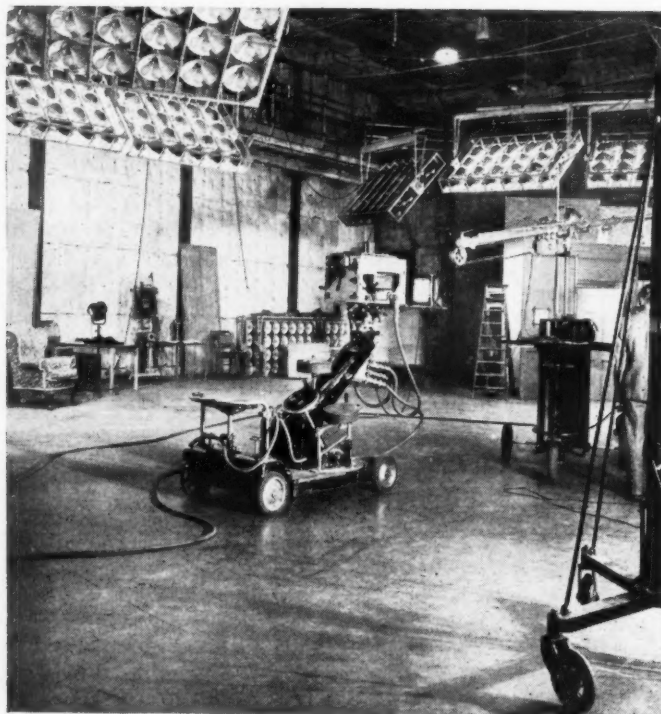
### SURVEYORS

The Executive Council are open to receive applications for membership or practice qualifications from Building, Land, Valuation, Municipal, Quantity, and Hydrographic Surveyors and practitioners in Urban and Rural Estate Management; specialist diplomas are obtainable in certain subjects.

Examinations in Building and Quantity Surveying are held annually.

Further particulars may be obtained from:  
**THE SECRETARY (K),**  
 68, GLOUCESTER PLACE, LONDON, W.1.  
 Telephone: WELbeck 9966

## AT BIRMINGHAM, TOO, I.T.A. CALLS FOR J & B



A Television Studio at Lime Grove, Shepherds Bush:

At Pinewood, Highbury, Brighton, Ealing, Manchester, Twickenham, Wembley, Welwyn, at Lime Grove and Wood Green; and now at BIRMINGHAM—Jones and Broadbent Mineral Wool is doing a sound job of essential work.

By virtue of over 70 years' progressive experience J & B Acoustic Treatment was selected for the important role of ensuring the best possible conditions for I.T.A. Transmission at BIRMINGHAM.

We are proud of this contribution and of the part played by our material. We look forward to the many future occasions on which we shall have our opportunity for further service.

Our records of installations, large and small, old and new, are the finest testimonial to the reliability, permanency and effectiveness of all J & B Insulation Products.

## J & B MINERAL WOOL

**JONES & BROADBENT LIMITED**

Perren Street, London, N.W.5

You may Consult our Technical Department  
 entirely without obligation: Gulliver 2120



# Specify Sherwoods

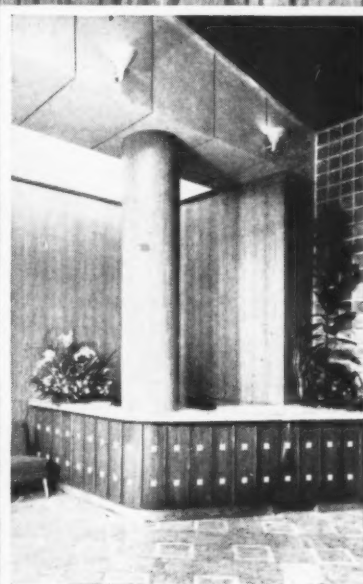
and be in good hands

Famous in paint since 1777



BARKING BIRMINGHAM

CARDIFF LIVERPOOL NEWCASTLE GLASGOW DAR-ES-SALAAM



**just  
what  
the  
architect  
ordered...**

... a genuine, high-grade,  
cloth-backed veneer; which will not  
warp, crack, shrink or expand;  
which can be applied direct—on  
flat or rounded surfaces;  
and which is available in a wide  
range of woods specially  
chosen for their versatility and  
beauty in use.

Flexwood is a superb material for  
interior decor, yet very  
reasonable in price. We shall be  
pleased to quote you  
for a complete installation  
on receipt of drawings.

## flexwood

Alexandria Trading Corporation Ltd.,  
121 London Wall, London, E.C.2—Telephone: Monarch 2272



## A modern Cornucopia



Every day an almost endless variety of BRASS, BRONZE, NICKEL SILVER AND COPPER EXTRUSIONS of all shapes and sizes leaves our Birmingham factory to serve world industry. Constant analytical control at every stage of production guarantees their *consistently* high quality and faultless finish — which virtually eliminates further machining, thus saving time, tools and labour.

● To produce *better* products more quickly and more cheaply — specify

## MCKECHNIE EXTRUSIONS

MCKECHNIE BROTHERS LIMITED

14 Berkeley Street, London, W.1  
Telephone: HYDe Park 9841/7

Metal Works Rotton Park Street, Birmingham 16  
and Aldridge, Staffs.

Other Factories Widnes, London, S. Africa, New Zealand  
Branch Offices London, Leeds, Manchester, Newcastle-on-Tyne,  
Gloucester, Paris.

## The "ALL WOOD" HARDBOARD!

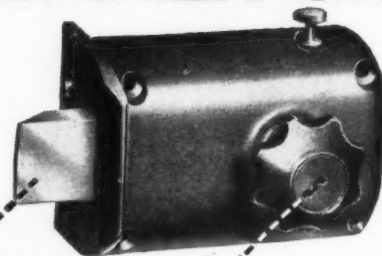


BUY WISELY ~ BUY RIGHT  
YOUR PROBLEMS SOLVED  
BY-FIBONITE

Sole Selling Agents in the U.K.

WM. BRANDTS (WALLPLY) LTD.,  
36, Fenchurch Street, London, E.C.3.

## How burglars are baffled by REMLOCK



This 1" deadbolt provides an automatic deadlock every time the door is shut, and cannot be forced back. Only the proper key can release it.



This knob is controlled by an interior key mechanism. It controls the deadbolt from the inside and cannot be turned unless released by the proper key. Defeats the broken-glass-panel intruder.



The cylinder back plate is fixed in the lock case to foil attempts to turn the cylinder.

Complete with screws, striking plate, and keys **27'6**  
Standard model (without inside key mechanism) **25'—**

The above prices are subject to generous trade discounts.

The REMLOCK incorporates the constant mesh cam and track principle used in precision engineering. Mechanical movement is smooth. Strength is exceptional—has successfully passed extremely tough 'destruction' tests. Key mechanism is of 5 pin-tumbler type.

It's a safe plan to specify **REMLOCK**

REMPLY LIMITED, 25 BUCKINGHAM GATE, LONDON, S.W.1



Sebel FOLD-A-BYE chair — all-steel, wrinkle-plastic finish on seat and back. Wide range of colours and finishes. Folds away flat — only 2 inches thick! Tables to match.



Sebel have the answer to most seating problems. Our steel chairs and tables are designed for halls, canteens, cafés—they're smart and comfortable, sturdy but lightweight and easily stacked or folded away when necessary. In a few minutes a roomful of Sebel furniture can be completely cleared for games or dancing.

# Sebel

★ Write for free book about the complete range of Sebel Steel Furniture to Department 16 K., Sebel Products Ltd., West Street, Erith, Kent.

## Denton's DENTOLITE

+ Self-Sterilising +  
**EMULSION PAINT**

*The only paint of its kind in the world*

- ★ The finest PVA Emulsion Paint—plus "Self-Sterilising" properties AT NO ADDITIONAL COST.
- ★ A "one coat" covering paint—one coat over similar colour gives complete obliteration.
- ★ Manufactured by a special process (World Patents applied for) which makes the finish "self-sterilising"—i.e., it destroys disease-producing germs and continues to do so throughout its entire life—a special fungicidal grade is available.
- ★ All claims confirmed by the National Research Association and Scientific Authorities throughout the world—copies of their reports and technical literature available on request.
- ★ Non-poisonous, odourless and dries in about 2 hours with a beautiful satin finish.
- ★ Available in thirty washable light-fast attractive shades.

Produced by the Makers of

**DENTONAMEL**



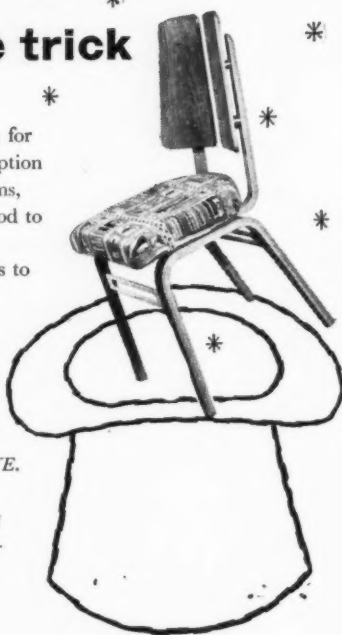
**DENTON EDWARDS PAINTS  
LIMITED**

Paint and Varnish Makers for over 160 years  
 ABBEY ROAD · BARKING · ESSEX  
 Telephone: Rippleway 3871 (10 lines)  
 Telegrams: EDLACA, BARKING

## TECTAS do the trick

TECTAS are just the job for public seating—for reception rooms, lounges, rest-rooms, etc. Good to look at, good to sit in—but tough and hard-wearing too, thanks to laminated construction (stronger than solid wood, cheaper and smarter than metal), Wide choice of veneers and covering materials.

*This is the TECTA FORTE. Full details about it and other TECTAS—including the famous Tecta Slacker—in our leaflet. Write to: Dept. A711.*



### E. KAHN & CO LTD

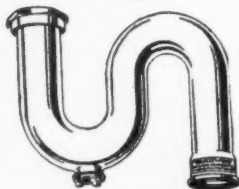
(Tecta Division), Fenner Road, Great Yarmouth (Phone 4251)  
London Office: 119, New Bond Street, W.1 (Mayfair 6481)

## It's a good job



### —they specified COPPER TRAPS

A good job because—  
— whether connected to Copper, Lead or Iron piping they will never leak,  
— they are resistant to all climatic conditions.  
— they are modern, more sanitary,  
— they are lighter, cheaper, easier to handle.



For B.S.S. 659 Copper Tube use our Copper Traps in conjunction with the "TRAPEZE" patent Slip-in Joint. Simply wet end, push into joint and it is permanently leak-proof.



Obtainable solely from leading Tap Manufacturers through the normal merchant channels.



**LISTER STREET,  
BIRMINGHAM 7, ENGLAND**

Telephone: ASTon Cross 3771-2  
Telegrams: 'TRAPPED, Birmingham 7'

See our exhibit at the Building Centre, 26 Store Street, W.C.1.

**NEW**

## Solution for the damp walls problem

Eliminate the risk of damp spoiling decoration—first apply one coat of

# Brella

LIQUID WATERPROOFER

Brella contains silicones which repel water without sealing the treated surface.

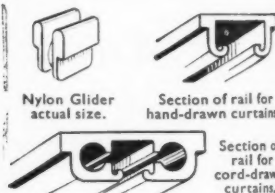
- ★ Easily applied—1 gallon normally covers 250/300 sq. ft.
- ★ Will not crack or chalk.
- ★ Will not alter appearance or texture of surface.

Write for details and price:

**PURIMACHOS LIMITED,**  
**ST. PHILIPS, BRISTOL, 2**

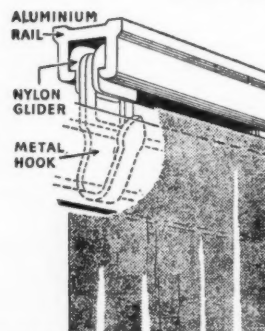


Registered Trade Mark



## The SILENT system of CURTAIN RAILS with NYLON GLIDERS

**SILENT GLISS** Curtain Rails with Nylon Gliders eliminate rattle and squeak, are simple and economical to install, silent in operation, and well-nigh everlasting.



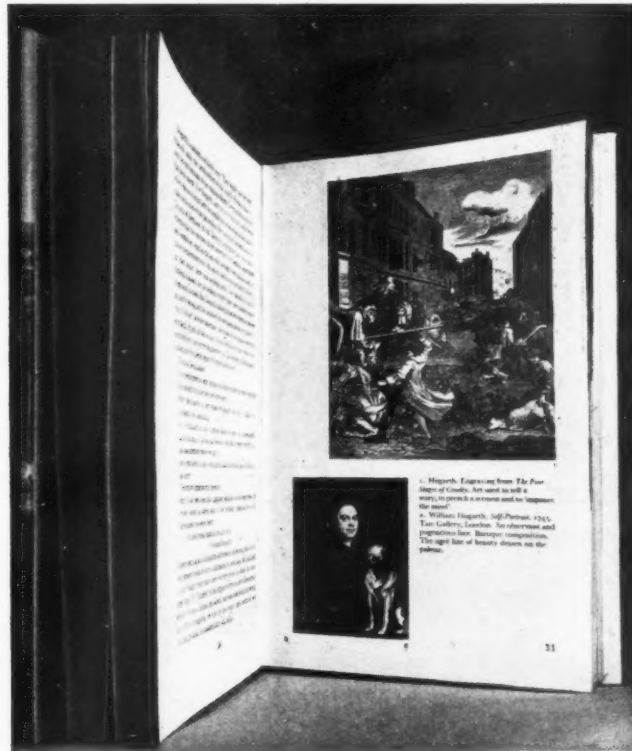
**HARDWEARING**  
NYLON gliders slide noiselessly in silicone-treated aluminium rails which can be countersunk or screw-fixed. Twenty different types of rail are available to meet every structural requirement. Any weight of curtain, hand- or cord-drawn, runs easily and hand-drawn curtains overlap perfectly.

For specifications and prices, write to:—

**SILENT GLISS LTD., Dept. 7, 39 Berners Street, London, W.**  
Sole Manufacturers and Distributors for the British Empire.

RECOMMENDED BY THE BOOK SOCIETY

# *THE ENGLISHNESS OF ENGLISH ART*



*by Nikolaus Pevsner*

THE 1955 REITH LECTURES, re-written to  
almost twice their original length, and fully annotated. With  
130 illustrations in line and halftone. 8 $\frac{3}{4}$  in. by 5 $\frac{1}{2}$  in. 208 pages.

Price 16s. net, postage 1s. 2d.

LONDON, W. THE ARCHITECTURAL PRESS, 9-13 QUEEN ANNE'S GATE, WESTMINSTER, S.W.1

# FLOOR MAINTENANCE

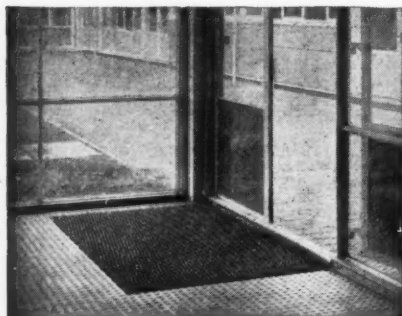
## *a service to Architects*

**Our job is** to keep floors in the pink of condition with the minimum cost in labour and materials. Every floor has different characteristics, is used for different purposes, and has to cope with different types of traffic, that is why our individual and personal attention is proving so valuable to Architects, Local Authorities, Education Committees, Hospital Boards, etc. We advise over 22,000 schools. Our representatives are placed strategically throughout the country and can give immediate advice on any flooring problem.

**FLOOR TREATMENTS LTD.** 14 Easton Street, High Wycombe, Bucks. Telephone: High Wycombe 1617 (2 lines)

*Clients include:—*

Royal Festival Hall  
D. H. Evans Ltd.  
Selfridges  
J. Players & Sons, Nottingham  
New Premises, Bank of England  
Stock Exchange, London  
Austin Motors  
London Hospital



## TYPROD MATS

*installed in the  
new Parks  
Secondary  
Modern School*

Ideal for schools, hospitals, public buildings where long life and cleanliness are essential. Made from hard wearing fabric reinforced by rubber strips. 'Typrod' Mats are warm, dry and firm, yet buoyant and restful to the feet. We shall be pleased to quote for any special applications for these mats.

**TYRE PRODUCTS LIMITED**

303 Harrow Road, Wembley, Middx. Tel: WEMbley 9555

## METAL LETTERS

*In STAINLESS or ENAMELLED STEEL*

### CAST BRONZE LETTERS

*(Including CERAMIC Filled)*

### Engraved BRONZE PLATES

### PERSPEX LETTERS

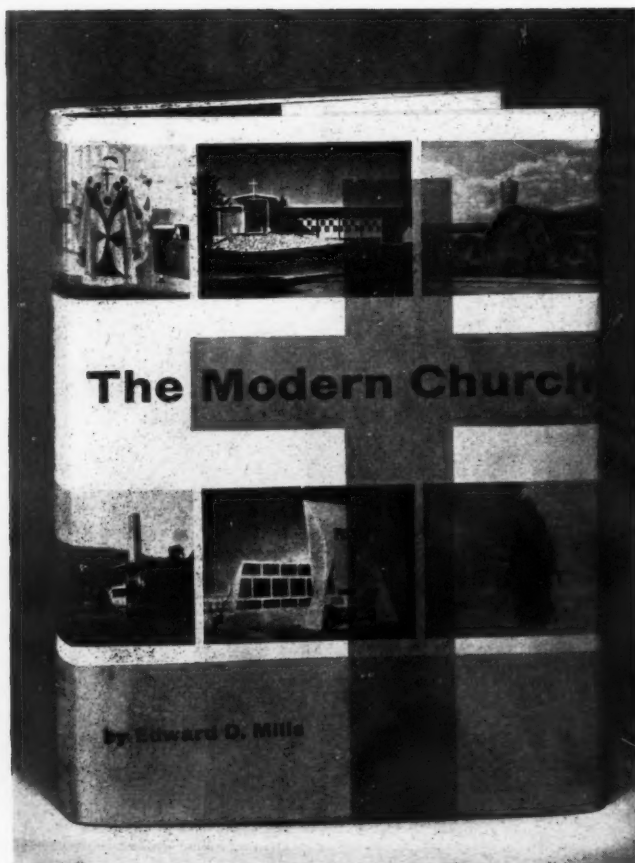
*Write for NEW Illustrated List. Completely Revised up to Date.*

### NEON SIGNS

*COMPLETE INSTALLATIONS  
erected and maintained for the  
Trade using plain vans.*

**CHASE PRODUCTS**  
*(Engineering) LTD*

7 PACKINGTON RD., SOUTH ACTON, W.3-Acorn 1153-4-And at Leeds.



*just published*

## The Modern CHURCH

BY EDWARD D. MILLS, F.R.I.B.A.

THIS IS A PRACTICAL BOOK about the design and construction of the twentieth-century church, the church specifically designed to fulfil the needs of the clergy and congregation of the present day. It is intended to be of value to members of the clergy and those concerned with church administration, as well as to all those architects engaged in the provision of new churches and subsidiary buildings for Christian communities of whatever denomination.

Of recent years many interesting modern churches have been built in all parts of the world, but little has yet been published about them. This book, one of the first to illustrate an extensive collection from among the most interesting examples and projects, shows how the architects have handled the problem of designing—to meet present-day needs, and in terms of modern building methods and materials—a building type with a very long historical tradition.

The author, a well-known practising architect, has expert knowledge and wide experience of the subject. Among his illustrations are photographs and plans of many of the most outstanding new churches in this and many other countries, including the work of such famous architects as Marcel Breuer, le Corbusier, Fritz Metzger, Oscar Niemeyer, Mies van der Rohe, Eliel Saarinen and Basil Spence. There are also some examples of stained glass by Fernand Léger and Henri Matisse, of sculpture by Jacob Epstein and Henry Moore, of murals by Graham Sutherland and Hans Feibusch and of other ancillary arts.

Size 9½ in. by 7½ in. 190 pages, including colour frontispiece and 64 pages of plates, with over 200 illustrations in halftone and line. Price 30s. net. Postage 1s. 3d.

THE ARCHITECTURAL PRESS, 9-13 QUEEN ANNE'S GATE S.W.1



## CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

## Public and Official Announcements

25s. per inch; each additional line, 2s.

## HAYES AND HARTINGTON URBAN DISTRICT COUNCIL

Applications are invited for:—  
(a) ARCHITECTURAL ASSISTANTS (PERMANENT) (two vacancies), Grade A.P.T. II, i.e., £555-£675 per annum. (b) SENIOR ARCHITECTURAL ASSISTANT (TEMPORARY), Grade A.P.T. IV, i.e., £710-£885 per annum, plus London "weighting" in each instance, 21-25 years £20 per annum, 26 years and over £30 per annum. Candidates for (a) must have passed the R.I.B.A. Inter. Exam., good experience of housing work with local authority. Housing accommodation will be made available for one of these two appointments if necessary. (b) Must be a Registered Architect, have good general experience in design and construction in relation to Municipal housing and other works, and capable of supervising large building contracts. The Council is unable to provide housing accommodation for this appointment. 5-day week. Further particulars and form of application obtainable from the undersigned, which, when completed, must be returned as soon as possible.

GEORGE HOOPER,

Clerk and Solicitor.

Town Hall, Hayes, Middlesex. 9932

## CITY OF NEW SARUM

## AMENDED ADVERTISEMENT

SENIOR ARCHITECTURAL ASSISTANT required in the City Engineer's Department. Salary within range Grade A.P.T. V (£795-£970).

Applicants must possess Final R.I.B.A. or equivalent, and have had experience in design and detailing of housing schemes, estate layouts and public buildings, and in the supervision and handling of contracts.

Pensionable post. Medical examination required. Housing accommodation provided.

Applications, stating age, present and previous appointment with salaries, with the names of two referees, to the City Engineer, The Council House, Bourne Hill, Salisbury, by 30th May, 1956. Canvassing will disqualify. 9922

THE LONDON HOSPITAL, Whitechapel, E.1. requires JUNIOR ARCHITECTURAL ASSISTANT, salary £440 to £650 p.a. according to experience, plus London weighting. Post superannuable. Applications, stating age, present salary and brief particulars of experience, to be sent to the House Governor. Accommodation is available in Kensington if successful candidate is a woman. 9156

AIR MINISTRY. Works Designs Branch, requires in London and Provinces ARCHITECTURAL ASSISTANTS experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries up to £898 p.a. (men) and £788 (women). Starting pay dependent on age, quals. and experience.

Paid overtime. Long term possibilities with promotion and pensionable prospects, 4 weeks' leave a year. Liability for overseas service. Normally natural born British subjects. Write stating age, quals., employment details, inc. type of work done, to any employment exchange, quoting Order No., Borough 1000. 9607

## COUNTY BOROUGH OF CROYDON

## ARCHITECTURAL STAFF

Applications are invited (by the 1st June, 1956) for these established posts:—

(a) ASSISTANT ARCHITECT to lead small team. Commencing salary according to experience, progressing by annual increments of up to £50, to a maximum of £1,110 per annum.

(b) ASSISTANTS to work with him. Commencing salary according to qualifications, progressing by annual increments of up to £45, to a maximum of £870 per annum.

If necessary, the Corporation will endeavour to assist with living accommodation at full economic rent.

Particulars and application form from Borough Engineer, Town Hall, Croydon. 1022

## RUTLAND COUNTY COUNCIL

## Appointment of ARCHITECTURAL ASSISTANT

Grade IV salary £710-£885. Applications are invited for this post which is subject to the Local Government Superannuation Acts, 1937 to 1953, and the National Scheme of Conditions of Service.

The post is the first in the recently created department of the County Architect.

Applicants should preferably be experienced in new school designs, and particulars of age, experience and qualifications, together with the names of two referees, should be sent to T. Brian Kennedy, A.R.I.B.A., M.T.P.I., County Architect and Planning Officer, County Offices, Oakham, within fourteen days of the publication of this advertisement.

A. BOND,

Clerk of the County Council.

County Offices, Oakham. 7th May, 1956. 1012

BOROUGH OF SOLIHULL  
APPOINTMENT OF QUANTITY SURVEYING ASSISTANT

Applications are invited for the appointment of a Quantity Surveying Assistant in the Borough Engineer and Surveyor's Department.

Salary in accordance with Clerical Division Grade I (£520-£580).

Applicants should be experienced in working out and thoroughly conversant with checking claims for fluctuations in rates of labour and prices of materials.

Applications giving full particulars and the names of two referees should be forwarded to the Borough Engineer and Surveyor, 90, Station Road, Solihull, not later than 26th May, 1956.

W. MAURICE MELL,

Town Clerk.

4th May, 1956. 9980

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

Applications are invited for the appointment of PRINCIPAL ASSISTANT ARCHITECT (Housing and General Section) at a salary in accordance with A.P.T. Grade V (£795-£970 p.a.), the commencing salary to be fixed within the scope of this grade according to qualifications and experience.

Applicants should be Associates of the R.I.B.A. with good architectural experience and knowledge of local government procedure. Housing accommodation will be made available if required.

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

Applications stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than Monday, 28th May, 1956, endorsed "Principal Assistant Architect."

A. NORMAN JAMES,

Town Clerk.

Town Hall, Dewsbury. 1019

4th May, 1956

## METROPOLITAN BOROUGH OF SHOREDITCH

Applications are invited for the appointment of ASSISTANT ARCHITECT. Salary A.P.T. IV (£740-£915). Subject to medical examination. Council's Superannuation Scheme and N.J.C. conditions.

Applications to Borough Architect, Town Hall, Old Street, E.C.1. stating age, training and experience, giving names of two referees, to arrive by 28th May, 1956. 9992

NEWCASTLE REGIONAL HOSPITAL BOARD  
SPECIAL AREA COMMITTEE FOR CUMBERLAND AND NORTH WESTMORLAND

Applications are invited for the following permanent (superannuable) appointments in the Carlisle Area-office of the Regional Architect's Department in connection with the development of the Hospital Service in Cumberland and North Westmorland.

(a) ASSISTANT ARCHITECT, Grade £640 × £25 (4) × £35 (2) to £930 per annum.

(b) ARCHITECTURAL ASSISTANT, Grade £480 × £20 (7) × £25 (2) to £570 per annum.

Commencing salary will depend on the applicant's age and amount of practical experience. Applicants for post (a) should be Registered Architects, and applicants for post (b) should have passed the Intermediate Examination of the Royal Institute of British Architects and be studying for the Final Examination.

Applications stating age, qualifications, past and present appointments, present salary and details of experience and training, together with the names of three referees (of whom at least two should be architects) should be forwarded to the Clerk of the Special Area Committee, 72 Warwick Road, Carlisle, within 14 days of the appearance of this advertisement.

W. J. BALL,

Clerk of the Special Area Committee.

72 Warwick Road, Carlisle. 9994

## B.E.A.

## require a

## CHIEF STAFF ARCHITECT

to take full charge of all work for which no consulting architects are appointed. Experience in planning, detailing and supervision must cover industrial and office buildings, preferably premises for transport undertakings and shops. Membership of R.I.B.A. and ability to achieve high speed results essential. Salary range £1,525 to £1,775 p.a. according to experience. Four weeks annual leave, pensionable post. Applications giving full details to Chief Personnel Officer, British European Airways, Keyline House, Ruislip, Middlesex. 9983

## BOROUGH OF WEMBLEY

## TOWN PLANNING ASSISTANT

Applications are invited for the above appointment from persons who have passed a Professional Examination for Corporate Membership of one of the Institutions appropriate to practising Town Planners and who have had practical experience in town planning administration. Commencing salary according to experience, within £720-£870 p.a. inclusive. Applications, disclosing any relationship to a Member or Senior Officer of the Council, giving the names and addresses of three referees and quoting Reference "G", must reach the Borough Engineer and Surveyor, Town Hall, Wembley, by the 14th June, 1956. Canvassing disqualifies. Housing accommodation not provided. 1039

CITY OF LEEDS EDUCATION COMMITTEE  
LEEDS COLLEGE OF ART

Principal: E. E. Pulles, A.R.C.A., F.S.A.E., F.R.S.A.

## SCHOOL OF ARCHITECTURE AND TOWN PLANNING

Head: F. Chippindale, F.R.I.B.A.

## DEPARTMENT OF TOWN PLANNING

Senior Lecturer in Charge: W. K. Smigielski, Ing.Arch., M.T.P.I.

## DIPLOMA COURSE IN TOWN PLANNING

(Qualifying for exemption from the Final Examination of the Town Planning Institute) open to Architects, Engineers, Surveyors, Geographers and Economists, and

## PRE-DIPLOMA COURSE IN TOWN PLANNING

(Preparing for the Intermediate Examination of the Town Planning Institute).

Full-time and part-time courses are available commencing 10th September, 1956. Applications are now being considered and candidates are asked to apply not later than the 1st September, 1956.

Further particulars can be obtained from the Clerk to the School, 43a, Woodhouse Lane, Leeds, 2.

GEORGE TAYLOR,

Chief Education Officer.

Education Offices, Leeds, 1. 9999

## LONDON ELECTRICITY BOARD

## SENIOR DRAUGHTSMEN

Applications are invited for the following Senior Draughtsman vacancies.

NORTH EASTERN SUB-AREA (based at Stratford, E.15). Ref.: V/2179/A.

Candidates should have a good general and technical education preferably with some workshop training. They must be conversant with the layout of switchgear, plant and associated equipment for substations up to 11 kV. A knowledge of building and civil engineering design whilst not essential would be an advantage.

WESTERN SUB-AREA (based at Victoria, S.W.1). Ref.: V/2171/A.

Candidates should have a good general and technical education and be experienced in general building and constructional engineering design with a knowledge of R.C. structures, and should be capable and experienced draughtsmen.

The posts are graded under Schedule "D" of the National Joint Board agreement as Grade 5-£735 to £840 per annum, inclusive of London Allowance.

Application forms from Personnel Officer, 46, New Broad Street, London, E.C.2. Please quote appropriate reference number of vacancy preferred. 1000

## CITY AND COUNTY OF THE CITY OF EXETER

Applications are invited for the appointment of Senior Assistant Architect on the establishment of the City Architect's Department salary range between £690 and £885 per annum, according to experience.

Applicants must be Associate Members of the R.I.B.A. or hold equivalent qualifications, and preference will be given to those experienced in the design and construction of schools and civic buildings.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Acts 1937-1953. The successful applicant will be required to pass a medical examination.

Canvassing will disqualify, and applicants must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications stating age, qualifications, previous and present appointments and salaries, full details of experience and the earliest possible date when available should be sent to H. B. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Municipal Offices, Exeter, not later than 26th May, 1956.

C. J. NEWMAN,

Town Clerk.

Exeter, May, 1956. 1001

ARCHITECTURAL ASSISTANT required by UGANDA GOVERNMENT for construction of new hospital, on contract for four of 30-36 months in first instance. Commencing salary according to experience, in scale (including Inducement Pay and present temporary allowance of 10 per cent. of salary) £772 rising to £1,280 a year. Gratuity at rate of 1 1/2 per cent. of total subsistence salary at rate of 1 1/2 per cent. of total subsistence salary. Outfit allowance £30. Candidates should be 25 to 40 years, must be quick and accurate draughtsmen with sound knowledge of building construction. Experience of building in tropics desirable and experience of modern hospital work an advantage. Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, full qualifications and experience and quote M2B/41520/AG. 1002

## COUNTY BOROUGH OF SOUTHAMPTON

## BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the permanent post of SENIOR ASSISTANT PLANNING OFFICER; Grade A.P.T. IV (£710-£885) or Grade A.P.T. V (£795-£970) according to experience. Applicants should be members of the Town Planning Institute and preferably hold a qualification in landscape architecture. Duties offer considerable scope for preparing and executing schemes of urban landscaping in addition to normal planning work. Candidates should state their housing needs. Application forms from the Borough Architect, Civic Centre, Southampton. Closing date 28th May, 1956. 1029

**GOVERNMENT OF CYPRUS**  
(a) TOWN PLANNING OFFICER

and  
(b) ASSISTANT TOWN PLANNING OFFICER  
PLANNING AND HOUSING DEPARTMENT  
To be responsible for carrying out Planning Surveys, assisting in Town Planning Schemes and to advise Local Authorities on planning and Building Bye-Law matters.

Contract appointments for two years. Salary range: Post (a) £1,483-£1,857 per annum, including overseas allowance. Post (b) £1,080-£1,440 per annum, including overseas allowance.  
Point of entry according to qualifications and experience. Temporary cost of living allowance at present 9 per cent. of basic salary. Gratuity £25 10s.-£37 10s. for each completed three months satisfactory service. Free passages for officers and families up to five persons in all. Quarters if available at low rental. 33 days' leave for each completed month of resident service.

Candidates must be: Post (a) A.M.T.P.I. and preferably with secondary related qualification. Experience in carrying out Planning Surveys and preparation of plans and development contracts. Post (b) A.M.T.P.I. or recognised University Degree in Town Planning.

Write Director of Recruitment, Colonial Office, London, S.W.1, giving age, qualifications and experience and quoting (a) or (b) BCD 62/17/03.

**CITY OF WORCESTER**  
**CITY ENGINEER AND SURVEYOR'S DEPARTMENT**

**APPOINTMENT OF QUANTITY SURVEYOR**  
Applications are invited for this permanent appointment on A.P.T. Grade IV (Salary £710 rising to £885 per annum).

Candidates must have had considerable experience in the preparation of Bills of Quantities, estimating, measurements on site and the settlement of accounts for building work. Preference will be given to Associates of the Royal Institute of Chartered Surveyors.

This appointment is subject to the provision of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Housing accommodation will be made available to the successful candidate.

Applications, giving names of two referees, to be delivered to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by Wednesday, the 23rd May.

**BERTRAM WEBSTER,**  
Town Clerk.

Guildhall, Worcester. 9997

**CITY OF WORCESTER**  
**APPOINTMENT OF TWO SENIOR ASSISTANT ARCHITECTS**

Applications are invited for these appointments in the City Engineer and Surveyor's Department within A.P.T. Grade V (Salary £795-£970 per annum).

Candidates should be Registered Architects and Associate Members of the R.I.B.A. and should have had experience in general municipal work.

Housing accommodation will be made available to the successful candidates if required and a casual user's car allowance will also be available.

Applications with the name of two referees and stating age, qualifications and experience are to be sent to the City Engineer and Surveyor, 22, Bridge Street, Worcester, by 23rd May, 1956.

**BERTRAM WEBSTER,**  
Town Clerk.

Guildhall, Worcester. 9998

**BOROUGH OF SOLIHULL**  
**ASSISTANT ARCHITECTS A.P.T. GRADE IV**

(£710-£885)  
Applications are invited for the above mentioned posts in the Borough Engineer and Surveyor's Department.

Solihull has a population of approximately 80,000 which is planned to increase to 110,000 over the next few years, and the appointments are primarily in connection with the large programme of schools and capital work schemes including housing, libraries, crematorium, corporation depot, etc., which are in hand as a result of the rapid expansion of the Borough.

No application forms are being issued, but the Borough Engineer will be pleased to answer specific questions regarding the positions.

Commencing salary may be fixed at an appropriate stage within the grade, according to qualifications and experience.

Where applicable housing accommodation may be made available as soon as possible.

Applications, giving the names of two referees, should be sent to Mr. C. R. Hutchinson, B.Sc., A.M.I.C.E., Borough Engineer and Surveyor, 90, Station Road, Solihull, not later than 26th May, 1956.

**W. MAURICE MELL,**  
Town Clerk.

4th May, 1956. 9982

**OXFORDSHIRE COUNTY COUNCIL**  
**COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited for ARCHITECTURAL ASSISTANTS in APT. Grades IV, III, II and I: N.J.C. Conditions of Service. Applications giving age, education, qualifications and experience, a copy of a recent testimonial and the names and addresses of two referees to be sent in envelope endorsed "Staff" to County Architect, Park End Street Offices, Oxford, by 23rd May, 1956.

**GERALD GALE BURKITT,**  
Clerk of the Council.

County Hall, Oxford. 9981

**CHURCH COMMISSIONERS** require ARCHITECTURAL ASSISTANTS. Candidates should be up to Inter. R.I.B.A. standard. Salary according to experience within scale of £600-£25-£800, plus pay supplement but appointments not permanent or pensionable.  
Apply in writing to the Establishment Officer, Church Commissioners, No. 1, Millbank, Westminster, S.W.1, not later than the 30th June next. 1043

**CAMBRIDGESHIRE COUNTY COUNCIL**  
**TOWN PLANNING DEPARTMENT**

Applications are invited for the appointment of a PLANNING ASSISTANT on Grade APT III of the National Joint Council scales (£640 to £765 p.a.). The commencing salary will be according to experience and ability.

The successful applicant will be employed in the Development Plan section of the Department. Current work is varied and interesting; it includes central redevelopment, village planning and traffic surveys.

Preference will be given to applicants who have passed the Intermediate examination of the Town Planning Institute or a related professional body and who have had experience in a planning office.

Applications, setting out past and present appointments (with dates), experience, qualifications, present salary and the names of two referees, should be received by the County Planning Officer, County Hall, Hobson Street, Cambridge, not later than 26th May, 1956.

**CHARLES PHYTHIAN,**  
Clerk of the County Council.

Shire Hall, Cambridge. 1008

**COUNTY BOROUGH OF SOUTHPORT**

Applications are invited for the following appointments in the Borough Architect and Town Planning Officer's Department:—

(a) ASSISTANT QUANTITY SURVEYOR, A.P.T. Division, Grade V (£795-£970 per annum).  
(b) TOWN PLANNING ASSISTANT, Special Grade (£690-£840 per annum).

Candidates should have passed the Final Examination of the R.I.C.S. (Quantities Division) for Post (a) and the Final Examination of the T.P.I. for Post (b).

Consideration will be given to the provision of housing accommodation if required.

Application forms obtainable from the Borough Architect and Town Planning Officer, 99/105, Lord Street, to be returned by 2nd June.

**R. EDGAR PERRINS,**  
Town Clerk.

1027

**CITY OF LEEDS**  
**CITY ARCHITECT'S DEPARTMENT**

Applications are invited for the following appointments:—

1. ASSISTANT HEATING AND VENTILATING ENGINEERS, A.P.T. III (£640-£765).

Applicants will assist in the preparation of designs for Heating and Ventilating systems for schools and other public buildings.

2. ASSISTANT ARCHITECT, A.P.T. III (£640-£765).

3. ARCHITECTURAL ASSISTANT, A.P.T. II (£595-£675).

4. ARCHITECTURAL ASSISTANT, A.P.T. I (£530-£610).

5. ASSISTANT SURVEYOR (LAND), A.P.T. IV (£710-£885).

6. ASSISTANT SURVEYOR (LAND), A.P.T. II (£595-£675).

7. ASSISTANT SURVEYOR (LAND), A.P.T. I (£530-£610).

8. ASSISTANT QUANTITY SURVEYORS, A.P.T. IV (£710-£885).

9. ASSISTANT QUANTITY SURVEYORS, A.P.T. II (£595-£675).

10. CLERKS OF WORKS, A.P.T. II (£595-£675).

11. CLERKS OF WORKS, A.P.T. I (£530-£610).

The payment of salary increments will be subject to satisfactory service and will be granted normally with effect from the 1st April following the completion of six months' service.  
The appointments are subject to the Local Government Superannuation Acts 1937-1953 and the successful applicants will be required to pass a medical examination.

Application forms may be obtained from the City Architect, Priestley House, Quarry Hill, Leeds, 9, to whom they should be returned together with copies of three recent testimonials (not older than 12 months) by 12 noon on Saturday, 26th May, 1956. Applicants should clearly indicate for which post they wish to be considered.

Canvassing in any form, either directly or indirectly, will be a disqualification.

**R. A. H. LIVETT, O.B.E., A.R.I.B.A.,**  
City Architect.

Priestley House, Quarry Hill, Leeds, 9.

5th May, 1956. 1007

**DERBYSHIRE COUNTY COUNCIL**

County Planning Dept. Applications are invited for a post of SENIOR ASSISTANT (ARCHITECT) on Grade A.P.T. V (£795-£970).

Applicants should have passed the final examination of the Royal Institute of British Architects or have graduated in Architecture. The appointment offers opportunity for experience in the layout and design of estates, schemes of redevelopment and the detailing of proposals in central areas. Knowledge of Statutory planning procedure will be an advantage.

Applications together with one testimonial and the names of two referees to reach the County Planning Officer, 8a, Bold Lane, Derby, by 28th May. 1039

**DURHAM COUNTY COUNCIL**  
**PLANNING DEPARTMENT**

**ASSISTANT AREA PLANNING OFFICERS (2).** Salary £795-£970. Must be Associate Members of the Town Planning Institute and have had at least 3 years' experience since qualifying in all aspects of development control work and preferably some experience of Town Maps.

**LANDSCAPE ASSISTANT.** Salary £710-£885. Must be qualified by examination in Landscape or Horticulture.

**PLANNING ASSISTANTS (3).** Salary £710-£885. Must be Associate Members of the Town Planning Institute.

**ARCHITECTURAL ASSISTANT.** Salary £690-£840 or £710-£885, according to experience. Must be qualified by examination. Successful applicant will be engaged on housing layouts, town centre layouts and the control of elevations.

Forms and particulars from the County Planning Officer, 10, Church Street, Durham. Closing date 6th June, 1956.

**J. K. HOPE,**  
Clerk of the County Council.

**PUBLIC SERVICE OF SOUTH AUSTRALIA**

Applications are invited for the position of TOWN PLANNER, Registrar-General of Deeds Department, Adelaide.

The Town Planner is responsible for the administration of the Town Planning Act 1929/55 and is Chairman of the Town Planning Committee.

Applicants should possess high academic qualifications in planning or an allied profession and be eligible for corporate membership of the Australian Planning Institute, or the Town Planning Institute, London. Experience in planning for large cities is desirable.

Salary range £1,850/£2,050 Australian. Applications giving full names, age, qualifications and experience together with copies of references, should be addressed to:—

**AGENT GENERAL FOR SOUTH AUSTRALIA,**  
**SOUTH AUSTRALIA HOUSE,**  
**MARBLE ARCH,**  
**LONDON, W.1.**

Closing date: 31st May, 1956. 1038

**CORPORATION OF GREENOCK**  
**BURGH SURVEYOR AND MASTER OF WORKS DEPARTMENT**

Applications are invited for the following appointment on the staff of the above Department of the Corporation.

**PRINCIPAL PLANNING ASSISTANT** on the salary grading £948 rising to £1,092.

Candidates should be able to control Town Planning Staff, be experienced in Town Planning procedure, have trained in an Engineering Architect's or Surveying Office and be conversant with the provisions of the Town and Country Planning (Scotland) Acts. Candidates should preferably be Corporate Members of the Town Planning Institute and the holding of other qualifications will be an advantage.

Applications giving particulars of age, qualifications, present and previous experience, together with the names of two referees should be submitted to the undersigned not later than fourteen days from the appearance of this advertisement.

**JOHN LIDDELL,**  
Town Clerk.

Municipal Buildings, Greenock.

11th May, 1956. 1079

**CITY OF NOTTINGHAM**  
**ASSISTANT ARCHITECTS**

(a) GRADE APT IV (£710-£885 p.a.).  
(b) GRADE APT II (£595-£675 p.a.).

Applications are invited for the above positions in the City Engineer's Department. Commencing salary will depend on experience. HOUSING ACCOMMODATION may be made available in suitable cases.

Candidates for post (a) should be Associates of the R.I.B.A. Candidates for post (b) should be up to intermediate R.I.B.A. standard.

Applications, on forms to be obtained from R. M. Finch, O.B.E., M.I.C.E., City Engineer and Surveyor, Guildhall, Nottingham, are to be made to him not later than 26th May, 1956. Requests for forms should state whether the application is for position (a) or (b). 1015

**COUNTY BOROUGH OF ROCHDALE**  
**ASSISTANT ARCHITECTS**

Applications are invited for the appointment of two Assistant Architects at a salary within the Special Grade £690-£840 per annum, commencing salary depending upon qualifications and experience.

One appointment will be in the Housing Architects' Section and one in the General Architects' Section.

Alternative applications will be considered from persons who are undertaking their professional training but have not yet fully qualified, at a salary within Grades I to III.

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

Housing accommodation will be provided by the Council in appropriate circumstances.

A scheme for the payment of voluntary overtime is to be introduced.

Canvassing is prohibited and applicants must disclose whether they are related to any member or senior official of the Council.

Applications, stating age, qualifications, training and experience, together with the names and addresses of two persons to whom reference can be made, and endorsed "Assistant Architect," must be delivered to the Borough Surveyor, Town Hall, Rochdale, by 11th June, 1956. 1035



## NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

ASSISTANT QUANTITY SURVEYOR required. Applicants should be Associate members of the R.I.C.S. and be thoroughly experienced in taking-off, abstracting and billing of quantities, measurement of work in progress and settlement of final accounts.

Salary scale: £640 × £25 (4) × £30 (4) × £35 (2) - £930 plus £20-£40 London Weighting. Salary above minimum may be paid according to appropriate experience since obtaining qualification.

Applications, stating age, qualifications (with dates) and experience, together with names of two referees to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 28th May, 1956. 1004

## NORTH STAFFORDSHIRE TECHNICAL COLLEGE

Principal: H. W. Webb, O.B.E., D.Sc.  
BUILDING DEPARTMENT

A full-time LECTURER is required in September next to teach Reinforced Concrete Work and Theory of Structures to an advanced level. Applicants should possess an appropriate graduate qualification or equivalent, and should state in their application any other subjects offered in addition to the above.

The salary would be on the Lecturer grade of the Burnham Technical Scale. This scale is at present 1955-£1,065, but the scales are now under review. The commencing salary would be subject to the usual additions for qualifications and experience.

No application forms are issued, and details of education, training and experience should be sent to the Principal immediately.

H. DIBDEN,  
Clerk to the Governors. 1014

## COUNTY BOROUGH OF SOUTHAMPTON

requires under N.J.C. conditions of service:

(a) ASSISTANT ARCHITECT, Special Scale, £650-£840. Applicants should have passed Parts I and II of the R.I.C.S. final examination (or equivalent) and have had at least 5 years' experience, including period spent on theoretical training, and preferably have had experience in Municipal housing estate development and administration of contracts.

(b) ARCHITECTURAL ASSISTANT, Grade A.P.T. II (£595-£675). Must have passed the Intermediate examination of the R.I.B.A. or its equivalent at one of the recognised schools of architecture, and have had subsequent experience, preferably in local government housing.

Applicants for appointment (a) needing assistance in obtaining housing accommodation should state requirements.

Apply with copies of two testimonials to the Borough Engineer and Surveyor, Civic Centre, Southampton. 1032

## COUNTY OF CORNWALL

## COUNTY PLANNING DEPARTMENT

Applications are invited for the following appointments in the County Planning Department, at Headquarters, Truro:—

(a) PLANNING ASSISTANT, A.P.T. II, £595-£675.

(b) PLANNING ASSISTANT, A.P.T. I, £530-£610.

Applicants for (a) must have passed the Intermediate Examination of one of the Professional Institutes and preference will be given to candidates with Inter T.P.I.

Applicants for (b) should be students of one of the Professional Institutes.

In each case experience in carrying out basic planning surveys, ability to map and present the information by the use of modern techniques is essential.

The customary service conditions of the Local Government Service will apply and the successful candidates will be required to pass a medical examination.

Applications, together with the names and addresses of three referees should be addressed to the County Planning Officer, County Hall, Truro, to reach him not later than 2nd June, 1956 (no application forms are being issued).

E. T. VERGER,  
Clerk of the County Council. 1033

## BOROUGH OF BEBINGTON.

County Hall, Truro, 7th May, 1956.

## BOROUGH OF BEBINGTON.

APPOINTMENT OF ASSISTANT ARCHITECT. Applications are invited for the appointment of ASSISTANT ARCHITECT in the department of the Borough Engineer and Surveyor at a salary ranging between £530 and £840 p.a. (i.e. Grade I A.P.T., Grade II A.P.T., or Special Grade) according to qualifications and experience. Minimum requirement Inter R.I.B.A. or equivalent. Charter conditions apply.

THE SUCCESSFUL CANDIDATE IF MARRIED AND IN NEED OF HOUSING AT THE TIME OF APPOINTMENT WILL BE OFFERED A HOUSE BY THE COUNCIL WITHIN A REASONABLE PERIOD OF TIME.

Application form and further particulars may be obtained from the Borough Engineer & Surveyor, "Brackenwood," Higher Bebington.

Canvassing, or an undisclosed relationship to a member or senior officer will disqualify.

Applications are to be sent to the Town Clerk, Municipal Offices, Bebington, not later than 14th June, 1956.

G. CHAPPELL,  
Town Clerk. 1071

## METROPOLITAN BOROUGH OF FULHAM BOROUGH ARCHITECTS' DEPARTMENT

(a) PRINCIPAL ASSISTANT ARCHITECT, A.P.T. V (£825-£1,000 p.a. including London Weighting).

(b) ASSISTANT ARCHITECT, A.P.T. III or IV (£670-£795 or £740-£915 p.a. including £30 London Weighting).

(c) ARCHITECTURAL ASSISTANT, A.P.T. I or II (£530-£610 or £595-£675 p.a. plus London Weighting of £20 or £30 according to age).

(d) SENIOR ASSISTANT QUANTITY SURVEYOR, A.P.T. V (£825-£1,000 p.a. including London Weighting).

Qualifications required: Posts (a) A.R.I.B.A. and experience in the design and construction of multi-storey dwellings and in handling contracts; (b) preference will be given to A.R.I.B.A. or equivalent with experience in the design and construction of multi-storey dwellings; (c) R.I.B.A. intermediate standard and at least two years drawing office experience; (d) A.R.I.C.S. (Quantities) or equivalent and experience in the preparation of bills of quantities, handling large contracts for multi-storey dwellings. Application forms from Town Clerk, Town Hall, S.W.6. Closing date 29th May. 1063

## HORNCHURCH URBAN DISTRICT COUNCIL APPOINTMENT OF ASSISTANT ARCHITECT

Applications are invited for the permanent appointment of Architectural Assistant in the Department of the Engineer and Surveyor at a salary in accordance with Grade III (£640×£25-£765) of the National Scales.

Candidates should have good architectural experience and experience in the development of schemes of a major character will be an advantage.

The appointment will be terminable by one month's notice on either side: subject to a medical examination, and the Conditions of Service of the National Joint Council for Local Authorities A.P.T. and Clerical Services.

Applications on forms provided by the undersigned must be received in envelopes endorsed "Architectural Assistant" not later than 2nd June 1956.

Applicants should state whether they require housing accommodation.

P. L. COX,  
Clerk of the Council. 1061

Council Offices,  
Billet Lane,  
Hornchurch.  
8th May, 1956.

## LONDON COUNTY COUNCIL

## ARCHITECT'S DEPARTMENT

Vacancies exist for ARCHITECT/PLANNERS (salaries up to £817). Tasks include three-dimensional planning within London's eight major Comprehensive Development Areas (including Stepney/Poplar, the South Bank, and Elephant and Castle) and other Redevelopment Areas.

The work includes the preparation of comprehensive layouts covering all the important areas of new public and private development throughout the County, and covers the whole field of planning technique.

Particulars and application form returnable by 31st May from architect (AR/EK/ATP), County Hall, S.E.1. (907). 1044

## FIFE COUNTY COUNCIL

## PLANNING DEPARTMENT, CUPAR

Applications are invited for appointment as PLANNING ASSISTANT in the above Department. Applicants should have practical experience in the preparation of planning schemes and preferably have passed the Intermediate Examination of the Town Planning Institute. Salary on A.P.T. Grades II to IV, i.e., £530 to £700 per annum.

Medical examination under Superannuation Scheme. Applications stating age, qualifications and experience to be lodged with the undersigned not later than 4th June, 1956.

MATTHEW POLLOCK,  
County Clerk. 1080

County Buildings,  
Cupar, Fife.

## LONDON COUNTY COUNCIL

Brixton School of Building, September. GRADE B TEACHER OF BUILDING. Should hold either Higher National Diploma or Certificate in Building or comparable technical or professional qualifications, possess good industrial experience and competent to teach Building Construction and associated subjects. Burnham F.E. salary scale, £561×£25-£1,012, individual commencing and maximum salary according to age, qualifications and experience. Application forms from Secretary at School, Ferndale Road, S.W.4, returnable by 2nd June (815). 1025

## BOROUGH OF TAUNTON

## ARCHITECT'S DEPARTMENT

Applications are invited for the post of ARCHITECTURAL ASSISTANT. Salary (Grade II—Special Grade) £595-£675, £690-£840, in the Borough Housing Architect's Department.

The appointment will be subject to the National Scheme of Conditions of Service and the provisions of the Local Government Superannuation Acts.

Applications, together with the names of two referees should be submitted to C. Bacon, F.R.I.B.A., Borough Housing Architect, Flook House, Station Road, Taunton, by not later than 28th May, 1956.

Consideration may be given to the provision of Housing accommodation if required.

K. A. HORNE,  
Town Clerk. 1077

Municipal Buildings,  
Taunton.

HERTFORDSHIRE COUNTY PLANNING DEPARTMENT. Applications are invited for the post of PRINCIPAL ASSISTANT. Linked grade A.P.T. I/II (Salary £530-£675). Applicants should preferably have had previous experience in a Planning Office and must be competent draughtsmen. Experience and ability in colour photography is essential since the successful applicant will be required to take charge of photographic work in the department. The post carries a "casual user" car allowance for photographic work. Forms of application from The County Planning Officer, County Hall, Hertford. These must be returned within 14 days of the appearance of this advertisement. 1058

## CARDIGANSHIRE COUNTY COUNCIL

Applications are invited for the post of PRINCIPAL ASSISTANT ARCHITECT (A.P.T. Grade VI, £880×£40-£1,080) in the County Architect's Department, County Hall, Aberystwyth.

Applicants should be Members of the R.I.B.A. with good experience in the design and construction of modern buildings.

The successful person will be in charge of the Drawing Office and will have general responsibility for the department in the absence of the County Architect and his Deputy.

Forms of application and further details obtainable from the County Architect.

Applications to be returned to the undersigned by not later than 2nd June, 1956.  
J. E. R. CARSON,  
Clerk of the Cardiganshire County Council,  
Swyddfa'r Sir,  
Marine Terrace,  
Aberystwyth, Cards. 1081

## CITY OF WAKEFIELD APPOINTMENT SURVEYOR

Applications are invited for the above superannuable appointment in the City Engineer's Department at a salary in accordance with Grade A.P.T. V commencing at £795 per annum.

Candidates must be Members by examination of the R.I.C.S. or the I.Q.S. and have had a wide experience in large scale Local Authority Housing, Schools and other Municipal projects.

Applications stating age, qualifications and previous appointments, together with the names of two referees to be forwarded to the undersigned not later than the 31st May, 1956.

HOUSING ACCOMMODATION WILL BE PROVIDED IF NECESSARY.

W. S. DESBORGHES,  
Town Clerk. 1075

Town Hall,  
Wakefield.

## COUNTY BOROUGH OF ROCHDALE

Applications are invited for the appointment of a QUANTITY SURVEYOR in the Borough Surveyor's Office, Grade IV, £710-£885. Applications will be considered from candidates who are not fully qualified on Grade III, £640-£765. The commencing salary will not necessarily be the minimum of the grade.

The successful candidate will be employed in the Architect's Department, the work of which includes schools, and all other types of Corporation buildings with the exception of Housing.

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

Housing accommodation will be provided by the Council in appropriate circumstances.

A scheme for the payment of voluntary overtime is to be introduced.

Canvassing is prohibited and applicants must disclose whether they are related to any member or senior official of the Council.

Applications, stating age, qualifications, training and experience, together with the names and addresses of two persons to whom reference can be made, and endorsed "Quantity Surveyor" must be delivered to the Borough Surveyor, Town Hall, Rochdale, by 10 a.m. on Monday, 11th June, 1956.

K. B. MOORE,  
Town Clerk. 1076

## FAREHAM URBAN DISTRICT COUNCIL

(Population 48,000)

Applications invited for post of Temporary ARCHITECTURAL ASSISTANT, A.P.T. Grade III (£640×£25-£765 per annum) on the Council's Staff. Applicants should be of or nearing R.I.B.A. Final Standard and have a sensitive approach to modern design.

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

Applications giving age, qualifications and experience, together with names and addresses of two referees, should reach the undersigned by the 28th May, 1956. Canvassing disqualifies.

B. W. RANDS,  
Clerk to the Council. 1049

"Merton",  
5, Grove Road,  
Fareham,  
Hampshire.

## LONDON COUNTY COUNCIL

Hammersmith School of Building and Arts and Crafts, as soon as possible. ASSISTANT GRADE "B" TEACHER OF CARPENTRY AND JOINERY and Associated Subjects to Final C. & G. standard. Should have good industrial and technical experience together with appropriate qualifications. Burnham F.E. salary scale £561×£25-£968, commencing and maximum salary according to age, qualifications and experience. Application forms from Secretary at School, Lime Grove, W.12, returnable by 2nd June (913). 1045

# GOVERNMENT OF NORTHERN IRELAND ASSISTANT ARCHITECT

Applications are invited for the unestablished post of Assistant Architect Class II in the Works Directorate, Ministry of Finance. Salary scale, which attracts pay supplement of amounts between £31 and £160 per annum is £575×£25—£750×£30—£960×£40—£1,000. Minimum of scale is linked to entry at age 26 plus or minus one increment for each year above or below that age. Maximum entry point £900 plus pay supplement of £118.

Candidates must be Registered Architects by examination, and must have had at least two years' experience in an Architect's Office in the preparation of working drawings for new buildings.

Preference will be given to a suitably qualified candidate who served in H.M. Forces during the 1914-18 or 1939-45 wars, provided the Ministry is satisfied that such a candidate is, or within a reasonable time will be, able to discharge the duties of the post efficiently.

Application forms may be obtained from the Director of Establishments, Ministry of Finance, Stormont, Belfast, to whom they must be returned, together with copies of two recent testimonials, so as to reach him not later than 25th June, 1956.

## METROPOLITAN BOROUGH OF FULHAM ASSISTANT BUILDING SURVEYOR

Borough Architect's and Housing Department. A.P.T.I. (£530×£20—£510 p.a. plus London Weighting £20/£30 p.a. according to age). Must have experience in the building trades, a good knowledge of current rates and prices, and inspecting, pricing and ordering maintenance repairs for housing estates and public buildings. Application forms from Town Clerk, Town Hall, S.W.6. Closing date 29th May.

## FEDERATION OF RHODESIA AND NYSASALAND VACANCIES: ASSISTANT ARCHITECTS AND ARCHITECTURAL DRAUGHTSMEN FEDERAL PUBLIC WORKS DEPARTMENT (1) ASSISTANT ARCHITECTS

Applicants, under 30, must hold A.R.I.B.A. or equivalent.

Starting salary: £900—£1,250 p.a. depending on qualifications and experience on scale rising to £1,600 p.a.

(2) ARCHITECTURAL DRAUGHTSMEN. Applicants, under 35, must have at least ten years' experience in an Architectural drawing office.

Starting salary: £1,170 p.a. on scale £1,170×£50—£1,470.

Application forms and further details from the Federal Public Service Attaché, Rhodesia House, 429, Strand, London, W.C.2. Closing date 28th May.

## LONDON COUNTY COUNCIL ARCHITECT'S DEPARTMENT

ARCHITECTURAL AND SURVEYING ASSISTANTS required for Safety regulations of theatres and special buildings, and for general BUILDING REGULATION WORK. Commencing salaries up to £817 according to experience and qualifications. Application forms and particulars, returnable by 28th May, from the Architect (AR/EK/TBR2), County Hall, S.E.1. (906)

## MIDDLESEX COUNTY COUNCIL DEPUTY AREA PLANNING OFFICER, A.P.T.

VI (£880—£1,080 p.a. plus London Weighting), responsible under Area Planning Officer for development control, survey and planning. To possess extensive experience and suitable qualifications. Established pensionable subject to prescribed conditions. Five-day week.

Application forms from County Planning Officer, 10 St. George Street, S.W.1, returnable by 5th June (Quote S.855 A.J.). Canvassing disqualified.

## SURREY COUNTY COUNCIL

Applications invited for the following appointments:

ASSISTANT ARCHITECT, GRADE III (£540×£25—£765 p.a. plus London Allowance). Pref. given applicants who have passed Inter. R.I.B.A. ARCHITECTURAL ASSISTANT, GRADE I (£530×£20—£610 p.a. plus L.A.).

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

## METROPOLITAN BOROUGH OF HOLBORN SENIOR ASSISTANT ARCHITECT

Senior Assistant Architect required in Borough Architect's Dept. R.I.B.A. Final standard, to assist in the preparation of working drawings and details for new public buildings. Salary within A.P.T. V (£795—£970 plus London weighting) according to experience. Applications with names of two referees to Town Clerk, Town Hall, High Holborn, W.C.1.

## Tenders Invited

6 lines or under, 12s. 6d.; each additional line, 2s.

## BOROUGH OF LUTON

The following tenders invited for ELECTRICAL INSTALLATIONS:

- (a) ROTHERHAM SCHOOL.
- (b) SINGLE BEDROOM 2-STORY FLATS, VAUXHALL PARK ESTATE.

Documents from Borough Engineer, Town Hall, Luton, on payment of £2 2s. deposit for EACH contract, returnable on receipt of a bona fide tender not subsequently withdrawn. Cheques payable "Luton Corporation." Tenders to Town Clerk, Town Hall, Luton, by 31st May.

TENDERS are invited for the construction of a Bungalow of 1,800 sq. ft. in area, located in the Finchley area.—Contractors wishing to estimate should apply for particulars to Ivor Warner, A.R.I.B.A., 28, Queens Road, Loughton, Essex.

## Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

A SALES REPRESENTATIVE is required for the energetic sales development of "UNDULITE" the new roofing material, by Ashdowns Ltd., leading Plastics Manufacturers, whose Works is situated in St. Helens. Applications are invited from men between 30 and 40 years of age who have sound established connections with the building trade and with architects. The person selected to fill this vacancy will be required to operate and live in either the London area or in Southern England. Applicants are invited to send details of their education and experience to the Personnel Liaison Officer, Pilkington Brothers Ltd., St. Helens, Lancs. (of whom Ashdowns Ltd. is a Subsidiary Company), quoting Ref. "U".

## CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, MANCHESTER.

Applications are invited for the following appointments:

(a) SENIOR ASSISTANT ARCHITECTS, with experience of work on commercial and industrial projects.

(Salary range £820 to £975 per annum.)  
(b) ASSISTANT ARCHITECTS, capable of preparing working drawings from preliminary details.

(Salary range £550 to £820 per annum.)  
There is a five-day week in operation, and both appointments offer prospects of upgrading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4.

## CO-OPERATIVE WHOLESALE SOCIETY, LTD., ARCHITECT'S DEPARTMENT, LONDON.

ASSISTANT ARCHITECTS, WORKER-UP.

AND SHOP FITTING DRAUGHTSMAN. Applications are invited from suitably qualified persons. Salary on a scale £445—£945 inclusive of L.W., with placing according to age, qualifications and experience. The posts are supernumerary, subject to medical examination. Five-day week in operation. Applications, stating age, experience, qualifications and salary required, to—W. J. Read, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leaman Street, London, E.1.

ARCHITECTURAL ASSISTANTS required for small West End Office. Good salaries. Write to Box 9580.

SENIOR ASSISTANT required for Head Office, Bristol. High standard of ability in contemporary design and construction and able to control contracts on own initiative. A wide variety of work where contemporary design is given full reign.—Apply in writing, giving experience and salary required, to Angus McDonald & Partners, Chartered Architects, 1, Unity Street, College Green, Bristol, 1.

THE British Thomson-Houston Co. Ltd. require ARCHITECTURAL ASSISTANTS, Intermediate or R.I.B.A. Final Standard, preferably with previous experience on projects of an industrial nature, for their Architect's office at Rugby.—Applications, stating age and full particulars, to: G. C. Knight, Esq., A.R.I.B.A., Works Architect, The British Thomson-Houston Co. Ltd., Rugby.

ARCHITECTURAL ASSISTANTS with imagination and initiative required by Brighton office to London practice. Applicants should have progressive ideas and at least two years' experience after completion of training. Congenial working conditions; five day week; staff pension scheme. Salary by arrangement.—Apply Box 9917.

ARCHITECT with small varied practice in West London requires ASSISTANT for preparation of working drawings, running contracts, etc. Salary £600—£700, according to experience.—Write details, Box 9728.

LONDON Consultants require immediately ASSISTANTS of both Inter. and Final R.I.B.A. standard for varied and interesting contemporary industrial projects. Responsibility given to applicants with good design sense and constructional ability. Apply giving full particulars and salary required to Box No. 401, Glovers Advertising Ltd., 351, Oxford Street, London, W.1.

ASSISTANT QUANTITY SURVEYOR required by Sheffield Brewery Company. Preferably professionally trained and experienced in taking off and preparation of Bills of Quantities.—State full particulars and salary required to Duncan Gilmore & Co., Ltd., 10, Nursery Street, Sheffield.

SHELL-MEX and B.P. Ltd. require an ARCHITECTURAL ASSISTANT for work in the Southern Counties and based at their Southampton Office in connection with the development and construction of service stations, including the remodelling of existing premises. Applicants should be at least Intermediate standard R.I.B.A. and state age, experience, qualifications and salary required.—Staff Manager (Ref. D.73), Shell-Mex and B.P. Ltd., Shell-Mex House, London, W.C.2.

HASTIE, WINCH & KELLY require ARCHITECTURAL ASSISTANT, able to take charge of medium-sized jobs, including Churches, Hostels, Factories, etc. Telephone for an appointment, WE1 8863, or write with particulars to 1, Bentinck Street, W.1.

ARCHITECT'S ASSISTANT required by Sheffield Brewery Company. R.I.B.A. Inter-standard.—State full particulars and salary required to Duncan Gilmore & Co., Ltd., 10, Nursery Street, Sheffield.

ARCHITECTURAL DRAUGHTSMEN required by Ilford Ltd. for staff architect's office. Applicants should have completed at least two years' office experience. Apply in writing, stating age, training and experience to Ilford, Ltd., Romford, Essex.

ADAMS, HOLDEN & PEARSON require ARCHITECTURAL ASSISTANTS immediately. Write giving particulars of experience and salary required to 38, Gordon Square, W.C.1.

NORMAN & DAWBARN invite applications from ASSISTANTS or ASSISTANT ARCHITECTS of Inter. or higher standard with at least 3 years' office experience. Interesting and varied programme of U.K. and overseas work. Write to 7, Portland Place, London, W.1, or phone Langham 8011.

ASSISTANT required in Maidstone Office.—Write stating experience and salary. Box 9809.

ARCHITECTURAL ASSISTANTS, Senior and Junior required, preferably with London practice experience, office and factory buildings. Write, giving particulars of experience, etc., to Messrs. Bates & Sinning, 89, Chancery Lane, W.C.2.

SENIOR ARCHITECT required for work in South Wales on the design and co-ordination of industrial projects. Candidates must be qualified A.R.I.B.A.—Please write, giving details of previous experience and salary required, to Box No. 417, Glovers Advertising, Ltd., 351, Oxford Street, London, W.1.

LONDON Consultants require ARCHITECTURAL ASSISTANTS for design work on Atomic Power Stations. The vacancies offer great opportunities and scope for the right applicants, who should be qualified or have reached Final Standard for A.R.I.B.A. Staff Pension Scheme. Please apply in confidence to Box 353, Glovers Advertising, Ltd., 351, Oxford Street, London, W.1.

ASSISTANT required by established firm of Reading Architects. Must have sound knowledge of construction, accustomed to Commercial and Factory work. Salary £750 to £1,000 p.a., according to experience.—Particulars to Box 1006.

JUNIOR DRAUGHTSMAN required. Hours 9.5-30, 10-12 Saturdays. Salary up to £7 per week, subject to experience and ability.—Write, giving full particulars, Meredith & Partners, Architects and Surveyors, 6, Victoria House, Goodmayes, Essex.

ASSISTANT ARCHITECTS required for interesting work on modular, prefabricated structures of varied types. A contemporary outlook is preferred, and applicants should be Associates or approaching qualifications.—Please write, stating salary required, age, and details of experience, to Box 9985.

ARCHITECTURAL ASSISTANT required. A Good draughtsman, with office experience and knowledge of building construction.—Apply, stating salary required, to Caroe & Partners, 16, Great College Street, Westminster.

JUNIOR ASSISTANT required. Must be good draughtsman and with some previous office experience.—Write, with full particulars and salary required, Jackson & Jackson, F./L.R.I.B.A., 13, North Street, Ashford, Kent.

ARCHITECTURAL ASSISTANT, of Intermediate standard, preferably with previous office experience, required immediately for busy general practice in Home Counties. Travelling expenses to interview paid.—Write, stating age, experience, and salary required, to Box 9996.

TWO SENIOR ASSISTANTS urgently required for interesting practice in Gordon Square. One must be qualified and have had some experience.—Box 9989.

ARCHITECTURAL ASSISTANT, Intermediate standard, required by large Midlands Brewery Company. Applicants must be competent draughtsmen.—Please reply, giving full details of qualifications, experience, age, and salary required, to Box 9993.

ARCHITECTURAL ASSISTANT required (R.I.B.A. Inter. or beyond). Commencing salary £650 to £750, according to qualifications.—Details of training, experience, and age, please, to W. C. Mangan, 2, Ribblesdale Place, Preston, Lancs.

ARCHITECTURAL ASSISTANT, Intermediate standard, required for busy office near Nottingham with interesting and varied practice. Salary according to experience.—Apply Box 1018.

TWO SECTION LEADERS at a salary of £1,000 to £1,100 per annum required for large industrial and multi-storey projects. Only men of ability will be considered and applicants must be A.R.I.B.A. The positions offered are in the Manchester Area, with a large firm of building contractors. Good working conditions and a Pension Scheme in operation. Apply Box 1062.



**CHIEF ASSISTANT and TWO SENIOR ASSISTANTS** required by old-established firm of Chartered Architects, who have an extensive programme of work in hand. The work, mainly contemporary in character, includes multi-storey buildings in steel and reinforced concrete for high-class industrial purposes. High salaries paid to suitable applicants, who must have had considerable and varied experience. First-class working conditions and prospects. Superannuation scheme.—Chippindale & Edmondson, Empire House, Piccadilly, Bradford, 1. 1020

**GUILDFORD OFFICE—ASSISTANT**, of intermediate standard, with ability to prepare working drawings, specifications, and assist Partner with administrative matters. Apply Head Office, stating experience and salary required.—Angus McDonald & Partners, A.R.I.B.A., Chartered Architects, 1, Unity Street, College Green, Bristol, 1. 1021

**ARCHITECTURAL ASSISTANTS** required for General Practice. Salary £750—£950, according to qualifications and experience.—Apply, giving full particulars, to Frank Bradley, F.R.I.B.A., 4, Wood Street, Bolton, Lancs. 1023

**ASSISTANT BUILDING MAINTENANCE SURVEYORS** required by

**THE ATOMIC WEAPONS RESEARCH ESTABLISHMENT**, Aldermaston, Berkshire, to assist on Building Survey work in connection with the extension, conversion and maintenance of the buildings of the Establishment and its Housing Estates. The work involves liaison with scientific and engineering staff and covers a wide field with many novel problems.

Applicants should be Registered Architects or Chartered Surveyors (Building section) or have exempting qualifications. Experience in the preparation of schemes, specifications, schedules of work and estimates for the execution of works by direct and contract labour is essential.

Salary: £728 (at age 25)–£1,130 p.a. Contributory Superannuation scheme. Married officers now living outside the Establishment's transport area will be eligible for housing on one of the Authority's Estates, or alternatively assistance towards legal expenses incurred in house purchase may be available; until housed a lodging allowance may be payable.

Requests for application forms by postcard to the Senior Recruitment Officer at the above address not later than 22nd May, 1956. Quote reference 1153/119. 1026

**KEEN ARCHITECTURAL ASSISTANT** required, Inter. to Final standard, for Private Practice in Worcester. Salary £400 to £600, 5-day week. All replies answered.—Alexander Graham, 15, The Tything, Worcester. 1031

**DIOCESE OF BLACKBURN**  
**THE Dilapidations Board** invites applications for the position of **DIOCESAN SURVEYOR**. Applicants should be members of the Church of England, A.R.I.B.A. or A.R.I.C.S.—For particulars apply to the Secretary, Cathedral Close, Blackburn. 1009

**ASSISTANT ARCHITECT** urgently required in congenial West Surrey office to help cope with accumulating programme of work for War Department, County Council, Local Authority and Commercial, Industrial and Domestic clients. Good salary to experienced practical man.—A. J. & L. R. Stedman, Chartered Architects, 36, South Street, Farnham, Surrey. Tel. Farnham 6016. 1010

**KEEN ARCHITECTURAL ASSISTANTS**, up to Final standard, required for work on a number of interesting schemes. Practical knowledge, sense of responsibility, and good draughtsmanship essential. Salary by arrangement.—Apply to R. Dannatt & Son, F.R.I.B.A., Prudential Buildings, 65A, Duke Street, Chelmsford, Essex. 1011

**ARCHITECTURAL ASSISTANT** required for a young progressive Cambridge firm. Salary £450. State experience and age. Contemporary work.—Box 1013.

**WESTMINSTER BANK** has vacancy in their Architect's Office for **ASSISTANT** of Intermediate standard. Must be quick, accurate draughtsman and used to work of good class.—Write, giving age, experience, and salary required, to The Architect, 51, Threadneedle Street, E.C.2. 1017

**ARCHITECTURAL ASSISTANT** required, Inter. standard draughtsman, with office experience. Willing to hold Architect with working drawings of flats and maisonettes, attempting contemporary.—Box 1016.

**ARCHITECTURAL ASSISTANT** required for a young and progressive practice in Haslemere, Surrey. Should possess Intermediate R.I.B.A., with minimum 4 years' office experience. Commencing salary in region of £600 p.a. Car necessary. Mileage allowance.—Write, giving age, experience, to Box 982.

**ARCHITECTURAL ASSISTANT** required by a busy West End office. Salary up to £1,000 p.a. according to experience. Five-day week. Apply in writing with all details to Mewes & Davis, 1, Old Burlington Street, W.1. 1069

**JAMES & BYWATERS** urgently require **ASSISTANT** of Intermediate standard or higher, for detailing various types of buildings. Salary according to experience and qualifications.—Apply in writing to 5, Bloomsbury Street, W.C.1, or telephone Museum 9922. 9657

**SENIOR and JUNIOR ASSISTANTS** required. Varied work. Superannuation scheme. Apply—Richard Brown, Architects, 123, Victoria Road, Darlington. 1059

**ARCHITECTS and ARCHITECTURAL ASSISTANTS** are offered interesting and remunerative work on large industrial, multi-storey and Housing contracts with long established Company of contractors in the Manchester Area. The positions offered are of a permanent nature, with good working conditions. A contributory pension scheme is in operation. Salaries dependent on qualifications and experience will be from £750 to £900, with advancement according to proven ability. Apply Box No. 1061.

**ARCHITECT, S. & S.E. Area**, requires **PARTNER, R.I.B.A. or M.I.C.E.**, with capital to develop and enlarge expanding practice. Box 1068.

**DAVID HARTLEY** requires **ARCHITECTURAL ASSISTANTS** immediately. Write, giving particulars of experience and salary required to 4, The Grove, Slough, or telephone SLough 20926. 1067

**ASSISTANTS** required by Architects with extensive London and Provincial practice, including large reinforced concrete and steel-framed structures.—Apply Box 1037.

**EXPERIENCED ARCHITECTURAL ASSISTANT** required urgently. Initiative and ability to handle contracts at home and abroad. Varied work on factories, shops and industrial design. Salary approx. £800 p.a.—Gaby Schreiber & Associates, Sloane 6127. 1052

**ARCHITECTURAL ASSISTANT** required in Architect's Department of London Brewery Company. Must be good draughtsman.—Write, stating age, experience, salary required, Box 1053.

**ARCHITECTURAL ASSISTANTS** required for Private Practice in Glasgow. Salary range £650—£1,000, according to experience and qualifications.—Box 1047.

**ARCHITECTURAL ASSISTANT** for temporary appointment of minimum 12 months. Intermediate standard R.I.B.A. essential, A.R.I.B.A. desirable. 5-day week. Salary according to qualifications and experience.—Apply to Personnel Adviser, Spicers, Ltd., 19, New Bridge Street, E.C.4. 1048

**CITY Architects' Office** require experienced **ASSISTANT**, with contemporary outlook. Commencing salary £900 per annum. Congenial office conditions.—Box 1055.

**ARCHITECT'S ASSISTANT** required for varied work in small private office, western outskirts of London. Some office experience desirable, but not essential.—Write, stating age and experience, Box 1056.

**EXPERIENCED ARCHITECTURAL ASSISTANT** required. Salary £800—£900 p.a. Interesting work.—Apply, giving full particulars, to Box 1057.

**EXPERIENCED ARCHITECTURAL ASSISTANTS** required for contemporary office, salary according to experience. C. H. Elsom, 10, Lower Grosvenor Place, S.W.1. VIC 4304. 9558

**RAMSEY, MURRAY, WHITE & WARD** have vacancies for:—

(a) **QUALIFIED ARCHITECT**, with at least 12 months' office experience since qualifying.

(b) **ARCHITECTURAL ASSISTANT**, advanced student R.I.B.A., with at least 12 months' office experience.

Salary to be agreed on the basis of qualifications and experience.

Apply 32, Wigmore Street, London, W.1, or telephone WELbeck 1409. 9625

**CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECT'S DEPARTMENT, BIRMINGHAM.**

**APPLICATIONS** are invited for the following appointments in a newly formed Branch Office. Interesting and varied commercial and industrial projects.

(a) **SENIOR ASSISTANT ARCHITECT**, with experience in Store and Shop Design. (Salary range £820 to £975 per annum.)

(b) **ASSISTANT ARCHITECTS**, capable of preparing working drawings and details from preliminary sketches.

(Salary range £550 to £820 per annum.)

Both appointments offer prospects of upgrading. Applications, stating age, experience, qualifications, and salary required, to G. B. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 3972

**ARCHITECT'S CO-PARTNERSHIP** require qualified **ASSISTANT** with experience.—Write 44, Charlotte Street, London, W.1, or telephone LANGham 5791. 9776

**"THE ARCHITECTS' JOURNAL"** requires a full-time **DRAUGHTSMAN** to assist in the preparation of Information Sheets and Working Details. First class draughtsmanship, knowledge of building construction and a keen interest in the compilation of technical information. Write to the Editor (Information Sheets), 9, Queen Anne's Gate, S.W.1, stating age, architectural training, and experience. 913

**ARCHITECTURAL ASSISTANTS** required for St. Albans office for work on School, Commercial and Housing projects. Should be good draughtsman with contemporary outlook. Good Salaries. Write to Box 9579.

**ARCHITECTURAL ASSISTANT** required in a busy London office with varied practice. Good salary and prospects for suitable applicant. 5-day week. Write, giving particulars of age, qualifications, experience, etc., to Box 775, c/o 7, Coptic Street, W.C.1. 9313

**ARCHITECTS' SENIOR ARCHITECTURAL ASSISTANTS** required immediately for a wide variety of work. Salary range £700—£975 per annum. Superannuation scheme. Application should be made in writing to Kenneth F. Masson, A.R.I.B.A., Chief Architect, S.C.W.S. Ltd., 76, Morrison Street, Glasgow, C.S. 9491

**BOISSEVAIN & OSMOND** require **JUNIOR ARCHITECTURAL ASSISTANTS** with a contemporary outlook. They should be good draughtsmen with some office experience. Excellent opportunities for rapid advancement for the right man; it is our policy to give responsibility commensurate with ability. Please telephone HOL 3381 for appointment. 9777

**ARCHITECTURAL ASSISTANTS** required by West End office with varied practice. Not less than Inter. standard and 3 years' office experience. 5-day week. Bonus scheme.—Write Welch & Lander, 38, Gloucester Place, Portman Square, W.1. 9822

**ARCHITECTURAL ASSISTANTS** required in a busy office with much varied work. 5-day week. Previous office experience desirable.—Write, stating experience and salary required, to Graham Crump & Denis Crump, F.A.R.I.B.A., 43, George Street, Croydon. 9892

**RONALD WARD & PARTNERS** require several **ARCHITECTURAL ASSISTANTS** with contemporary outlook and willing to use own initiative. Salary range £500 to £800. Interesting and varied work, home and abroad. Congenial working conditions.—Apply 29, Chesham Place, Belgrave Square, S.W.1. Telephone Belgrave 3361. 9189

**JUNIOR DRAUGHTSMAN** required, with good knowledge of building construction. State experience and the salary required to Messrs. Winter & Pickering, L.A.R.I.B.A., Chartered Architects, 114/115, Holborn, London, W.1. 9873

**SHERWOODS PAINTS LTD.** have a vacancy for a man of high ability and personality able to influence Architects, Local Authorities, etc., to specify their products. The successful candidate should have experience in contacting such Authorities in the London area. The position carries a progressive four-figure salary and expenses. Membership of superannuation scheme.—Write in strict confidence to the Sales Manager, Decorative Materials Division, Sherwoods Paints Ltd., Barking, Essex, and attach a typewritten, chronological summary of qualifications and experience. 9466

## Architectural Appointments Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.

**A.R.I.B.A. (44).** Resident. East Anglia. Desires appointment with commercial firm of repute in a technical or representative capacity. Box 1066.

**EX** Marine (24), theoretical coastal navigational experience and use of surveying instruments seeks post in practical surveying with opportunity to apply draughtsmanship.—Box 1050.

**INTERESTING**, responsible post sought by well qualified woman associate, residing N.W. London. 4½ years' experience. Work concerned with health or education preferred. Salary £750. Box 9935.

## Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

**BUILDING or STRUCTURAL DRAUGHTSMAN** required by Specialists in Prefabrication for interesting work on a number of timber building components. The successful applicant will have an opportunity of entering into the design of a new product in its early stages of development, and taking part in a development programme.—Applications, giving fullest possible details of career to date, including present salary, to be sent to G. R. Bonella, A.R.I.B.A., Messrs. H. Newman, Sons & Co., Ltd., Carr Lane, Gainsborough. 9991

**OPTIMITY** for **TOPLINE DESIGNER/DRAUGHTSMAN** with **LEADING SHOPFITTING ORGANISATION**

**EXCELLENT** prospects with unlimited scope offered by nationally-known London Shopfitters to man of creative ideas with genuine enthusiasm for contemporary store design. Permanent, progressive post with exemplary working conditions. Non-contributory pension scheme. Five-day week. Staff restaurant.—Box 9177.

## Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s.

**THE SITE SURVEY COMPANY, BLACKHEATH, S.E.3.** Specialists in all types of Architectural and Engineering Surveys, grid and contour lay-outs. Telephone LEE Green 7444-5. 4018

**GENERAL ARCHITECTURAL ASSISTANCE.** part-time or by arrangement, given by experienced qualified Architect to the profession, with good references. London area only.—Box 9950.

**GOOD LETTERING** is essential for Commemorative Wall Tablets, Foundation Stones, etc. Designs prepared and estimates given for the finished work in any suitable material. Renowned as a Centre for Lettering since 1934. Sculptured Memorials, 67, Ebury Street, S.W.1. 9170

**ARCHITECTURAL MODELS.**—Highest workmanship guaranteed from my team of expert modellers. Send plans for quotations to W. Roberts, 13, Campden Grove, W.8. 9262

**QUANTITY SURVEYOR,** London, W.1, requiring work, offers services to Architect or Architects to reciprocal advantage.—Box 9812.

**SURVEYING** and levelling of building sites and measured drawings undertaken by experienced Surveyor at moderate charges.—Box 9905.

**PRIVATE** Architect, Hampshire, able at present to give assistance to others. 25 years' general experience. Distance unimportant.—Box 9921.

**NAMEPLATES AND SIGNS, Bronze, Brass and Plastics.** Church Metalwork. Quick delivery. Austin, Luce & Company, 19, College Road, Harrow, Middlesex. Tel.: Harrow 3839. 1174

**NAMEPLATES, PLAQUES, CRESTS, etc.,** in bronze, brass and plastic, quotations and lay-outs submitted. Abbey Craftsmen Ltd., 78, Osnaburgh Street, London, N.W.1 Euston 5722. 4165

**"DON" ARCHITECTURAL MODEL MAKERS.** We offer speed, courtesy and reliability. Please phone Erith 3943 (or Hastings 1807 between 2-3 p.m.). 9308

**TYPING** executed within 24 hours: Specifications, Correspondence, etc. Very reasonable terms.—Ring, evenings, Cherrywood 3184. 9984

**ARCHITECT ASSISTANT,** quick, reliable, offers any form of assistance for work that can be undertaken at home.—Box 9986.

**ESTIMATES** for Conversions, Alterations, New Houses, Industrial Developments in London and Surrey. Phone Parsons & Co. (Builders), TUL 3052 for immediate attention. 1060

**ARCHITECTURAL ASSISTANT,** quick, accurate in work, reliable, offers any form of assistance for work that can be taken at home.—Please write to SAK, 216A, Finchley Road, N.W.3. 1041

**A.R.I.B.A. (38),** 6 years own practice, 18 years office experience on varied work, prepared to offer services to larger firm, Surrey or Kent preferred but anywhere considered. Box 1065.

**SURVEYS** of sites and buildings, levels, grids, contours, also detailed specifications prepared. LIV. 1839. 1073

**PROMPT** attention given to your requirements in the design and detail of reinforced concrete and steelwork by experienced engineers wishing to assist consultants, architects and builders. Surveys undertaken. Telephone: WORDSWORTH 9667. Box 1064.

### For Sale and Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.

**RECONDITIONED** Ex-Army Huts and Manufactured Buildings, Timber, Asbestos, Nissen Type, Hall Type, etc. All sizes and prices. Write, call or telephone: Universal Supplies (Belvedere) Ltd., Crabtree Manorway, Belvedere, Kent. Tel.: BRITH 2948. 1474

**EXCEPTIONAL** offer 3rd floor at 94, New Bond St., W.1. 1,300 sq. ft. £980 p.a. Long lease available, perfect natural lighting suitable for drawing office. Tel. GRO. 6601. 8231

**STEEL PORTAL FRAME BUILDINGS.** For immediate delivery from stock. 30 ft. and 40 ft. single span or multiple spans, in heights of 9 ft., 12 ft., 15 ft. and 18 ft. to eaves. Fully conforming with B.S.8449 and Code of Practice. Framework only or complete buildings. R.I. Buildings, Ltd., 238/240, Abbey House, Victoria Street, London, S.W.1. Tel. ABBEY 3964, and Ruskin Chambers, 191 Corporation Street, Birmingham. 9924

### Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

**A. J. BINNS, LTD.,** Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works 96/107, St. Paul's Road, N.I. Canonbury 2061

**WANTED.**—Copies of "The Architectural Review," from March, 1954—March, 1956.—Please address offers to A. & R. Milne, 229, Union Street, Aberdeen. 914

**HARLEY STREET,** near Cavendish Square, W.1; newly decorated large office. Switchboard and reception facilities available. £250 p.a. inclusive of rates. F. & F., £300.—Box 1064.

**W. F. WHITE,** Builder, specialising in good quality decorative and conversion work of contemporary or orthodox style. Please write, 30, Ashlyn Grove, Hornchurch, Essex. 1070

### Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

**R.I.B.A. and T.P.I. EXAMS.**—Stuart Stanley R. (Ex. Tutor Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./B.A. F./F.R.I.B.A. M./A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.), prepare Students by correspondence, 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

**WELL** qualified LECTURER will coach students in Design. Personal or postal tuition. Write Box 1072.

### COURSES for all R.I.B.A. EXAMS.

Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.

**ELLIS SCHOOL OF ARCHITECTURE**

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A. 103B OLD BROMPTON RD., LONDON, S.W.7 Phone: KEN 4477 and at Worcester

### ANCHORAGES TO CONCRETE

- SPEARPOINT Floor Clips to anchor wood floors to concrete.
- DOVETAIL Masonry Slot and Anchors to anchor brick and stone facings to concrete.
- ANKORTITE Box Fittings.

### ABBAY BUILDING SUPPLIES CO.

6, Waldemar Road, Wimbledon, London, S.W.19  
Telephone: Wimbledon 4178

### FIBROUS PLASTERWORK OF EVERY DESCRIPTION

#### ALLIED GUILDS

King Edward Square  
SUTTON COLDFIELD. Tel: Sut 3809

## WHITE FACING BRICKS

(S. P. W. BRAND)

Telephone: BULWELL 27-8237/8/9 • Telegrams: "Macline", Bulwell, Nottingham

M. MCCARTHY & SONS, LTD  
BULWELL • NOTTINGHAM

### COMBROOK FLOORING CO.

Parquet, strip and block floors laid. Old floors repaired, re-surfaced, polished and waxed. Specialists in all types of wood flooring. Estimates free. Enquiries to:

37, Spring Lane, Combbrook, Warwick

### Masterfoil CHAIN LINK FENCING

Ideal for  
Industrial Sites,  
Schools, Highways,  
Housing Estates, etc.  
FULLY GALVANISED  
Conforms to B.S.S.



### PROTECTS YOUR INTERESTS

FENCING & GATES LTD 14 STANHOPE GATE, LONDON, W.1. TEL: GRO 4527 AP/FGL11

**LIGHTNING PROTECTION**

By  
**FURSE**

W. J. FURSE & CO., LTD.  
14, TRAFFIC STREET, NOTTINGHAM  
LONDON—MANCHESTER—BRISTOL

### MODELS

ESTAB.  
1889.

John B. THORP  
FOR 98 GRAY'S INN ROAD, W.C.  
TOWN PLANNING  
PUBLIC BUILDINGS  
ESTATES and INTERIORS  
TELEPHONE: HOLBORN 1011

### ARCHITECTURAL — contemporary

## SIGN LETTERS

IN A VARIETY OF METALS  
& FINISHES

### WARD AND COMPANY

128 CHELTENHAM ROAD, BRISTOL 6  
TELEPHONE 21536

People come



from everywhere

to see London's largest display of office furniture and equipment at  
**OFFICE EQUIPMENT CO.**  
113 High Holborn, London, W.C.1. CHA 6524  
Write, phone or call for 54-page catalogue

OW 1115

FIRST FOLD HERE

FOLD HERE

Postage  
will be paid  
by  
Licensee

No Postage Stamp  
necessary  
if posted  
in Great Britain or  
Northern Ireland

BUSINESS REPLY FOLDER  
Licence No. S.W. 1761

THE ARCHITECTS' JOURNAL

9-13 Queen Anne's Gate

London, S.W.1.

FOLD HERE

## enquiry form

If you require catalogues and further information on building products and services referred to in the advertisements appearing in this issue of the Architects' Journal please mark with a tick the relevant names given in the index to advertisers overleaf. Then detach this page, write in block letters, or type, your name, profession or trade and address in the space overleaf, fold the page so that the post-paid address is on the outside and despatch. We will ensure that your request reaches the advertisers concerned.

TUCK IN THIS END



# Alphabetical index to advertisers

	PAGE		PAGE		PAGE
Abbey Building Supplies Co. ....	116	Fibrolene, Ltd. ....	95	Nu-Swift, Ltd. ....	58
Aidas Electric, Ltd. ....	16	Finch, B., & Co., Ltd. ....	34		
Allied Guilds. ....	116	Flexwood, Ltd. ....	105		
Ames Crosta Mills & Co., Ltd. ....	70	Floor Treatments, Ltd. ....	110		
Anderson, D., & Son, Ltd. ....	93	Fordham Pressings, Ltd. ....	91	Office Equipment Company ....	116
Architectural Press, Ltd. ....	109, 110	Freeman, Joseph, Sons & Co., Ltd. ....	50		
Ashwell & Nesbit, Ltd. ....	103	Freer, William, Ltd. ....	102		
Autotype Co., Ltd. ....	102	Frenger Ceilings, Ltd. ....	38		
		Furse, W. J., & Co., Ltd. ....	116		
				Parsons, Thos., & Sons, Ltd. ....	102
Batley, E., Ltd. ....	119			Peglers, Ltd. ....	86
B.B. Chemical Co., Ltd. ....	43	Gardiner, Sons & Co., Ltd. ....	21	Permanite, Ltd. ....	45
Bendz, Ltd. ....	108	Gliksten, J., & Son, Ltd. ....	41	Permutit Co., Ltd. ....	33
Benham & Sons, Ltd. ....	101	Greenwood & Hughes, Ltd. ....	101	Philips Electrical, Ltd. ....	20
Birmid Industries, Ltd. ....	27	Gyproc Products, Ltd. ....	62	Phoenix Timber Co., Ltd. ....	71
Boulton & Paul, Ltd. ....	48			Previte & Co., Ltd. ....	102
Bowker, S. O., Ltd. ....	70			Purimachos, Ltd. ....	108
Brady, G., & Co., Ltd. ....	9	Hall, J. & E., Ltd. ....	4		
Briggs, William & Sons, Ltd. ....	119	Haskins, Ltd. ....	40		
British Geon. Ltd. ....	63	High Duty Alloys, Ltd. ....	11	Radiation Group Sales, Ltd. ....	42
British Home & Office Telephone Co., Ltd. ....	60	Hills, F. & Sons, Ltd. ....	12	Range Boilers, Ltd. ....	90
British Insulated Callender's Cables, Ltd. ....	47	Hills (West Bromwich), Ltd. ....	61	Rawlings, Bros., Ltd. ....	98
British Mouldex, Ltd. ....	46	Hope, Henry, & Sons, Ltd. ....	79	Reed Millican & Co., Ltd. ....	75
British National Electrics, Ltd. ....	49			Remploy, Ltd. ....	106
British Reinforced Concrete Engineering Co., Ltd. ....	120			Richardson & Starling, Ltd. ....	119
British Titan Products Co., Ltd. ....	19	Ideal Boilers & Radiators, Ltd. ....	25	Riley (I.C.) Products, Ltd. ....	28
Browne, John & Co. (Bridgwater) Ltd. ....	97	Imperial Chemical Industries, Ltd. ....	64	Robertson Thain, Ltd. ....	22
Building Industry Distributors ....	17	Invisible Panel Warming Association ...	99	Ruberoid Co., Ltd., The . ....	14
Burn Bros. (London), Ltd. ....	100			Runnymede Rubber Co., Ltd. ....	74
Cape Asbestos Co., Ltd. ....	24	Jones & Broadbent, Ltd. ....	104		
Carlisle Plaster & Cement Co. ....	35			Salter, T. E., Ltd. ....	94
Catesbys Linoleum Contracts ....	88	Kahn, E., Ltd. ....	108	Sanbra, Ltd. ....	94
Chance Bros., Ltd. ....	37	Kerner-Greenwood, Ltd. ....	78	Sankey, J. H., & Son, Ltd. ....	26
Chase Products (Engineering), Ltd. ....	110	King, Geo. W., Ltd. ....	99	Sankey-Sheldon, Ltd. ....	87
Chatwood Milner, Ltd. ....	96			Saro Laminated Wood Products, Ltd. ...	6
Cheecal Processes, Ltd. ....	56, 57			Sebel Products, Ltd. ....	107
Coal Utilisation Council, The ....	53			Sherwoods Paints, Ltd. ....	105
Colt Ventilation, Ltd. ....	3	Lawley, W. & J., Ltd. ....	51	Sieglwart Floor Co., Ltd. ....	13
Combrook Flooring Co. ....	116	Lead Sheet & Pipe Council, The ....	18	Silent-Gliss, Ltd. ....	108
Conder Engineering Co., Ltd. ....	66	Leaderflush, Ltd. ....	90	Smith, R. (Horley), Ltd. ....	102
Coseley Engineering Co., Ltd. ....	23	Lignacite (N.E.) Ltd. ....	69	Smith's English Clocks, Ltd. ....	81
Coughtrie, J. & G., Ltd. ....	89	Lumenated Ceilings, Ltd. ....	77	South Durham Steel & Iron Co., Ltd. ...	39
Courtney, Pope (Electrical), Ltd. ....	76	Lyons, J., & Co., Ltd. ....	98	Spencer, Lock & Co., Ltd. (Royal Board)	30
Crittall Manufacturing Co., Ltd. ....	29			Stelcon (Industrial Floors), Ltd. ....	68
				Stockwell, S. J., & Co. (Carpets), Ltd. ....	31
				Story, Smithson & Co., Ltd. ....	84
				Sundeala Board Co., Ltd. ....	44
Denton Edwards Paints, Ltd. ....	107	MacAndrews & Forbes, Ltd. ....	119		
Dunn, Alexander, Ltd. ....	87	Magnet Timber, Ltd. ....	65		
Dussek Bitumen & Taroleum, Ltd. ....	97	Mallinson, William, & Sons, Ltd. ....	80	Thorn, J., & Sons, Ltd. ....	103
		Manger, J., & Son, Ltd. ....	86	Thorp, John B. ....	116
		Marryatt & Scott, Ltd. ....	92	Tretol, Ltd. ....	7
		Mason, Joseph, & Co., Ltd. ....	55	True Flue, Ltd. ....	96
Econa Modern Products, Ltd. ....	104	McCarthy, M., & Sons, Ltd. ....	116	Twyfords, Ltd. ....	67
Eidelmann, J. ....	85	McKechie Bros., Ltd. ....	106	Tyre Products, Ltd. ....	110
Ellis School of Architecture ....	116	McPherson, Donald & Co., Ltd. ....	90		
English Clock Systems, Ltd. ....	36	Merchant Adventurers, Ltd. ....	82		
English Electric Co., Ltd. ....	10	Merchant Trading Co., Ltd. ....	32		
Esavian, Ltd. ....	83	Metal Sections, Ltd. ....	54		
Evide, Ltd. ....	5	Metal Window Association, The ....	8	United Kingdom Provident Institution ...	92
		Mills Scaffold Co., Ltd. ....	2		
		Montgomery, Stobo & Co., Ltd. ....	95		
Faculty of Architects & Surveyors ....	104			Ward & Company ....	116
Fencing & Gates, Ltd. ....	116			Ward, Thos. W., Ltd. ....	59
Ferodo, Ltd. ....	73	National Coal Board ....	15	Williams & Williams, Ltd. ....	72
"Fibonite" ....	106	New Day Electrical Accessories, Ltd. ...	100	Wood, Edward, & Co., Ltd. ....	52

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property and Land Sales, see 111, 112, 113, 114, 115, 116.

Write in block letters, or type, your name,  
profession and address below, and fold so that the  
post-paid address is on the outside.

NAME \_\_\_\_\_  
PROFESSION \_\_\_\_\_  
ADDRESS \_\_\_\_\_



PAGE

58 ☐

116 ☐

102 ☐

86 ☐

45 ☐

33 ☐

20 ☐

71 ☐

102 ☐

108 ☐

42 ☐

90 ☐

98 ☐

75 ☐

106 ☐

119 ☐

28 ☐

22 ☐

14 ☐

74 ☐

94 ☐

94 ☐

26 ☐

87 ☐

6 ☐

107 ☐

105 ☐

13 ☐

108 ☐

102 ☐

81 ☐

39 ☐

30 ☐

68 ☐

31 ☐

84 ☐

44 ☐

103 ☐

116 ☐

7 ☐

96 ☐

67 ☐

110 ☐

92 ☐

116 ☐

59 ☐

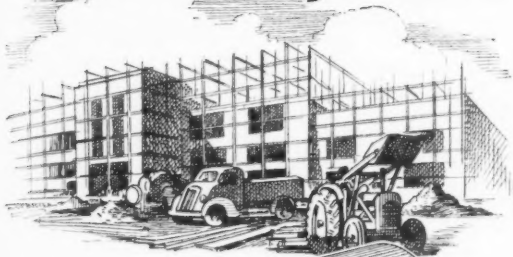
72 ☐

52 ☐

at the



# On every Site



"Laid in a minute . . . lasts as long as the wall"

Send for samples to  
**WILLIAM BRIGGS & SONS LTD. DUNDEE**  
BRANCHES THROUGHOUT THE UNITED KINGDOM

## TIMBER DECAY calls for prompt diagnosis . . .

Whether caused by prolific insect borers or insidious fungal rot (some species of which have the destructive effect of a slow fire), timber decay should be accurately diagnosed by specialists and arrested before expensive replacement becomes inevitable. The experienced survey staff of Richardson & Starling Ltd. undertake inspections and tender detailed advice on remedial measures.

## effective control materials . . .

**"WYKAMOL"** This unique insecticide requires only one application to effect the total extermination of Death Watch Beetle and other wood-borers, and confers complete immunity against further attack.

**"RESKOL"** Powerfully toxic to all fungi causing decay in timber, this special solution of pentachlorophenol can eradicate even the virulent Merulius (Dry Rot).

The superiority of these materials has been proved in practice time and time again. They are available to all users.

## guaranteed treatment by experts . . .

Unless the varying characteristics of beetle infestation or fungal rot are fully understood, successful eradication should be ensured by the employment of specialists. In the course of several years' reliable work, the services of Richardson & Starling Limited have been used in hundreds of important and historic buildings, including Cathedrals, Churches, Universities and ancient mansions. The careful treatment carried out by their highly trained team of expert operatives is covered by a ten-year guarantee of efficacy.

If you have a problem of timber decay, write now for full details of Services and prices of materials incorporated in our free technical brochure "The Control of Insect and Fungal Destroyers of Timber".

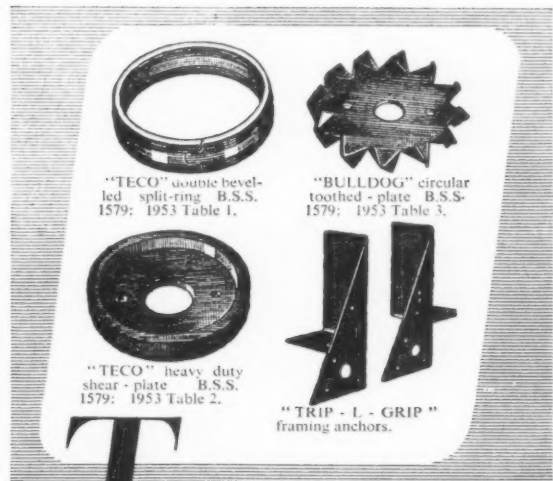
## RICHARDSON & STARLING LTD

Members of the British Wood Preserving Association  
(DEPT. A.J.), HYDE STREET, WINCHESTER  
Winchester SO1 1/2

London Office: THE TIMBER DECAY ADVICE BUREAU  
5 Southampton Place, W.C.1. Tel: HOLborn 3555-6

specify

"Teco", "Bulldog" & "Trip-L-grip" connectors for all construction in timber, and make practicable cuts in timber and hardware requirements. Fullset data gladly furnished.



## Timber connectors by

**MACANDREWS & FORBES LIMITED,**  
2 CAXTON STREET, LONDON, S.W.1. Telephone: ABBey 4451-3.

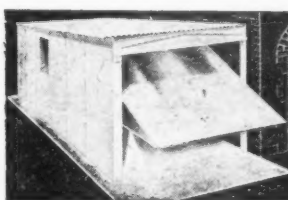
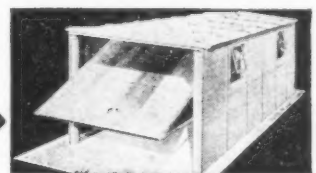
## BATLEY CONCRETE GARAGES

FOR EVERY CAR—AND EVERY SITE !

### SINGLE GARAGES

Available in widths of 8' 3" or 11'; clear height of 6' 3" or 7' 9". Extendible in length.

FROM £51/10/- OR  
10/3 WEEKLY

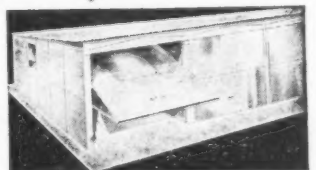


**LEAN-TO GARAGE** Designed for building on to the house or existing wall. Width required only 8'. Rear door available

FROM £55 OR 11/- WEEKLY

**MULTIPLE GARAGES**, One, two or more supplied in a block. Will provide an unequalled investment.

FROM £55 OR TERMS



- 'Up and Over' or hinged doors available.
- Easily erected.
- Portable yet permanent.
- Fireproof and rotproof.
- Non-corrosive aluminium alloy bolts and fittings.

NOW WITH  
EXCLUSIVE  
NEW ROOF  
DESIGN

Attractive Deferred Terms  
**FIVE YEARS' FREE FIRE INSURANCE**  
Free Delivery in England and Wales

Send for FREE Illustrated Brochure  
**ERNEST BATLEY LIMITED**

63, Colledge Road, Holbrooks, Coventry. Tel.: 89245/6

Construction at its best . . .



PROTEUS PROP JET ENGINE TEST HOUSE AT FILTON, BRISTOL

With movement hinges incorporated at the base of the columns, the specialist structural design of this building includes both reinforced concrete and reinforced brickwork and was prepared by The British Reinforced Concrete Engineering Co. Ltd., Stafford to the requirements of the Chief Architect to the B.A.C., Mr. Eric Ross, F.R.I.B.A.

We are proud to have played a part in speeding the development of the Proteus Prop Jet Engines powering the long range Bristol Britannia Airliner now being delivered to B.O.A.C.

**Reinforced  
Concrete  
Design by...**

**BRC**

*Specialists in Reinforced Concrete Design and Suppliers of Reinforcement*

**THE BRITISH REINFORCED CONCRETE ENGINEERING CO. LTD., STAFFORD**  
*London, Birmingham, Bristol, Leeds, Leicester, Liverpool, Manchester, Newcastle, Cardiff, Glasgow, Dublin, Belfast*

M-W 799





ment

ORD

elfast

M-W, 200