

# THE ARCHITECTS' JOURNAL



## Standard contents

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

## NEWS and COMMENT

*Astragal's Notes and Topics*

*Letters*

*News*

*Diary*

*Criticism*

## TECHNICAL SECTION

*Information Sheets*

*Information Centre*

*Current Technique*

*Working Details*

*Questions and Answers*

*Prices*

*The Industry*

## CURRENT BUILDING

*Major Buildings described:*

*Details of Planning, Construction,*

*Finishes and Costs*

*Buildings in the News*

*Building Costs Analysed*

*Architectural Appointments*

*Wanted and Vacant*

No. 3418]

[Vol. 132

THE ARCHITECTURAL PRESS

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

Price 1s. 0d.

Registered as a Newspaper

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

ILA	Institute of Landscape Architects.	1, Park Crescent, W.1.	Museum 3473
I of Arb	Institute of Arbitrators.	Hastings House, 10, Norfolk Street, 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.	Wellbeck 1859
IR	Institute of Refrigeration.	Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects.	68, Gloucester Place, W.1.	Wellbeck 9966
ISE	Institution of Structural Engineers.	11, Upper Belgrave Street, S.W.1.	Sloane 7128
JFRO	Joint Fire Research Organisation (DSIR & Fire Offices' Committee).	Fire Research Station, Boreham Wood, Herts.	Elstree 1341/1797
LDA	Lead Development Association.	18, Adam Street, W.C.2.	Whitehall 4175
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1.	Museum 3891
MAFF	Ministry of Agriculture, Fisheries and Food.	Whitehall Place, S.W.1.	Trafalgar 7711
MOE	Ministry of Education.	Curzon Street House, W.1.	Hyde Park 7070
MOH	Ministry of Health.	23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government.	Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service.	8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply.	Shell-Mex House, W.C.2.	Gerrard 6933
MOT	Ministry of Transport.	Berkeley Square House, W.1.	Mayfair 9494
MOW	Ministry of Works.	Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalt Mine Owners and Manufacturers Council.	14, Howick Place, Victoria Street, S.W.1.	Victoria 1600 & 6477
NAS	National Association of Shopfitters.	2, Caxton Street, S.W.1.	Abbey 4813
NBR	National Buildings Record.	31, Chester Terrace, N.W.1.	Wellbeck 0619
NCBMP	National Council of Building Material Producers.	10, Storey's Gate, S.W.1.	Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry.	21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFBTE	National Federation of Building Trades Employers.	82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives.	Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4459
NFHS	National Federation of Housing Societies.	12, Suffolk St., S.W.1.	Whitehall 1631
NHBRC	National House Builders Registration Council.	58, Portland Place, W.1.	Langham 0064/5
NPL	National Physical Laboratory.	Head Office, Teddington.	Molesey 1380
NRDB	Natural Rubber Development Board.	Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society.	Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust.	42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning.	16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association.	94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIB	Rural Industries Bureau.	35, Camp Road, S.W.19.	Wimbledon 5101
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1.	Langham 5533
RICS	Royal Institution of Chartered Surveyors.	12, Great George Street, S.W.1.	Whitehall 5322/9245
RFAC	Royal Fine 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
SBPM	Society of British Paint Manufacturers.	Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers.	17, Victoria Street, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association.	30, Cornhill, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists.	7, Woburn Square, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association.	32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing.	Town Planning Council.	Hon. Sec., Robert Pollock, Town Clerk, Rutherglen
SPAB	Society for the Protection of Ancient Buildings.	55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association.	28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association.	21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute.	18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation.	75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission.	6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association.	34, Berkeley Square, W.1.	Grosvenor 6636

Detail from 'The Age of Brass'. Rodin, Bronze, 1896 © BY S.F.A.D.S.M., PARIS



## This is democracy gone mad!

New materials clamouring for attention. Old ones struggling to keep their place. Devil take the hindmost!

Just where does an architect stand today?

On a floor!

... where he's right in the thick of it. Wood, cork, concrete, all elbowing their way into specifications. Not to mention the newer candidates—hardboard, thermoplastic.

Browbeaten? Never! Show them who's master.

Pick the material whose face fits best. Then call in RONSEAL. Amazing stuff. Spreads on. Sinks in. Dries out in no time. And—voilà! —you've got a floor. Tough. Glossy. More than a match for feet.

RONUK make RONSEAL. You relax.

**RONSEAL**  
FLOOR AND WOOD SEAL



By Appointment to Her Majesty The Queen Polish Manufacturers

Write for free descriptive leaflet to

**RONUK LIMITED**

Dept AJ, Portslade, Sussex · Telephone: Hove 49631



*and so simple to operate!*



### COAL BUNKERS

In prefabricated concrete with steel bar reinforcements for extra strength and long life. Sizes range from 5 to 30 cwt.

Swing up—swing down! Unique

"Alborough"

steel-lath construction, coupled with slide-over ball-bearing fitting, makes this new 'Alborough' Door ideal for every standard-size Garage. Send for full details.

Alborough Slide-Over Doors give open-sesame access and closing in any weather!

**Alborough**

'Slide-Over' doors

**A.B.C.D. (Raynes Park) Ltd.**

34/35 Alpha Road, Surbiton, SURREY

Telephone:—ELMbridge 6591/3

## SLIDING DOORS

run more smoothly, far longer on

**ELLARD SLIDING DOOR GEAR**

For every type of SLIDING DOOR

**METEOR**



Ellard 'METEOR' sliding door gear is designed for use with all types of internal straight sliding doors up to 120 lbs. each in weight.

'METEOR' sliding door gear is a recent addition to the "ELLARD" range and incorporates the latest principles of modern design, ensuring many years of smooth, trouble-free running.

Please write for full details of 'METEOR' and our many other types of Sliding Door Gear

**ELLARD SLIDING DOOR GEARS LTD.**

(Desk 6) Works Road, Letchworth, Herts. Tel: 613/4





## AIR CONDITIONING AND AIR TREATMENT

**up to date  
information  
on the most  
modern systems**

This new BRIGHTSIDE publication deals fully with all the latest methods of air conditioning and air treatment, and describes their application to typical industrial and commercial projects.

We will gladly send you a copy on request.

**BRIGHTSIDE HEATING & ENGINEERING COMPANY LIMITED · SHEFFIELD 1**

and at BELFAST · BIRMINGHAM · BRADFORD  
BRISTOL · EDINBURGH · GLASGOW  
LIVERPOOL · LONDON · MANCHESTER  
NEWCASTLE · PORTSMOUTH

Detail from 'The Age of Brass', Rodin, Bronze, 1896 © W.F.A.D.S.M., PARIS



## This is democracy gone mad!

New materials clamouring for attention. Old ones struggling to keep their place. Devil take the hindmost!

Just where does an architect stand today?

On a floor!

... where he's right in the thick of it. Wood, cork, concrete, all elbowing their way into specifications. Not to mention the newer candidates—hardboard, thermoplastic.

Browbeaten? Never! Show them who's master.

Pick the material whose face fits best. Then call in RONSEAL. Amazing stuff. Spreads on. Sinks in. Dries out in no time. And—voilà! —you've got a floor. Tough. Glossy. More than a match for feet.

RONUK make RONSEAL. You relax.

**RONSEAL**  
FLOOR AND WOOD SEAL



By Appointment to Her Majesty The Queen Polish Manufacturers

Write for free descriptive leaflet to

**RONUK LIMITED**

Dept AJ, Portslade, Sussex · Telephone: Hove 49631



and so simple to operate!



### COAL BUNKERS

in prefabricated concrete with steel bar reinforcements for extra strength and long life. Sizes range from 5 to 30 cwt.

Swing up—swing down! Unique "Alborough" steel-lath construction, coupled with slide-over ball-bearing fitting, makes this new 'Alborough' Door Ideal for every standard-size Garage. Send for full details.

Alborough Slide-Over Doors give open-sesame access and closing in any weather!

**Alborough**

'Slide-Over' doors

**A.B.C.D. (Raynes Park) Ltd.**

34/35 Alpha Road, Surbiton, SURREY

Telephone 1—ELMbridge 6591/3

**SLIDING DOORS**  
run more smoothly, far longer on

**ELLARD SLIDING DOOR GEAR**

For every type of SLIDING DOOR

**METEOR**



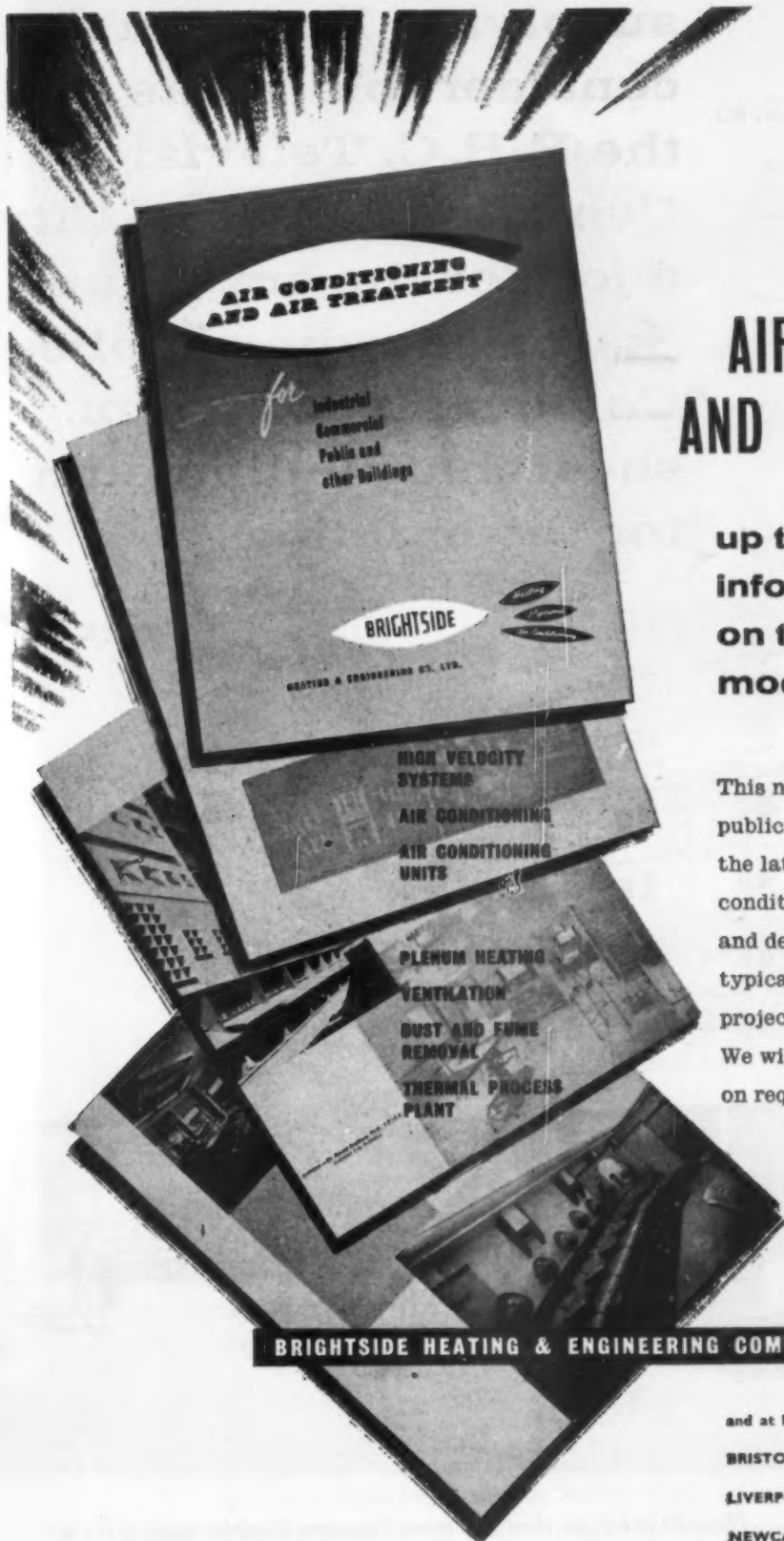
Ellard 'METEOR' sliding door gear is designed for use with all types of internal straight sliding doors up to 120 lbs. each in weight.

'METEOR' sliding door gear is a recent addition to the "ELLARD" range and incorporates the latest principles of modern design, ensuring many years of smooth, trouble-free running.

Please write for full details of 'METEOR' and our many other types of Sliding Door Gear

**ELLARD SLIDING DOOR GEARS LTD.**

(Desk 6) Works Road, Letchworth, Herts. Tel: 613/4



## AIR CONDITIONING AND AIR TREATMENT

**up to date  
information  
on the most  
modern systems**

This new BRIGHTSIDE publication deals fully with all the latest methods of air conditioning and air treatment, and describes their application to typical industrial and commercial projects.

We will gladly send you a copy on request.

**BRIGHTSIDE HEATING & ENGINEERING COMPANY LIMITED · SHEFFIELD 1**


and at BELFAST · BIRMINGHAM · BRADFORD  
BRISTOL · EDINBURGH · GLASGOW  
LIVERPOOL · LONDON · MANCHESTER  
NEWCASTLE · PORTSMOUTH

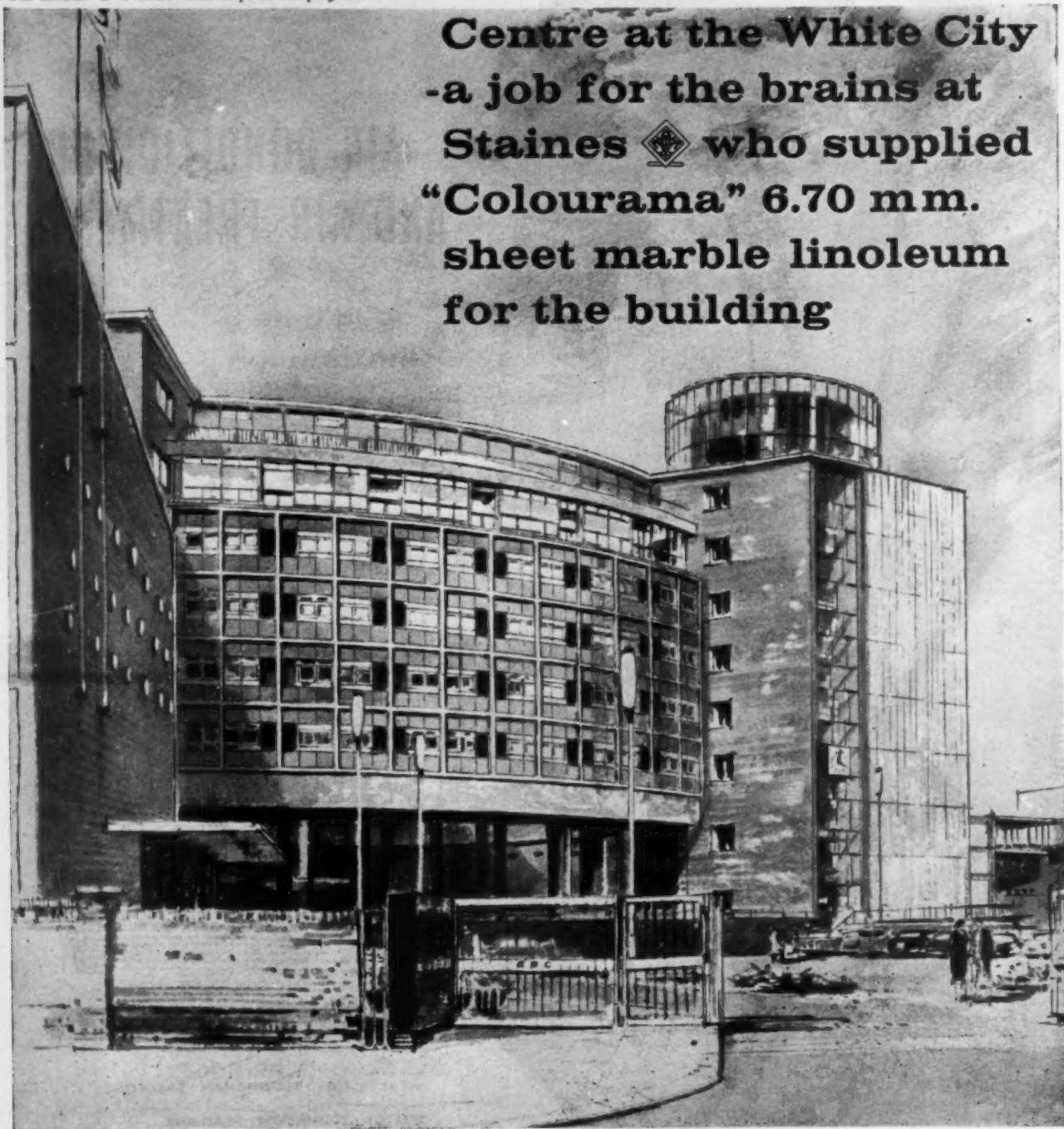


ARCHITECTS: *Norman & Dawbarn, 7 Portland Place, W.1.*

*Staines Colourama Linoleum installation by*

*The Limmer & Trinidad Lake Asphalt Company Ltd.*

**supplying linoleum for  
considerable areas of  
the B. B. C. Television  
Centre at the White City  
-a job for the brains at  
Staines  who supplied  
"Colourama" 6.70 mm.  
sheet marble linoleum  
for the building**



*Please let us tell you about the Staines Colourama Linoleum range. Write to:*

**LINOLEUM MANUFACTURING COMPANY LIMITED,**

**6 OLD BAILEY, LONDON E.C.4.**



## but not for floors

PROVER 11 permanently hardens and dustproofs concrete and granolithic floors and resists the erosive action of oils, acids and alkalis etc.

**HARDEN AND DUSTPROOF WITH**

**EVODE**

**PROVER II**

**CRYSTALS**

A PRODUCT OF **EVODE** OF STAFFORD

ROOF WATERPROOFING · CONCRETE ADMIXTURES AND HARDENERS · PROTECTIVE PAINTS AND BITUMINOUS COATINGS · GAP AND JOINT SEALING MASTICS AND GUNS · INDUSTRIAL ADHESIVES

\* Are YOU using the EVODE PERSONAL SERVICE TO DESIGNERS? Write or phone for details

**SEND FOR LITERATURE** EVODE LTD., (BUILDING CHEMICALS DIVISION) STAFFORD. Phone: 2241 (5 lines)

London Office: 82 VICTORIA STREET, S.W.1.

Telephone: ABBey 4622 (3 lines)

M-W-161

## Bringing a building to life



It's there, it's built. A flesh of concrete and glass on skeleton of steel. To make it live, warming and cossetting its occupants, is the job of the heating engineer.

He doesn't start now, of course. Complex heating systems of today are designed when the building itself is on the drawing board. Erection and installation proceed as the building grows at the pre-arranged pace.

It's a problem of design, teamwork and timing, needing organization and experience. In fact, if it's a big job, it's more than likely that the whole thing was left in the hands of Haden—capable hands, thoroughly versed in the problems of bringing a building to life.

# HADEN

**Heating, Air Conditioning  
Piping and Sanitary Engineers**

**G. N. HADEN & SONS LTD.**, 7/12 Tavistock Square, London W.C.1  
and branches throughout the United Kingdom & Overseas

TA3799



## The mortar plasticiser for buildings of today...



Architect: Graham Dawbarn C.B.E. (Norman and Dawbarn) General Contractor: Higgs and Hill Ltd

### NEW B.B.C. TELEVISION CENTRE LONDON

The best known of mortar plasticisers—Tretol Morta-Mix—was, of course, a natural choice for the new B.B.C. Television Centre at Shepherds Bush. Tretol Morta-Mix completely eliminates the need for lime and gives a “fattier”, more workable mortar which is suitable for every type of brickwork—including load bearing brickwork. The use of Tretol Morta-Mix greatly reduces material and storage costs. In addition, there is less wastage from droppings and the finished job is cleaner, with greater durability and increased resistance to frost. We shall be glad to send you full details of Tretol Morta-Mix, the mortar plasticiser.

**TRETOL** *Morta-Mix*

TRETOL LTD., Head Office, TRETOL HOUSE, THE HYDE, LONDON, N.W.9. Telephone : Colindale 7223

Associated Company - Tretol (Scotland) Ltd., 65 Renfield Street, Glasgow C.2. Telephone : Douglas 6133

# Acres of **AIRLITE** **THERMAL INSULATION**

are going into to-day's best buildings . . .

Whenever and wherever the insulation requirement is a critical factor.

Waterproof, rotproof, verminproof, strong. AIRLITE gains its strength from better fusing.

The supreme insulation material for CEILINGS, WALLS, FLOORS, PERIMETERS, etc. Economical, easy to specify—and install. Board sizes range up to 8' x 4' in any thickness up to 14".

(Standard thicknesses of  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1", 2", etc.)

## **ALSO**—Don't forget

AIRLITE is the quickest answer for pipe and tank lagging.

Available in moulded lengths, all sizes from  $\frac{3}{4}$ " to 4" dia. (copper and iron pipes).



## Amazing- **AIRLITE**

**EXPANDED POLYSTYRENE**

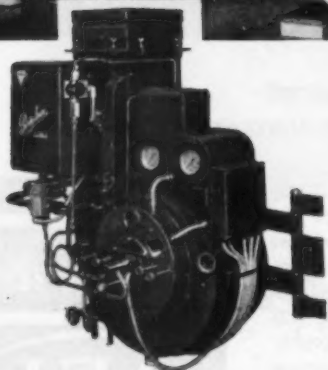
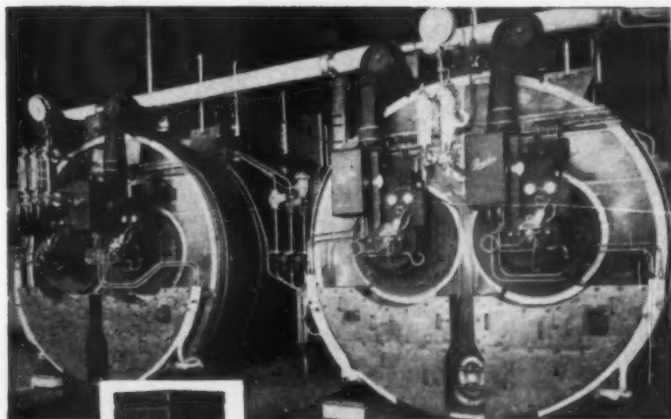


Write for information

**J. R. ENTERPRISES LTD.**  
**PIRBRIGHT, SURREY**  
**Tel: BROOKWOOD 2233**

# Industry is turning to **Puripher** Oil Burners

for **7** good reasons



Typical Puripher installation  
—at the new factory of  
Philips Records Ltd., Walthamstow.  
Each of the 4 type  
200 TZ burners being  
capable of 6.4 million B.T.U's.  
The above efficiency  
was obtained on the  
plant with very fluctuating load.



## PURIPHER OIL BURNERS

Manufactured by **GOTHIC ENGINEERING CO. LIMITED**  
Registered users of the trade mark 'Puripher'

London Office:—  
Primus Works, Croft St., Deptford S.E.8 Tel: Barmondsey 1334

Head Office:—  
Union St., West Bromwich Tel: West Bromwich 1391

### 1 HIGH AVERAGE EFFICIENCY

85% on nett C.V. of fuel. 15.35 lbs evaporation per lb fuel from and at 212°F. Bacharach Smoke Scale No. 2

Unique valve block and air control assembly ensures balanced oil/air ratio with realistic modulation. Instant response to boiler demand.

### 2 Equally unique spiral turbulating flame, produced without moving parts. Both fuel and air are spirally turbulated, and I.D. fans are unnecessary.

### 3 High pressure atomisation. Air is controlled and balanced throughout the range and ensures even distribution of air throughout the entire flame area.

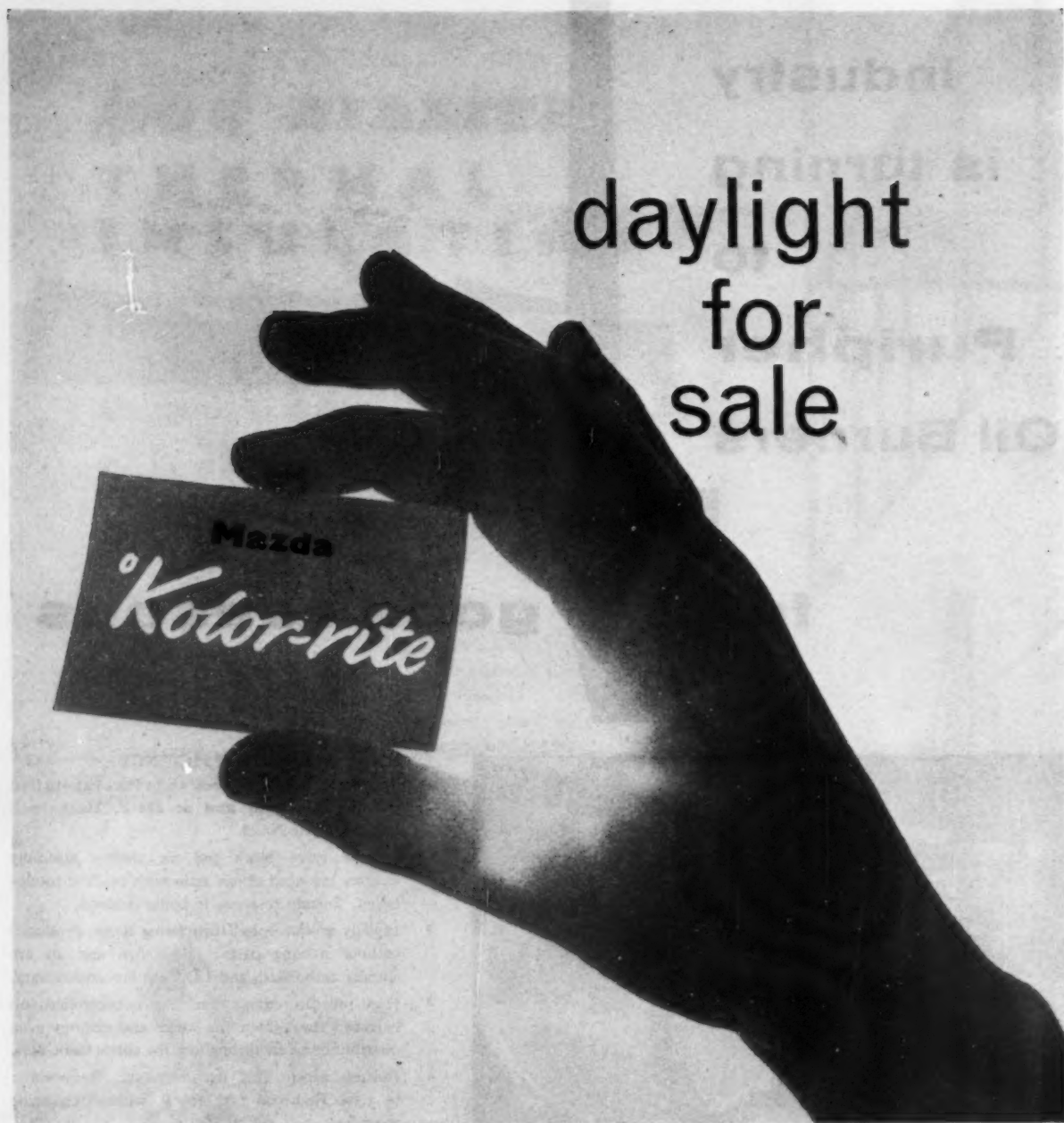
### 4 Burners accept fuel from 200 sec. Redwood 1 to 3,500 Redwood 1 at 100°F. without changing atomisers.

### 5 Puripher Oil Burners are completely automatic and run for long periods without attention. Automatic sequence control gives full protection.

### 6 Electronic sequence control giving purge period and oil circulation thus obviating any smoke on starting, the nozzles, pipes and oil blocks being warmed by low wattage heaters during the shut down or stand-by period.

### 7 Burners are supplied to suit any specific needs.



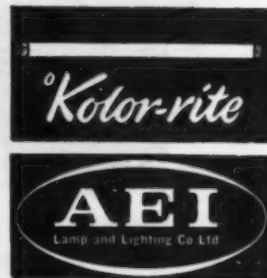


**(How to win friends and influence customers with the nearest thing to daylight—MAZDA °KOLOR-RITE FLUORESCENT LAMPS)**

Daylight not only helps skilled workers to do "close work", it also helps to sell what they're making. It sells anything from food to fabrics, from ice-cream to ideas. Only with daylight can you be absolutely sure that what you're displaying has a fighting chance of looking "the real thing".

But what happens at night, or indoors, when there's a shortage of daylight? Easy. Now you simply buy it—in the

form of the new Mazda °Kolor-rite fluorescent lamps. These lamps really are the nearest thing to daylight. And because they have the effect of bringing outdoors indoors, they enable colours to look fresh and natural. What more could you want to make any presentation vividly attractive? Be sure you're getting Mazda °Kolor-rite fluorescent lamps. Made in 5 ft. tubes with B.C. and Bi-pin caps. Also in 4 ft. tubes with Bi-pin caps.

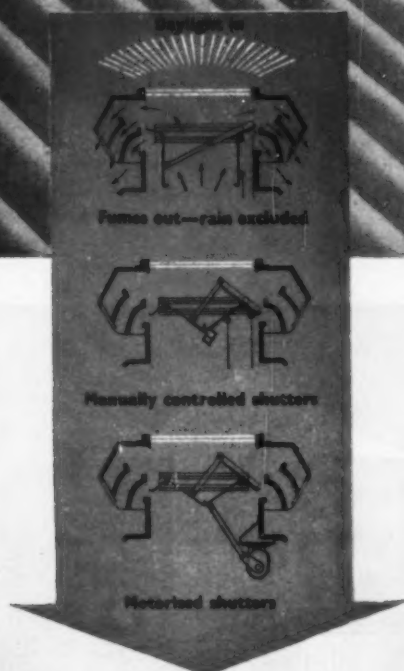
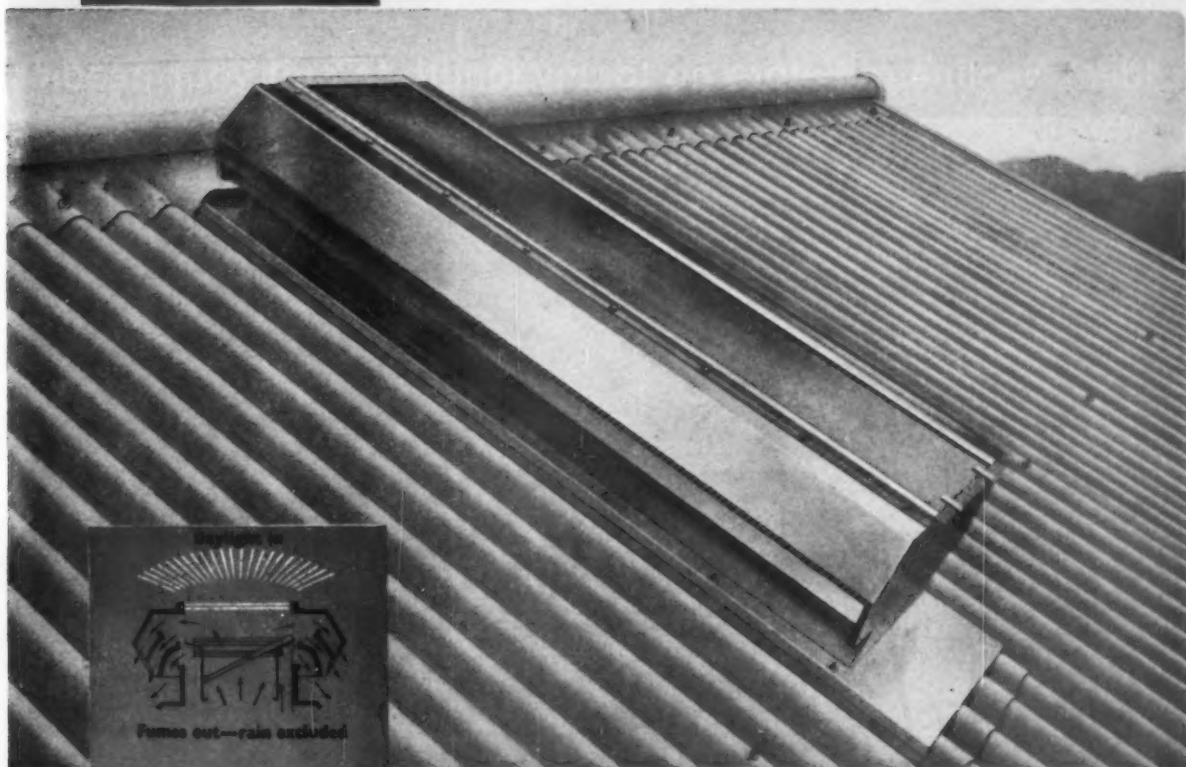


Melton Road, Leicester

**NEW!**

WITH GREENWOOD-AIRVAC'S  
**GLAZED TOP**  
ROOFLINE EXTRACTOR

Ventilation plus *extra* daylight



Greenwood-Airvac's new Glazed Top Roofline gives you natural lighting and natural ventilation—permanent or controllable—in one good looking unit. It is suitable for both flat and sloping roofs.

It removes fumes and vitiated air by efficient stack action through a large fully weathered free ventilation area. Well made in hardened aluminium, the Roofline is light in weight and only 14½" high. Where control shutters are fitted to conserve heat, they are made of fibreglass.

The Glazed Top Roofline is fully patented and is the latest addition to the well proved Greenwood-Airvac range.

Write today for the new  
technical leaflet RE3/1



**Greenwood Airvac ventilation**

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD

ESTABLISHED 1879.

PATENTEES, DESIGNERS AND MANUFACTURERS OF  
NATURAL AND MECHANICAL VENTILATING  
EQUIPMENT.



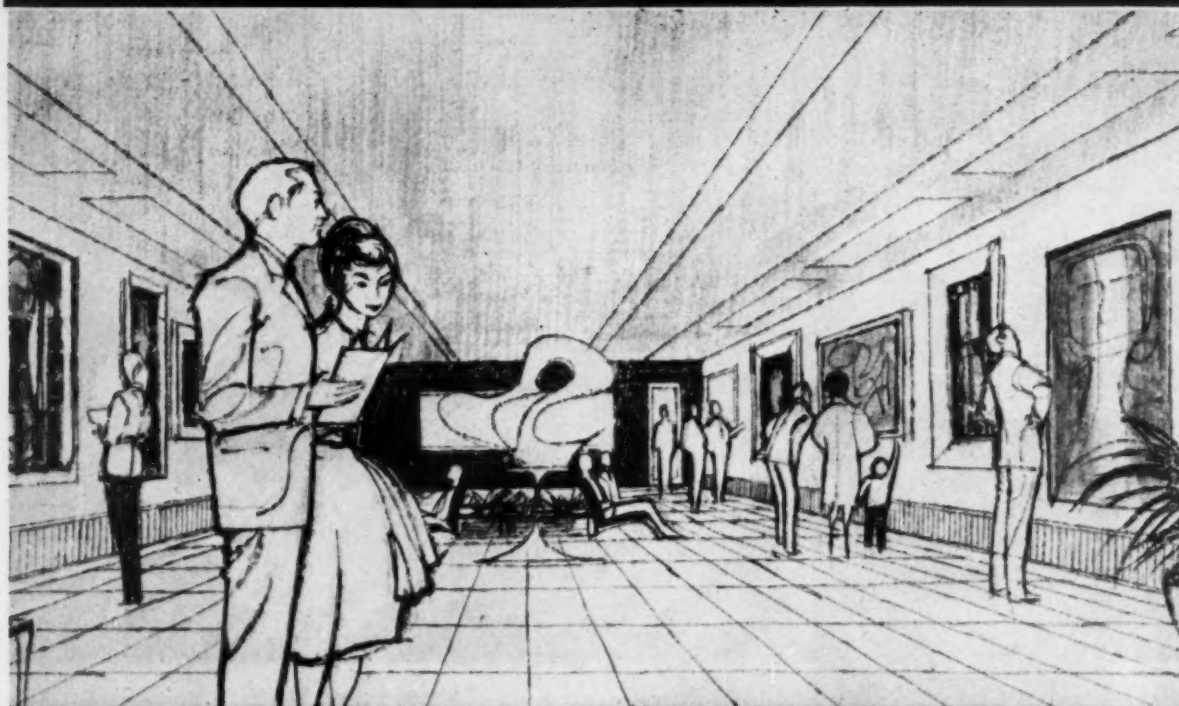
BEACON HOUSE, KINGSWAY, LONDON, W.C.2.  
CHANCERY B135 (4 lines). "Grams: 'AIRVAC', LONDON

GV 15

# NEOLINE

IS THE NEW  
IDEAL

Ideal Neoline radiators go to any length to suit your needs.



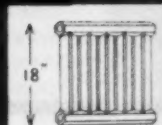
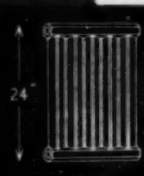
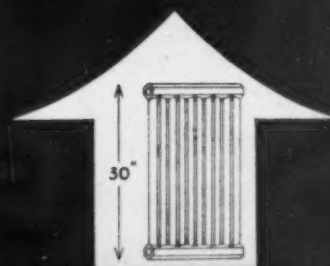
Wall-to-wall radiators in one unbroken line—no matter how long! You can specify this with Neoline because this new Ideal radiator can be made in sections to any length you require. And its modern, classically simple styling blends happily with all types of modern design. Attractive and highly efficient, with the proved durability of cast-iron. Neoline is the new Ideal radiator choice for modern projects great or small.

## Ideal Neoline

—perfect in power, perfect in style, perfect in radiators

For details of this full range of Ideal cast-iron radiators, please write to:  
Ideal Radiators & Radiators Limited,  
Roller Lane, Hove, Sussex,  
or 100 Strand, London W1

Telephone: 01823 555555 or 01823 555555

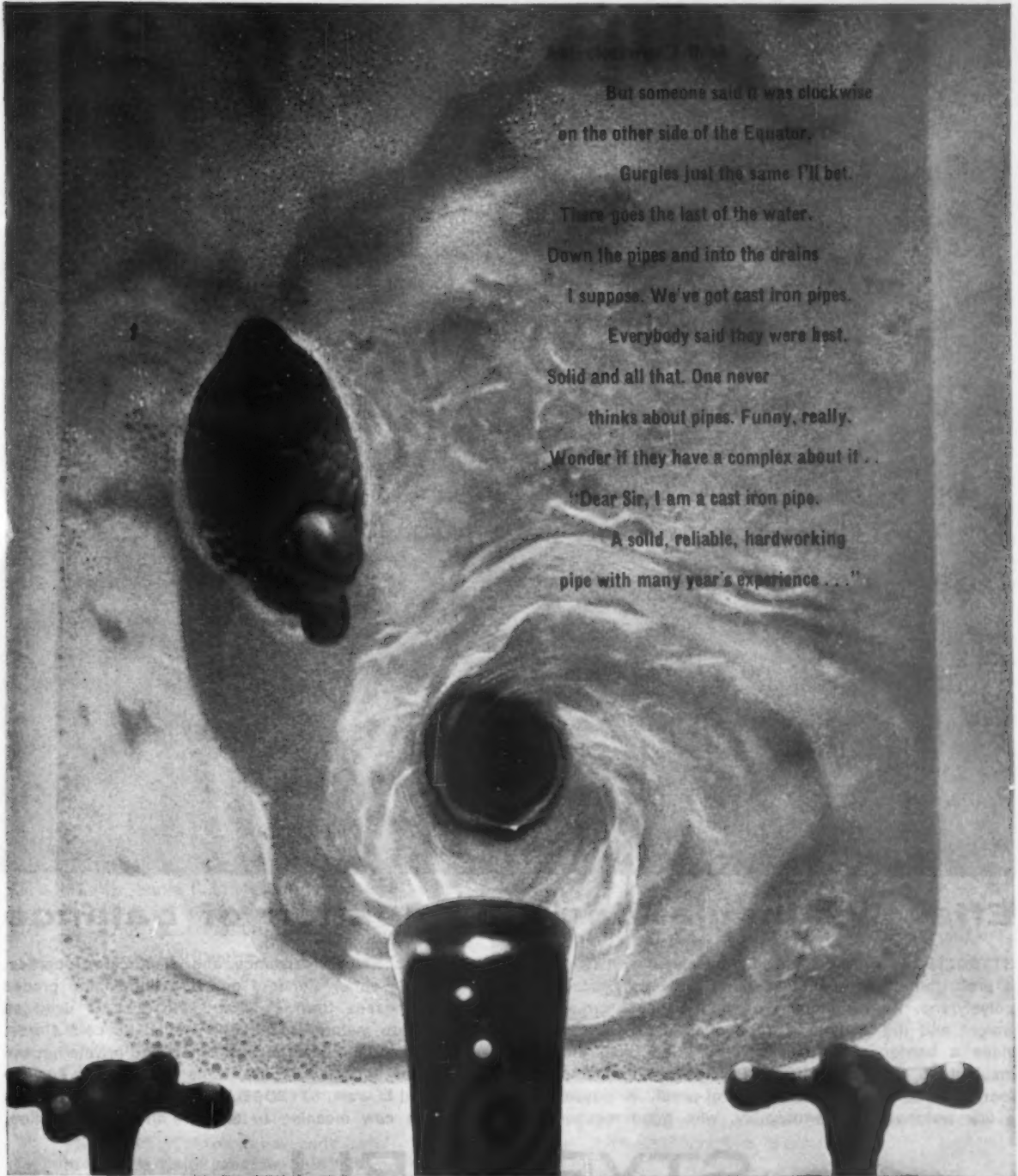


IDEAL  
Standard





## WHICH WAY DOES A WHIRLPOOL WHIRL?



But someone said it was clockwise  
on the other side of the Equator.

Gurgles just the same I'll bet.  
There goes the last of the water.

Down the pipes and into the drains  
I suppose. We've got cast iron pipes.

Everybody said they were best.  
Solid and all that. One never

thinks about pipes. Funny, really.  
Wonder if they have a complex about it . . .

"Dear Sir, I am a cast iron pipe.  
A solid, reliable, hardworking

pipe with many year's experience . . ."



rainwater and soil goods division of **ALLIED IRONFOUNDERS** KETLEY WELLINGTON SHROPSHIRE  
TEL: WELLINGTON 510 (OR FALKIRK STIRLINGSHIRE 2441)



## Effective insulation is a question of balance

STYROCELL is a rigid, lightweight material consisting of a profusion of non-communicating air cells encased in polystyrene. By maintaining a fine balance between its weight and the volume of trapped air, STYROCELL provides a barrier of virtually still air—the ideal thermal insulant. In addition to its light weight—1 lb. per cubic foot—STYROCELL is inert and rot-proof. It possesses a low water-vapour permeability, with good mechanical

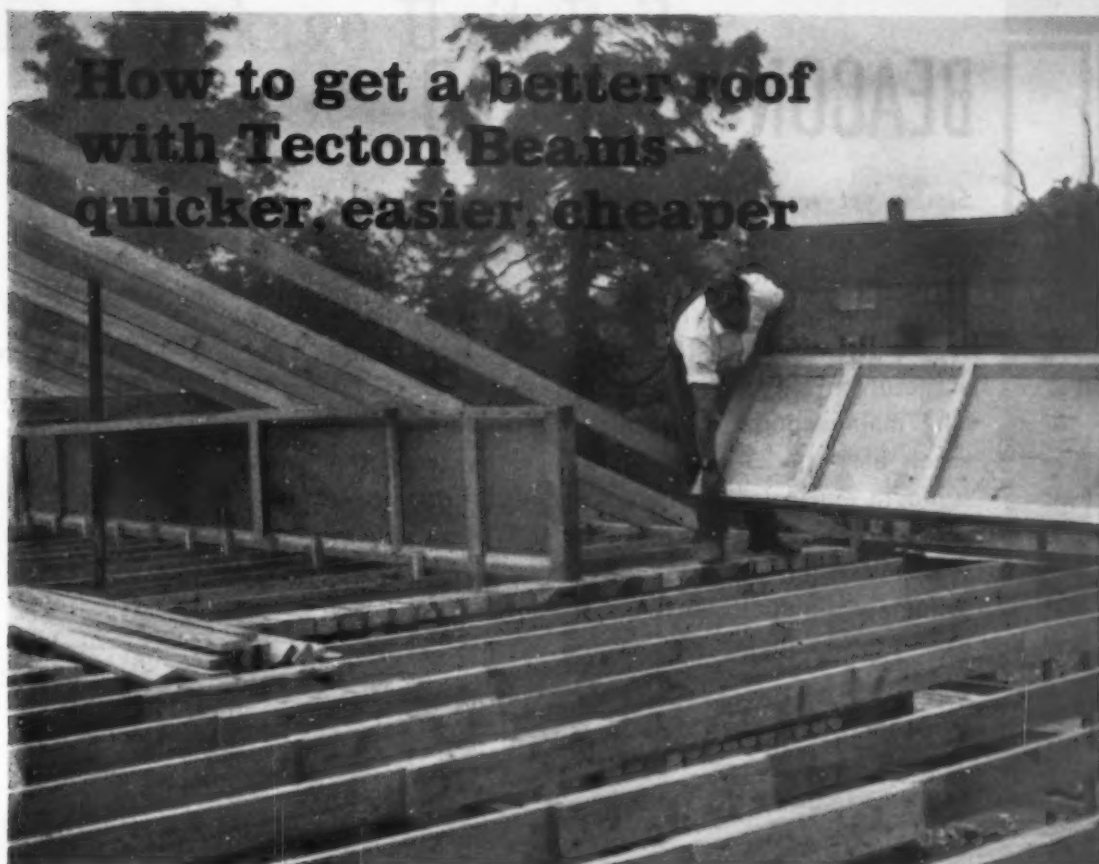
strength, chemical resistance and electrical properties. Available in either standard or self-extinguishing grades—in thicknesses from  $\frac{1}{2}$ "-10"—STYROCELL is used as an insulation material for mobile and static cold stores, factories, schools, office blocks, hotels and private houses and can be applied to roofs, walls and floors. Easy to handle and to work, STYROCELL is an inexpensive material that gives new meaning to effective thermal insulation.



# STYROCELL

Further details may be obtained from  
SHELL CHEMICAL COMPANY LIMITED, 170 PICCADILLY, LONDON, W.1.  
or from Marley Tile Company Limited, Sevenoaks, Kent, who are distributors  
of 'Styrocell' board (under the name 'Marleycel') to the building industry

'SHELL' and 'STYROCELL' are registered trade marks



**How to get a better roof  
with Tecton Beams—  
quicker, easier, cheaper**

*Tecton purlin beams used in house construction at Abbots Langley  
Architect: Erno Goldfinger, DPLG LRIBA. Contractor: Drury & Co. Ltd.*

## 4 more good reasons why you should specify Tecton Beams for pitched roof construction:

**Y**ou get complete freedom to plan the internal layout. Only 2 Tecton Purlin Beams carry the roof load. All internal walls, plus back and front walls, can be NON-LOADBEARING.

You use only 2 Tecton Purlin Beams per house, eliminating all trusses, binders, purlins.

You cut site costs - 2 men just hoist (no special lifting gear required) and fix Tecton, supplied to exact size.

Tecton is designed in accordance with B.S. Code of Practice CP112.

That is why Tecton has already been used on 98 major schemes this year.

So try our FREE Design Service for your next pitched roof job.

There's lots more information - Tecton beams for eaves and curtain wall panels, and for flat roofs OF UP TO 50 FEET SPAN.

*You'll want all the facts TODAY.*

# Tecton

PLEASE SEND data sheets for Tecton beams for flat and/or pitched roofs.

PLEASE ASK your technical representative to 'phone for an appointment.

PLEASE SUPPLY FREE quote against my drawings which I enclose - with no obligation, of course.

NAME ..... POSITION .....

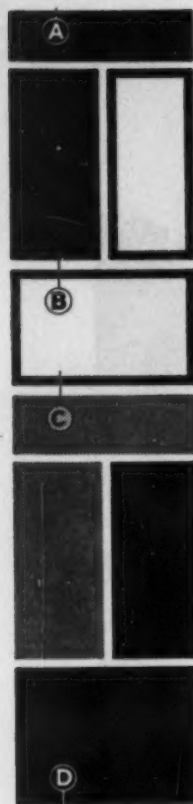
COMPANY ..... TEL. NO. ....

ADDRESS .....

TECTON DIVISION, DEXION LIMITED, MAYGROVE ROAD  
LONDON N.W.6. TEL: MAIDA VALE 6031

AJ2





# BEACON WALLCLAD

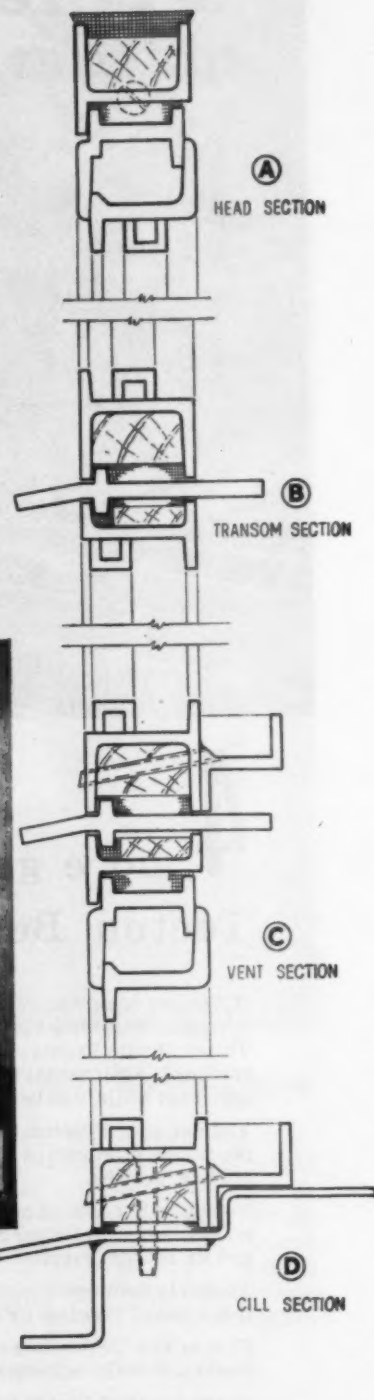
*Simple yet versatile*, this form of curtain walling, extreme in application, easy to assemble, fulfils the rigorous conditions of exterior weatherproofing. WALLCLAD is flexible, strong and straightforward, and can be applied to any sound structure.

The main support is a cruciform section, rolled steel bar, the rigidity of which controls the uniform expansion of the structure and minimises distortion. The availability of many infill panels, which can be incorporated in a WALLCLAD scheme, allows extensive scope for first class presentation in building technique.

WE HAVE A COMPREHENSIVE CATALOGUE ON WALLCLAD — WHY NOT SEND FOR ONE?



Wolverhampton Postmen's Office,  
P.D.O. and Garage, Horseley Fields,  
Wolverhampton.  
Contractor: A.F.R. Godfrey & Co. Ltd.



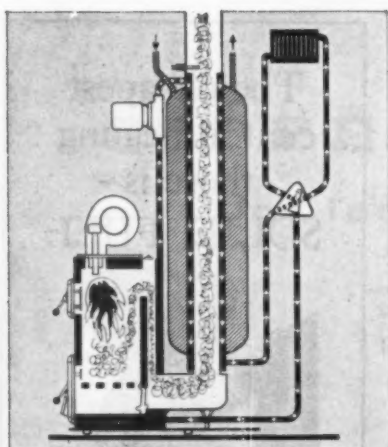
WALL CLADDING SYSTEM

JOHN THOMPSON BEACON WINDOWS LIMITED, WOLVERHAMPTON.

# The Package Unit Boiler



... everything a home needs for heating and hot water  
—except the radiators!



From Sweden, the land of many industrial design achievements, comes the world's most modern small-bore home heating system—the Norah 1500. In an elegant package unit little bigger than an office locker it contains an oil fired boiler (convertible to solid fuel if necessary in a few minutes) a calorifier and hot water storage tank, a circulating pump and a unique thermostat controlled change-over valve.

Designed for the house costing from £5,000 the Norah 1500 enables you to plan and promise the world's best heating system. No fire bricks, no waste heat and easy installations keep overall costs competitive with ordinary systems. We think you will be glad to have the booklet with full details. Please send the coupon for it now.

**Dual Firebed for oil or solid fuel.**

Downward pressure jet type oil burner — converted to solid fuel in a few minutes.

**Integral Storage Tank.**

Calorifier surrounds central heating water jacket through which passes hot flue gases. Storage capacity 26.5 gallons.

**Economiser for 80-82% efficiency.**

Hot gases are retarded and re-heated on route to flue — where they provide "free" heat for hot water.

**Automatic change-over valve.**

Room thermostat signals to valve which opens or closes path to radiator network.

**Thermostat control.**

Control fascia includes High Limit thermostat and boiler safety device — completely automatic operation.

**Small bore piping.**

Modern unobtrusive small bore copper piping—for which Norah 1500 is designed — saves installation costs, pleases user.

## Norah 1500



*Sweden's warmest export!*

From the famous Husqvarna Works



To BECH NEALE & CO. LTD (Sole U.K. Agents)  
Chronicle House, 72-78 Fleet Street, London EC4  
Please send the Booklet describing the Norah 1500

Name \_\_\_\_\_

Address \_\_\_\_\_

# It pays you and your clients to put in *solid fuel* central heating



**Lowest running costs.** The big news in central heating these days is the amazing cheapness of the solid fuel systems. For example, the average weekly running cost for a two- or three-radiator system can be as little as 9/9d! Just compare that with oil, gas and electricity—see chart on right.

**Lower installation costs.** Compared with oil, solid fuel systems are much cheaper to buy and install. The new solid fuel boilers are really streamlined and require very little attention. They are thermostatically controlled and finished in gleaming vitreous enamel in a range of modern colours.

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

**Lowest maintenance costs.** Solid fuel systems cost practically nothing to maintain. But with other fuels, skilled maintenance is necessary and this can cost from £5 to £15 per year—another 2/- to 6/- a week on the running cost.

**Compare the costs.** These are typical weekly costs, averaged over the year, for centrally heating a three-bedroomed house or bungalow—and hot water summer and winter. Look how much cheaper solid fuel is.

6 or 7 radiators and hot water ▼			
2 or 3 radiators and hot water ▼			
COKE in independent boiler	9/- per cwt	9/9d	15/-
SMALL ANTHRACITE in gravity feed boiler	12/- per cwt	—	14/1d
GAS	1/4d therm plus, say, 2/8d a week standing charge	16/1d	23/6d
ELECTRICITY	1d unit (No standing charge included)	18/2d	29/10d
OIL	1/5½d gallon	12/10d	22/8d

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

Write for **FREE** booklet on Central Heating and list of other technical publications to the Coal Utilisation Council, 3 Upper Belgrave Street, London, SW1. Also available 'Central Heating for Houses', a complete 120-page illustrated survey of all the various systems available, from the open-fire-and-back-boiler to the small pipe system. Copies 2/6d each.

## The cheapest central heating there is – SOLID FUEL



ISSUED BY THE COAL UTILISATION COUNCIL





TODAY'S BEST AIDS TO EFFICIENCY—



The Indugud Relief, outstanding among discoveries made at Al-Ubaid, of art works incorporating copper and bitumen . . . and dated c.3100 B.C. Reproduced by courtesy of the British Museum.

**What  
will  
last . . .  
5,000  
years?**

Copper and native bitumen are known to have been in use as long ago as 3100 B.C. because the weatherproof and corrosion-resistant properties of these materials have helped to preserve for 20th Century eyes relics of unbelievably ancient civilisations.

TODAY this same time-tested combination of Copper and native bitumen now derived from the great Trinidad Asphalt 'lake' provides modern building with COPPERTRINDA — the finest hand-made dampcourse in the world.

## **COPPERTRINDA**

**for lasting protection**

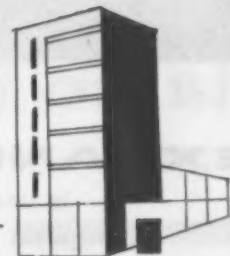
A sample of COPPERTRINDA will be sent to you immediately upon request to

**ENGERT & ROLFE LIMITED**

Dept. A.J.9

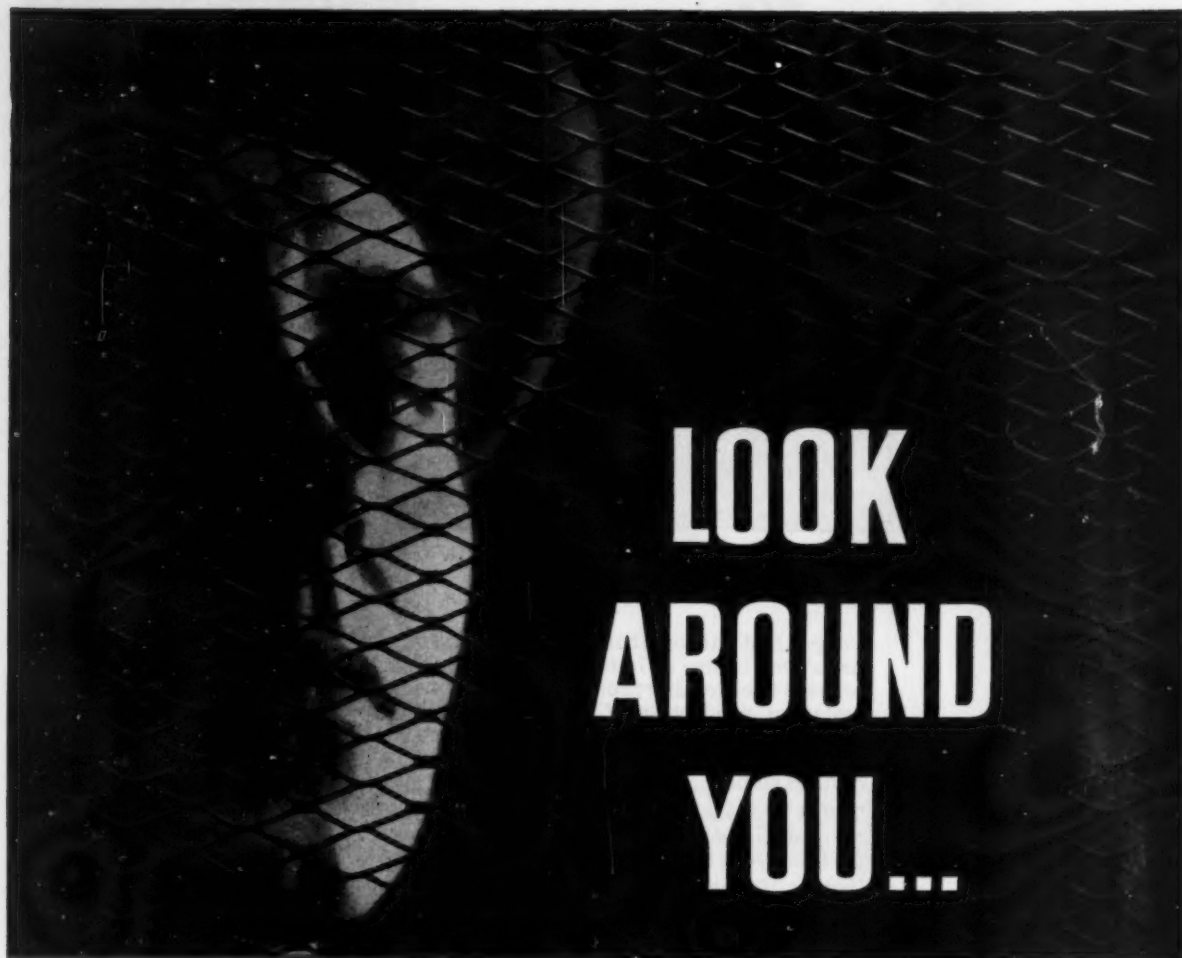
Barchester Street London E14

Tel. EAST 1441



Will Engert & Rolfe arrange to have a sample of COPPERTRINDA sent to

M \_\_\_\_\_  
(Designation) \_\_\_\_\_  
of \_\_\_\_\_  
\_\_\_\_\_



LOOK  
AROUND  
YOU...

and see why

## EXPANDED METAL

is used for suspended  
ceilings on all important contracts.

It is so adaptable that the design of a plaster ceiling can be faithfully reproduced from the drawing board to finished job, whatever shape is required.

Expanded Metal Lathing is not only a background but it is also a reinforcement with hundreds of keys in each square foot to support the plaster in suspended ceilings, partitions, linings, ducts and encasement of steelwork, with a high degree of fire protection.

*We can give you expert advice, based on sixty years' experience, in the design, supply and erection of expanded metal backgrounds for plaster.*

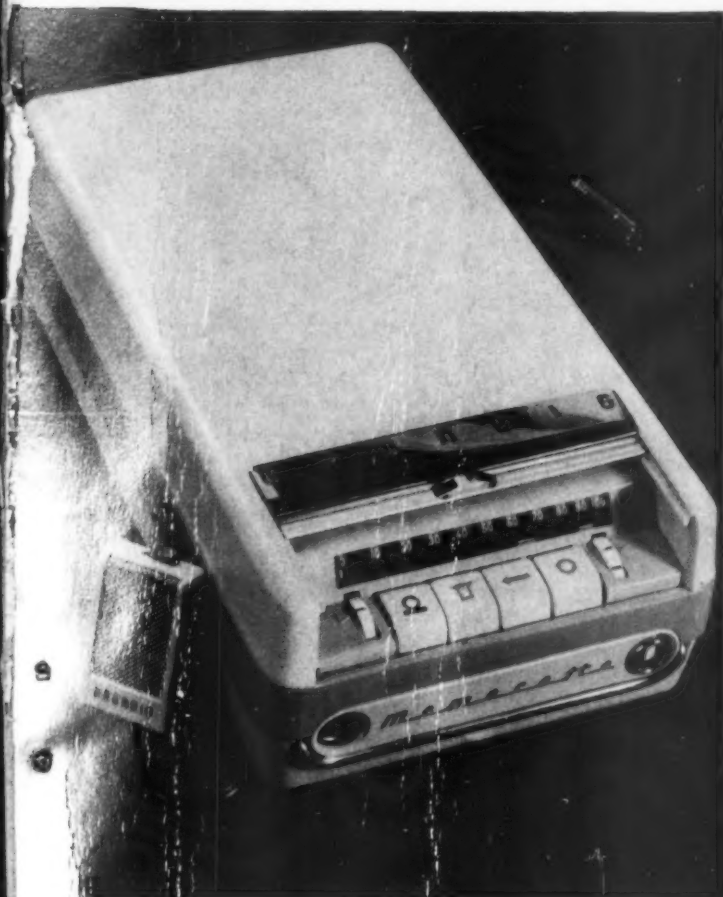


**EXPANDED METAL**  
at the heart of more things than most people realise

THE EXPANDED METAL CO. LTD., 16, Caxton Street, London, S.W.1 - Telephone: ABBey 7766 - Also at: Aberdeen  
Belfast - Birmingham - Cardiff - Dublin - Exeter - Glasgow - Leeds - Manchester - West Hartlepool - The Expanded Metal Company  
of Canada Ltd., Annacis Industrial Estate, Vancouver, Canada. Agencies and stockists throughout the free world.

**Expamet**

## TODAY'S BEST AIDS TO EFFICIENCY—



## full two-way interchangeability- in the office-and on site

Here are two compact electronic machines that between them can handle all your correspondence, record client conferences, make verbatim notes on site or take down both sides of a telephone conversation. They provide a complete system that will operate either in the office or out of it.

### IN YOUR OFFICE

you have the Stenorette Dictating Machine; gives you 25 minutes continuous dictation, automatic erase and back-space facilities.

### ON THE SITE

you have the Memorette: a battery-powered portable miniature dictating machine that can be used anywhere.

### BOTH USE THE SAME TAPE CASSETTE!

Thus you can record on one machine and transcribe on the other. Site recommendations could be recorded on the Memorette in, say, Birmingham and transcribed in London the following day. A discussion with clients in a private house could be played back in its entirety at the office without a word being typed or a moment wasted.

**Memorette** Battery operated 55 Guineas, with basic accessories.

**Stenorette** Mains operated 61½ Guineas, with basic accessories.

No Postage  
Stamp necessary  
if posted in  
Great Britain or  
Northern Ireland

REPLY PAID POSTCARD  
Licence No. SE 978

**GRUNDIG (GT. BRITAIN) LTD.**  
39/41 NEW OXFORD STREET,  
LONDON, W.C.1.

Postage  
will be  
paid by  
Licensee





## the office is only a pillar box away

The tape cassette from either the Stenorette or the Memorette can be posted overnight to arrive at the office first thing next morning. (Special mailing packs are available.) No-one's time need be wasted with shorthand, or even typing, at any point in the process. If wished the cassette can be heard direct - and answered immediately - posting the same cassette back to the sender.

## a trained stenographer wherever you go

With the Memorette portable dictating machine you have the service of a trained stenographer always at your elbow. On site, in your car, in a taxi, or a hotel bedroom - no matter where you are you can operate the Memorette. In fact the microphone fits so unobtrusively in the palm of the hand that recording, even in public places, is perfectly practicable.

## dictation and transcription

Both the Stenorette and the Memorette provide all the facilities you could possibly want for first-class dictation and quick accurate transcription. Both are easy to operate with simple finger tip controls.



Please send me a copy of the Grundig brochure 'Time in Hand'

NAME

ADDRESS

NEAREST TOWN

**GRUNDIG (GT. BRITAIN) LTD**  
39/41 NEW OXFORD STREET  
LONDON, W.C.1

## TIME TO THINK

A Stenorette gives you time to think; you can dictate at your own speed, at any convenient time. You can shift a mass of correspondence, deal with routine decisions on the spot, tape a report, record facts contained in a telephone conversation, all with the minimum effort. And your secretary or typist can transcribe the recorded tapes accurately, quickly and easily.

## TIME TO REMEMBER

With a Memorette in your hand you can record on site in your car, in a hotel, in your client's office. You can listen to what you have recorded immediately, can alter any part of it without difficulty, erase errors automatically. In fact you have all the facilities of a complete dictating system anywhere you are.

## TIME FOR ACTION!

Fill in the Reply Paid Postcard and post it for the free fully illustrated brochure 'Time in Hand'.

**DON'T DELAY. DO IT NOW!**

# FEBTONE

PATENT N° 727280

**SUPER PERMANENT  
COLOURS for CEMENT**

THE COLOURING MATTER  
OF FEBTONE CONFORMS WITH  
BRITISH STANDARD 1014-1942, TYPE A.  
BEING FREE FROM IMPURITIES  
AND ADULTERANTS, MAXIMUM  
STAINING POWER IS OBTAINED  
WITH ONLY 3 LB. TO  
6 LB. OF FEBTONE PER CWT.  
OF CEMENT USED

FEBTONE IS SUPPLIED IN 6 LB. CARTONS, EACH CARTON CONTAINING TWO 3 LB. PACKETS—ONE OR TWO 3 LB. PACKETS BEING USED PER CWT. OF CEMENT ACCORDING TO THE SHADE REQUIRED. THUS THERE IS NO WEIGHING OR MEASURING OUT, AND AS FEBTONE HAS A SELF-MIXING ACTION, NO CHANGE FROM NORMAL MIXING PROCEDURE IS NECESSARY.

USED FOR COLOURING CONCRETE AND CEMENT WORK  
FEBTONE ALSO—

PLASTICISES • WATERPROOFS • FLOOR HARDENS • RAPID HARDENS  
AND INCREASES  
COMPRESSIVE AND TENSILE STRENGTHS

**Write for  
Technical Brochure**

102 KENSINGTON HIGH STREET  
LONDON, W.8 Phone: WES 0444

## FEB

**(GREAT BRITAIN) LTD**

ALBANY ROAD, CHORLTON-CUM-HARDY  
MANCHESTER, 21 CHO 1063



## NO MAINTENANCE FOR 6 YEARS IN THE WETTEST CLIMATE IN ENGLAND

The Alston Foundry Company Limited, of Cumberland, say: *"The \*bridge is perpetually exposed to the elements, the action of which has had absolutely no effect whatever on the installation . . . there have been no appreciable signs of wear and it has never been necessary to carry out any form of maintenance to the bridge walkway in the period under review."*

# ALAFLOOR

\* They were referring to a bridge which, since its installation, has carried tens of thousands of people, in heavy industrial footwear, in the worst weather in England. An ALAFLOOR installation, of course! The illustration shows the ALAFLOOR bridge after 6 years.

### EXTRUDED ALUMINIUM FLOORING AND TREADS

#### ARCHIBALD LOW & SONS LIMITED

KIRKINTILLOCH SCOTLAND • HOME & OVERSEAS SALES OFFICE 143 SLOANE STREET LONDON S.W.1. TEL: SLOane 6178

756



## 'Standard' bathroom suites go into the Skyway Hotel, London Airport



Chartered Architects: FITZROY ROBINSON & PARTNERS  
Main Contractor: BERNARD SUNLEY & SONS LTD.  
Plumbing Sub-Contractor: ELLIS (KENSINGTON) LTD.

In the new Skyway Hotel, recently built at London Airport to receive guests from all over the world, each bedroom suite has its own bathroom equipped with 'Standard' sanitary appliances—as shown in the photograph on the left.

The 'Standard' Master Classic baths are made of cast-iron with a porcelain enamel finish and cast in one piece with an integral front apron. The wash basins and low level closet suites are made of 'Standard' vitreous china, the ceramic material which ensures permanent hygiene—because it is non-porous throughout. This fact, plus its high resistance to fracture, makes vitreous china the only material suitable for sanitary ware.

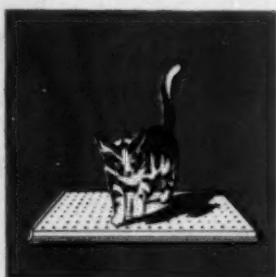
# Standard bathroom suites



IDEAL BOILERS & RADIATORS LIMITED · IDEAL WORKS · HULL

Visit our Stand No. 29 at the Building Trades Exhibition, Manchester, October 11—22

ACOUSTIC



TILING KNOW-HOW

... TILES  
SUPPLIED &  
INSTALLED  
BY CULLUM



... and CULLUM should know exactly how, where  
matters of acoustic tiling are concerned ...  
they've dealt in acoustic ceiling tiles for over  
thirty years. CULLUM are one of Britain's  
leading distributors.

*Sound control by*

**CULLUM**

BRITAIN'S MOST EXPERIENCED  
ACOUSTIC ENGINEERS ...  
CONCESSIONAIRES FOR  
ACOUSTI-CELOTEX AND BURGESS  
ACOUSTIC TILES

HORACE W. CULLUM & CO. LTD. The Acoustic Centre • 58 Highgate West Hill • London N.6 • Tel: FITzroy 1221

from

**LEISURE**

a self-contained

**SHOWER CUBICLE**

a space-saving  
**private bathroom**  
within the reach of  
all your clients!

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

PRICES FROM £43.4.6 (undrilled)  
TO £58.3.3 (complete with all accessories)

THE LEISURE SHOWER CUBICLE IS MADE BY LEISURE KITCHEN EQUIPMENT LTD  
NOTTINGHAM ROAD · LONG EATON · N<sup>r</sup> NOTTINGHAM · A DIVISION OF  ALLIED IRONFOUNDERS





*new ideas...*

Full size cross-sections

... from the range  
of  
**PLYFA** *Profil*

THE DECORATIVE PLYWOOD FOR PANELLING

New scope for panelling is offered by the wide choice of profiles now available in PLYFA PROFIL. Altogether there are now fifteen—in obechi or mahogany or a combination of both.

You should see the full range... write for folder (L18)

Sole Importers  
**VENESTA PLYWOOD LIMITED**  
Vintry House, Queen Street Place, London, E.C.4.  
Telephone: CENTral 3040

VENESTA



**Complete Flexibility in Planning**  
**Positively No Damage to Buildings**

**95% Recovery Value**

**Exceptional Insulation**

**Quality Materials in  
Every Kind of Finish**

## **All-purpose efficiency with . . . SWIFTPLAN demountable PARTITIONS**

. . . the partitioning service you've always wanted. The ultimate in flexibility—panels supplied in any width to suit your needs! But that is only one of the many reasons why the new SWIFTPLAN flush type partitioning will appeal to you as exactly what you've always wanted. Quality, for example—a quality, fit and finish such as you would expect only by having skilled craftsmen working specially for you on your premises. Site fixing, achieved by using spring loaded jacks where floors and ceilings are of solid construction, in all other cases floor and ceiling grounds are used. Quality finishes too—anything from painting to decorative veneers; suitable for any purpose, from the simplest accommodation to an executive suite. SWIFTPLAN offer you a complete partitioning service—design, construction, erection, alteration—to an entirely new standard of flexibility and efficiency. And at surprisingly reasonable cost.

*Write now for full details*

# **SWIFTPLAN**

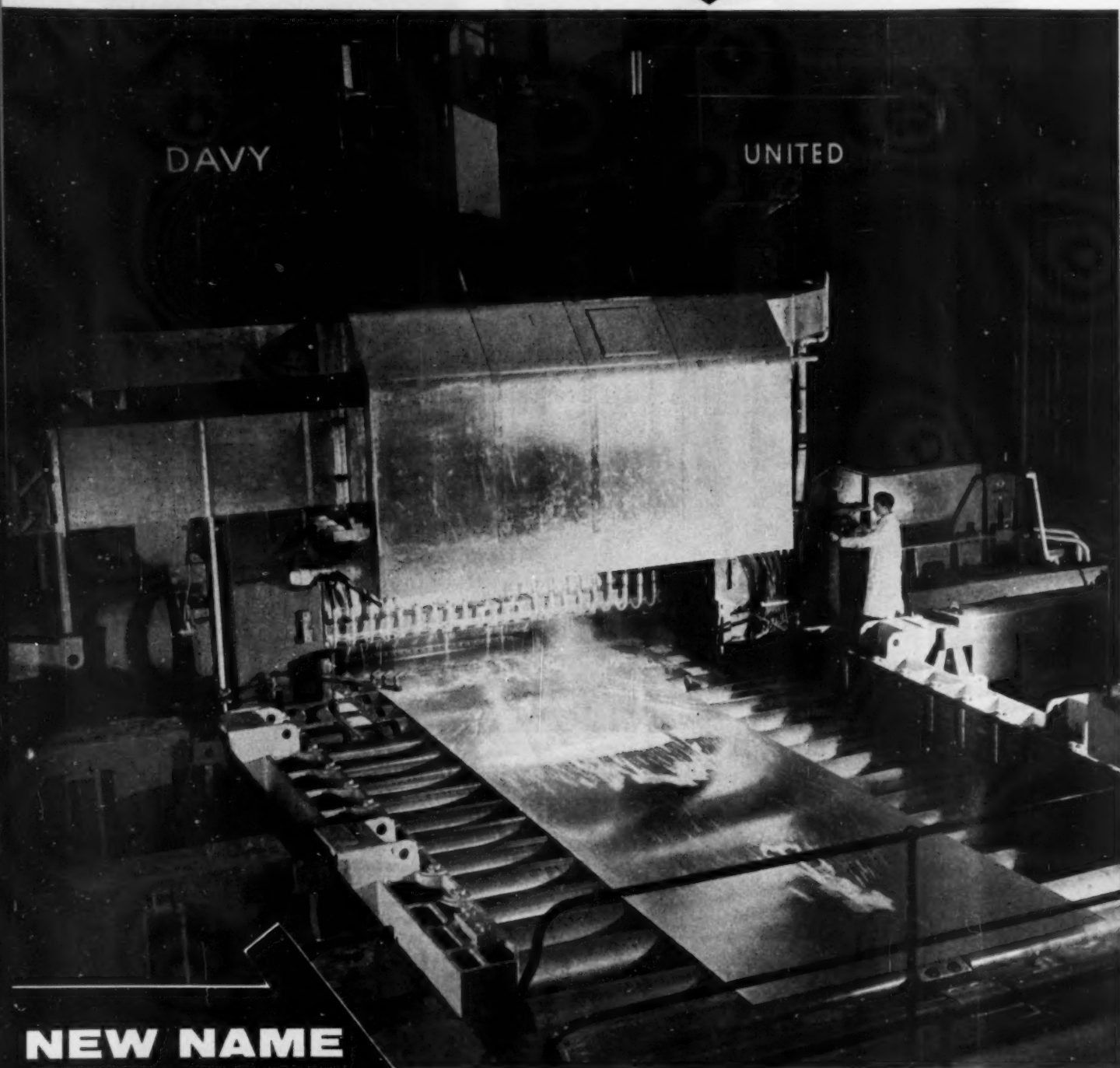
Regd.  
Trade Mark

**39 VICTORIA STREET · LONDON · SW1 · TELEPHONE ABBey 4393**

THE ARCHITECTS' JOURNAL (Supplement) October 20, 1960

**NEW MILL FOR BRITAIN**

**The largest**



**NEW NAME  
FOR  
NORTHERN  
ALUMINIUM**

**COMPANY LIMITED**

**ALCAN INDUSTRIES**

Sales Offices: **BELFAST:** Donegall House, 7 Howard Street, Belfast 32805  
**BIRMINGHAM:** Devonshire House, Great Charles Street 3, Central 7393  
**BRISTOL:** Pelouquin Chambers, 18 St. Augustine's Parade 1, Bristol 20351  
**LEEDS:** 26-27 Park Row 1, Leeds 33621 • **LONDON:** 50 Eastbourne Terrace W2,  
Paddington 3281 • **LUTON:** 57 Bute Street, Luton 7364-5 • **MANCHESTER:**  
23 Princess Street 2, Central 9335 • **NEWCASTLE UPON TYNE:** Groat House,  
Collingwood Street 1, Newcastle 20878 • **Castings & Forgings Sales Division:**  
Middlemore Road, Handsworth, Birmingham. Northern 3671.



# aluminium rolling mill in Europe



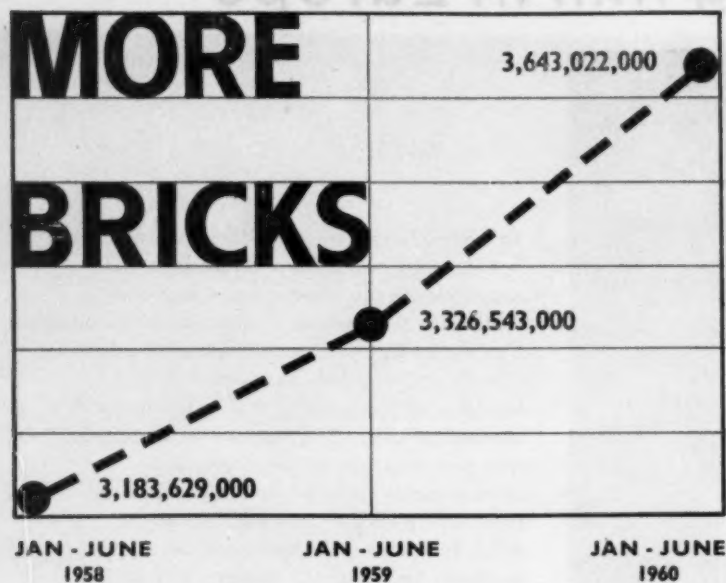
This 8,000 horse-power 144-inch mill, first stage in a 'hot line' one third of a mile long, is the centrepiece of the latest expansion of the continuous strip mill at Rogerstone, Monmouthshire. New equipment and modernisation at a cost of over £7 million makes Rogerstone the largest aluminium rolling mill in Europe, with a nominal capacity of 70,000 tons of sheet and strip products a year, plus a substantial extra capacity for hot-rolled coil and plate. It demonstrates the determination of Alcan Industries - the new name of Northern Aluminium Company - to maintain their position as leading suppliers of aluminium products to British industry. Leadership in equipment is backed by long experience in the application of aluminium, including joining methods. If you use, or might well use, aluminium, for expert advice get in touch with your nearest Alcan Industries (formerly Northern Aluminium) office.

## LIMITED

This new name identifies the company more clearly as a member of the Aluminium Limited of Canada enterprise, comprising some fifty companies in all parts of the world. Emphasis is thereby laid on the advantages that the company and its customers enjoy in being able to avail themselves of the Group's extensive research and development resources, and its great fund of experience in the smelting, manufacture and application of aluminium.



A member of the  
ALUMINIUM LIMITED OF CANADA  
group of companies



The Brick Industry is undergoing extensive re-organisation and development. Results may already be seen in the production figures for the first six months of this year—

## OVER 316 MILLION MORE

than in the corresponding period of last year.

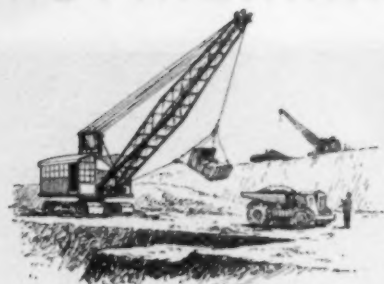
Capacity is being steadily expanded and when all planned developments have been completed, the Brick Industry should be able to meet all requirements.

In the meantime, you can help to ensure supplies when they are needed by making reservations at the planning stage.

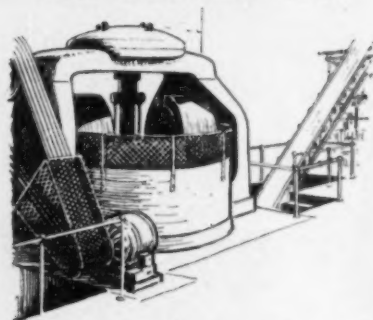
## THE BRICK INDUSTRY

is forging ahead!

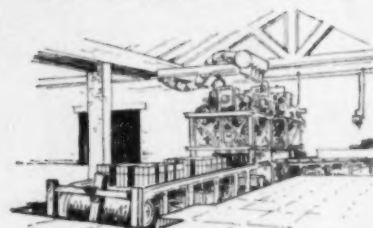
Issued by The National Federation of Clay Industries, London, W.C.1.



NEW EXCAVATION PLANT



NEW PREPARATION PLANT



NEW BRICKMAKING MACHINES



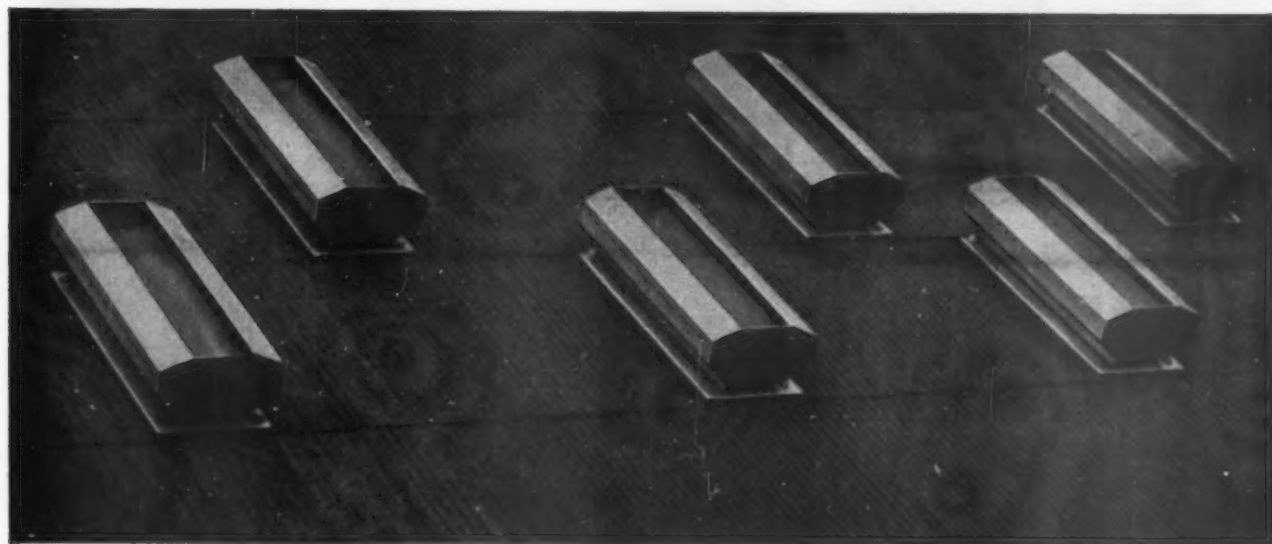
NEW KILNS



NEW MECHANICAL  
HANDLING EQUIPMENT



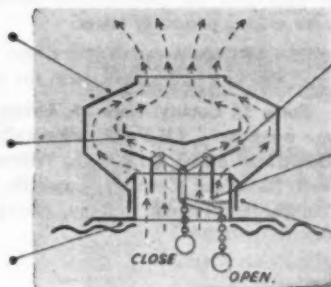
# COWL EXTRACTOR VENTILATORS



Anti-corrosive aluminium alloy cowling eliminates maintenance.

Baffle and adjustable dampers aerodynamically designed to eliminate turbulence—provide unrestricted outlet.

Base suitable for fixing into patent glazing or roof sheeting.



Adjustable dampers remotely controlled with pneumatic, hydraulic or mechanically operated shaft and lever gear.

Hand operated dampers spring loaded—positive snap action into open or closed positions.

Close fitting base eliminates down draughts—gives full protection against weather.

WE ALSO MANUFACTURE:

Fan assisted ventilators

Continuous ridge ventilators

Fixed and adjustable louvred ventilators for roof or wall fixing with or without fusible link gear

Power operated ventilating shutters

TEMPLEWOOD

HAWKSLEY

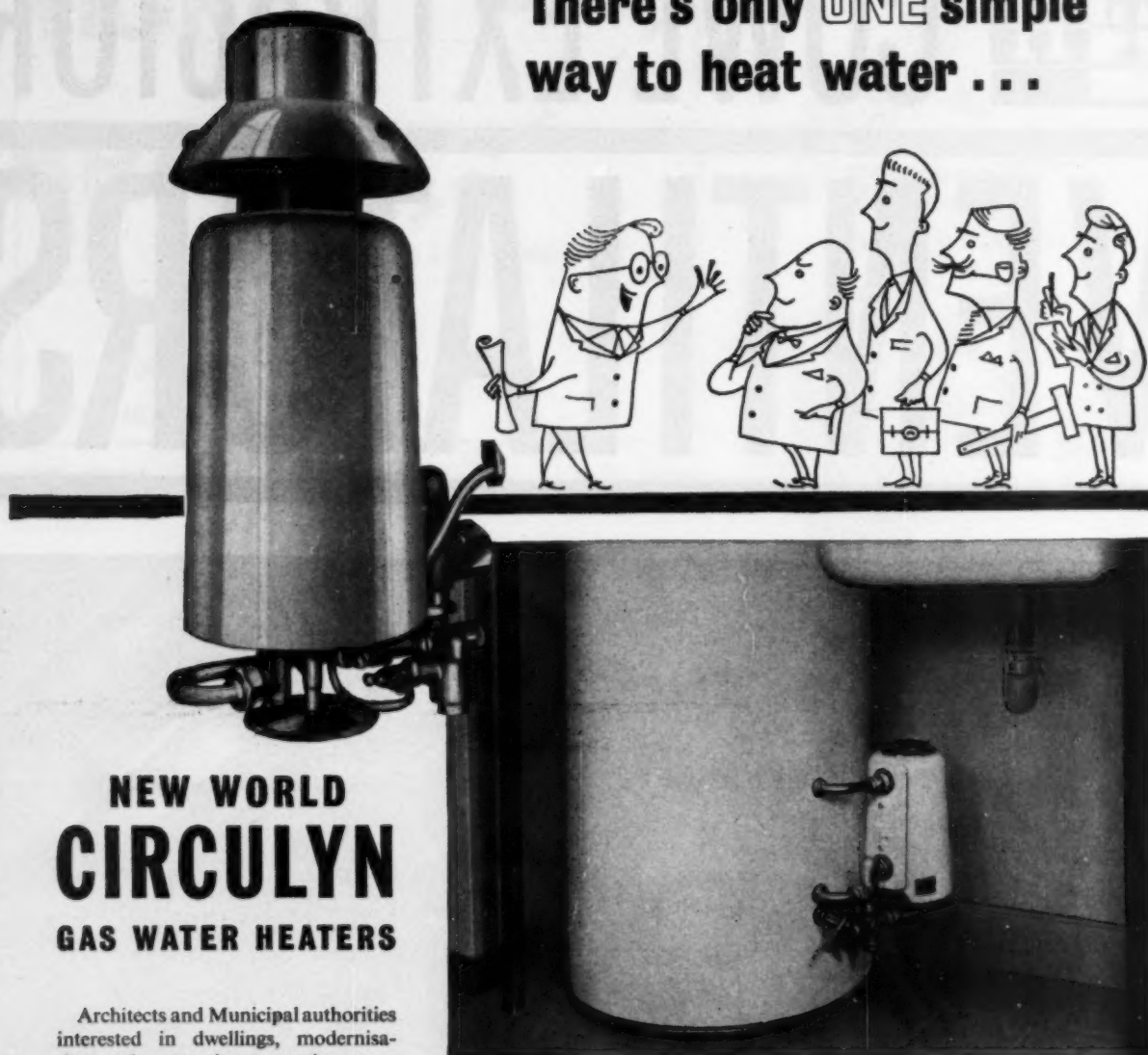
BUILDING DIVISION

MEMBER OF HAWKER SIDDELEY INDUSTRIES LTD.

OUR TECHNICAL DEPARTMENT WILL BE PLEASED TO CO-OPERATE IN PREPARING COMPLETE VENTILATION SCHEMES  
WRITE TO VENTILATION DEPARTMENT, 2 BUCKINGHAM AVENUE, SLOUGH, BUCKS. TELEPHONE SLOUGH 23219



There's only **ONE** simple  
way to heat water ...



## NEW WORLD CIRCULYN GAS WATER HEATERS

Architects and Municipal authorities interested in dwellings, modernisation and conversion are using more and more gas water heaters with storage systems.

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

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

In older properties existing gas and water services are

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

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

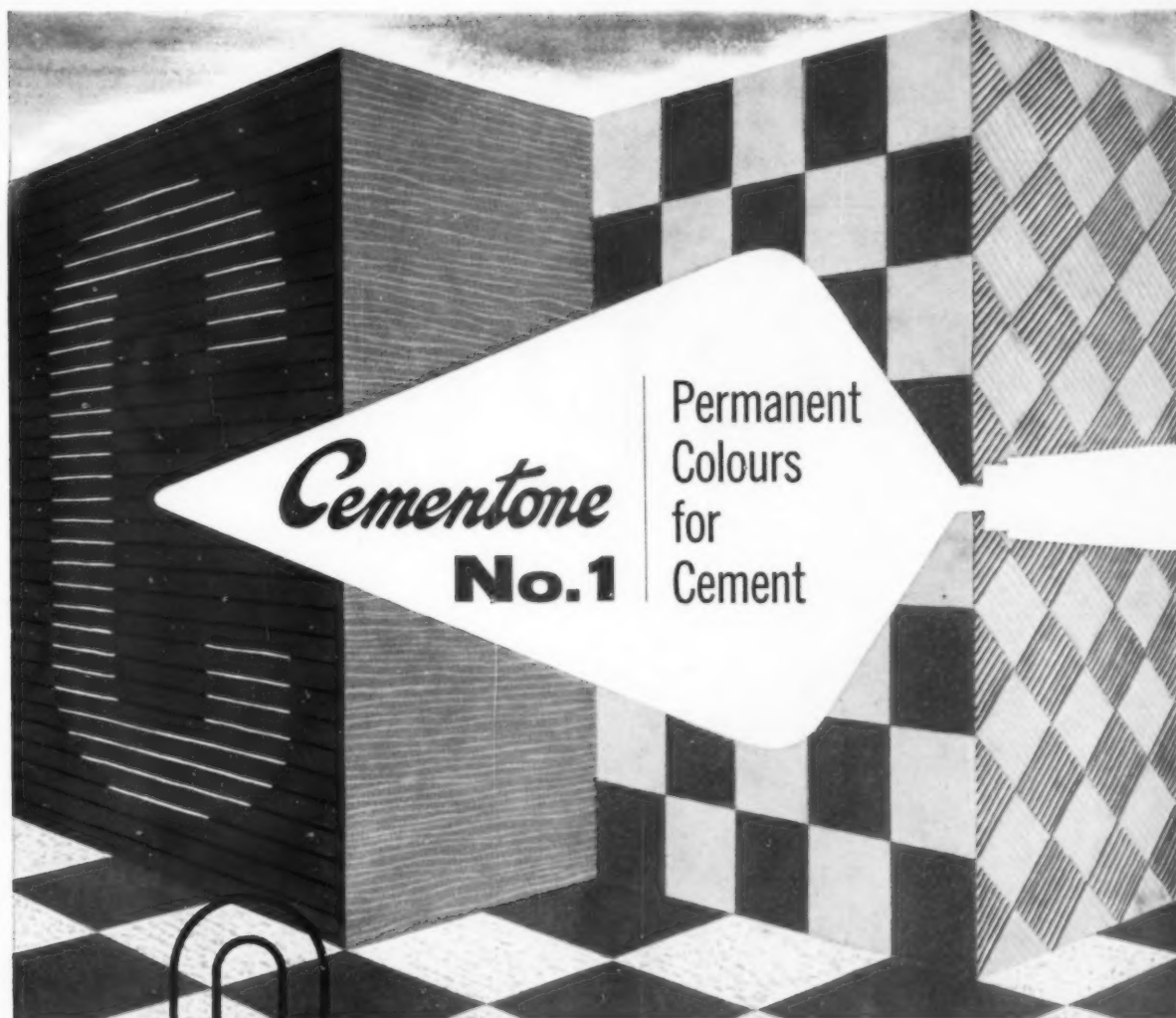
Some 35 County, Borough, Urban and Rural Councils are using the C.12LF/20 gallon cylinder Under Draining Board unit including: L.C.C., Willesden, Ilford, Camberwell, Battersea, Coventry, Lambeth, West Ham, Enfield, Edinburgh, Preston, Romsey, Liverpool.

Fit



**gas water heaters  
and forget your problems**

RADIATION GROUP SALES LTD, 255 NORTH CIRCULAR ROAD, LONDON, N.W.10. WILLESden 1234



THERE ARE

9

## DIFFERENT CEMENTONE PRODUCTS

*Cementone No. 1 is a Permanent Colour additive for cement and is supplied in eleven standard shades. These shades are intermixable and it is, therefore, possible to obtain an infinite variety of colours. The use of Cementone No. 1 adds new scope and dimension to concrete flooring, rendering, pointing and precast work.*

Joseph Freeman  
Sons & Co. Ltd.  
Cementone Works  
Wandsworth  
London S.W.18  
VANDYKE 2432



Cementone No. 1	Permanent Colours for Cement
Cementone No. 2	Waterproofing Powder
Cementone No. 3	Transparent Waterproof
Cementone No. 5	Concrete Floor Binder
Cementone No. 6	Waterproof Flat Finish
Cementone No. 7	Flat and Gloss Finishes
Cementone No. 8	Concrete Hardener
Cementone No. 9	Waterproof Stoneface Composition
Cementone No. 10	Surface Tinter

# glass for depth of colour



# in cladding

PILKINGTONS' GLASS CLADDING MATERIALS INCLUDE "ARMOURCLAD" AND "MUROGLASS"

For full information write to the Technical Sales and Service Department, Pilkington Brothers Limited, St. Helens, Lancashire. Tel: St. Helens 4001;  
LONDON OFFICE: Selwyn House, Cleveland Row, St. James's, S.W.1. Tel: Whitehall 5672-6.

Supplies are available through the usual trade channels. "ARMOURCLAD" is a registered trade mark of Pilkington Brothers Limited.







## *High Flats in Southgate*

... a concrete example of co-operation



**W**ATES build multi-storey flats for both private developers and local housing authorities. These two blocks, currently nearing completion for the Borough of Southgate, are a typical example of Wates specialised experience in this type of construction, and a rewarding result of close co-operation between the architects: David du R. Aberdeen & Partners; the consulting engineers: Ove Arup & Partners; and the contractors: Wates Limited, who are proud to have been associated with this well-planned project.



**WATES LIMITED, 1260 LONDON ROAD, NORBURY, LONDON, S.W.16 POLLARDS 5000**

## STONE AND THE ARCHITECT



The choice of the most suitable type of stone for a given purpose does not depend solely upon the stone itself; there are, of course, the architectural and aesthetic considerations involved.

But in so far as the selection of the stone is confined to its suitability as stone, and the technical aspects of masonry or fixing, then the Company is qualified to advise.

In all probability the ideal arrangement is for the architect, after a preliminary discussion with a Company representative, to visit a particular quarry, works, or yard. Alternatively, samples of stone can be sent together with a list of representative contracts in which a particular stone has been used. The architect can then see for himself what the stone will look like and how it will behave under actual conditions.

**PORTLAND  
BATH  
DOULTING  
BEER  
CLIPSHAM**

**THE BATH AND PORTLAND STONE FIRMS, LIMITED**

BATH, SOMERSET. Bath 3248 London VIC 9182 Portland 2276 Leeds 25972

## YORKSHIRE IMPERIAL METALS LIMITED

# **'Polyorc- ALKATHENE'**

Yorkshire Imperial Metals Limited and Imperial Chemical Industries Limited have decided that it would be advantageous to combine their activities in the marketing of polythene tube. In consequence it has been agreed that Yorkshire Imperial Metals Limited should assume sole responsibility for marketing 'Alkathene' polythene tube from October 3rd, 1960. The combined product of the two Companies will be known as 'Polyorc-Alkathene'.

'Polyorc-Alkathene' is manufactured and tested to the highest possible standards, and is one of the very few polythene tubes licensed by the British Standards Institution to bear the 'Kite' Mark.

Comprehensive stocks of 'Polyorc-Alkathene' are maintained at numerous stockpoints throughout the country, thus ensuring the continued first class delivery and distribution service maintained by the two Companies in the past.

The combination of the extensive research and development, technical service and sales facilities of the two Companies in the marketing of a single product will promote economy, efficiency and service to customers.

'Alkathene' and 'Polyorc' are registered trade marks, the property of Imperial Chemical Industries Limited and Yorkshire Imperial Metals Limited, respectively.

## **look for this label....**



**HEAD OFFICE: P.O. BOX 166, LEEDS**

**Telephone Leeds 7-2222**

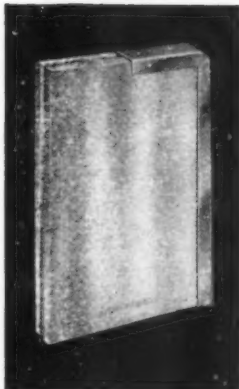




Check-mated with check... taste and tone superb! Pure vinyl — choosing **AMTICO** is a sure move to winning floormanship. Whatever the finish — **AMTICO** lasts as well as it looks! Resilient, radiant, many coloured... as versatile as the Queen, as necessary as the King... **AMTICO** is the most beautiful flooring in the world!

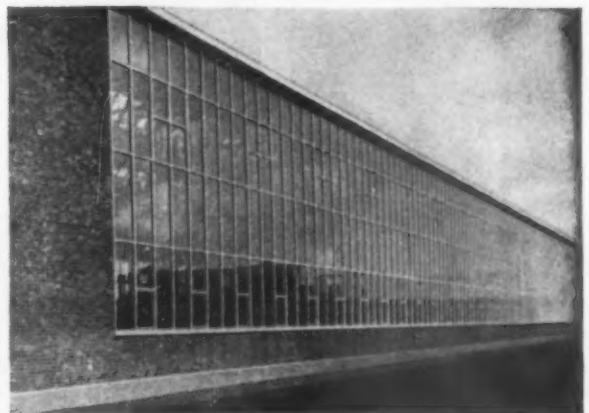
HUMASCO LTD., VINYL COVERINGS, 23 OLD BAILEY, E.C.4

low thermal transmittance



Heat loss is no problem for the polar bear. Nor need it be so for the architect using extensive day lighting areas. 'Hilsulate' double glass panels reduce heat loss by 35%, practically eliminate condensation, lessen down-draught and can be handled as easily as single pane glass. For associative use—there are 'Hilsulate' glass faced, metal backed, coloured panels.

*For full information please contact our Technical Department.*



Architect, C. R. Kirby Esq., A.R.I.B.A. Dowty Group Ltd., of Cheltenham

**HILLS (WEST BROMWICH) LIMITED**



ALBION ROAD, WEST BROMWICH, STAFFS.  
Telephone: West Bromwich 1811 (15 lines).

London: CHAPONE PLACE, DEAN STREET, W.1.  
Telephone: GERRard 0526/9.

Branches at: Manchester, Bristol, Newcastle-on-Tyne, Glasgow.

*the new*  
**TAYCO** **Thermatic**

An independent solid fuel boiler of 27,500 BTUs.

Full thermostat control.

Simple to use and clean.

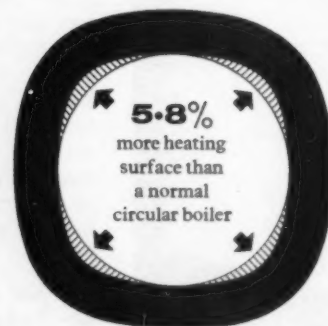
Constructed with the usual high Tayco standards  
of finish and reliability.

Designed by Neville Conder, M.S.I.A., F.R.I.B.A.



The Thermatic 25,  
Thermatic Super,  
21/60 and  
Pacesetter  
all feature the unique  
Tayco Quartic Boiler Body

Plan view of Quartic Boiler body



Full information from :-

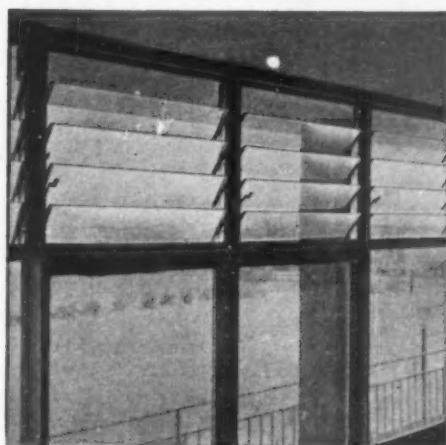
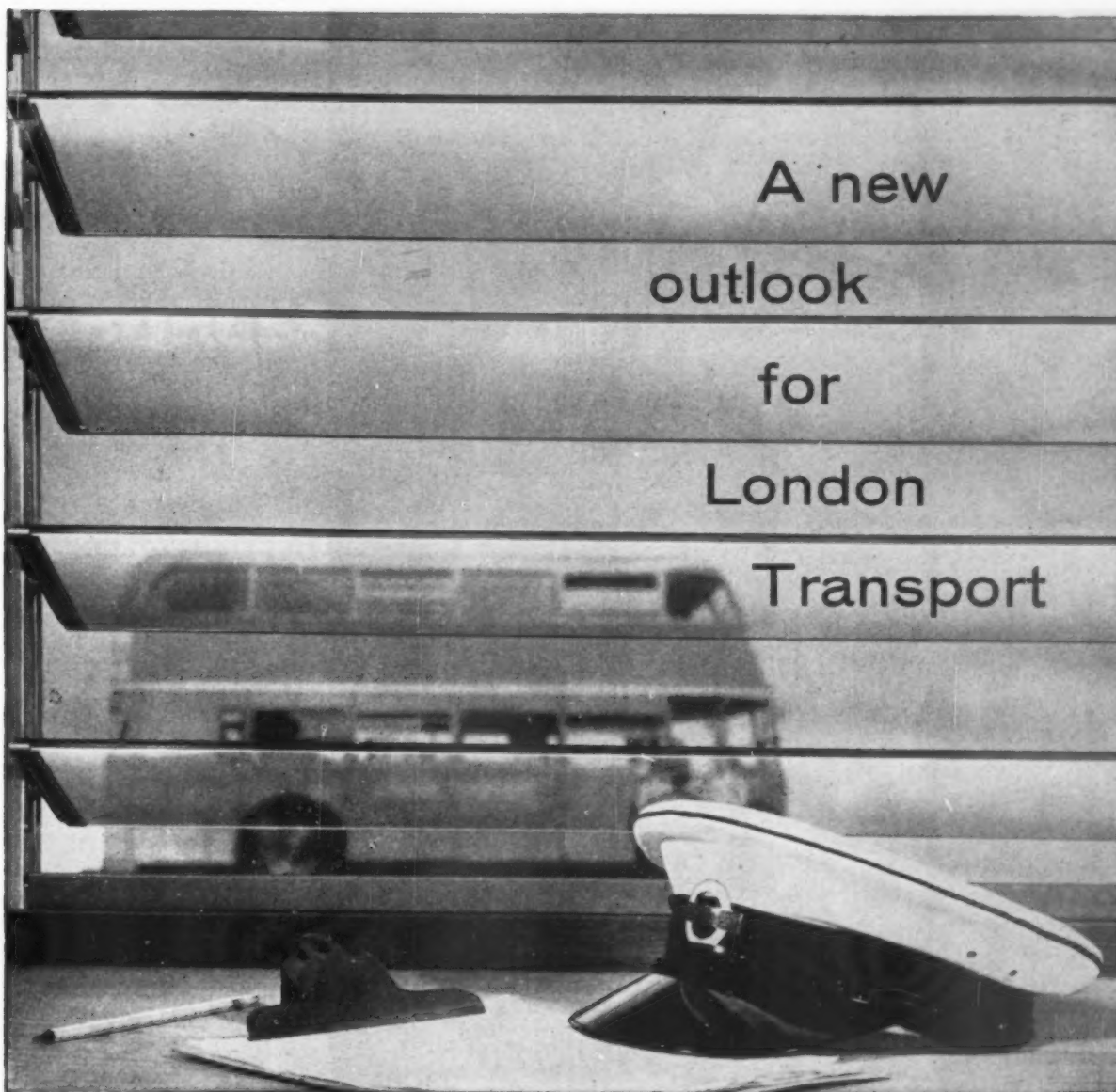
**TAYCO BOILERS LTD**

170/172 VICTORIA STREET · LONDON SW1

Tel: VICTORIA 3972

18W/64





...and a fresh outlook, too, since they installed 'Naco' Sunsash Adjustable Louvres in their garages! 'Naco' Adjustable Louvres are used extensively in light and heavy industry; by British Railways, Shell Mex & B.P. Ltd., the British Standards Institution, Nestlé Co., Ltd., and almost all County Councils, as well as many other leading organisations in over 90 countries. In windows and doors, they answer lighting and ventilation needs; and they are weatherproof. Suitable for conversions as well as new buildings, 'Naco' Louvres cost no more than most standard windows. Finishes available are zinc plated steel sprayed with aluminium lacquer, or anodised aluminium. Both have alloy bearings.

*Full technical information  
will gladly be supplied on request.*

# NACO

SUNSASH

THE WORLD'S LARGEST SELLING LOUVRE WINDOW

N.V. APPLETON PTY., LIMITED, LIVERPOOL ROAD, SLOUGH, BUCKS. TEL: SLOUGH 25715/25368



*new buildings  
— new needs*

and new ranges of Crittall aluminium windows and curtain walling, designed to match the most forward-looking architectural concepts and to meet the toughest practical demands. Thorough research, advanced design and manufacturing techniques, a new factory specialising in aluminium windows and equipped with the most up-to-date anodizing plant — these, allied to Crittall's long experience, help to make tomorrow's buildings better to live in and work in, less costly to maintain.

*and  
WINDOWS  
by  
CRITTALL*

Write for leaflet 241d  
THE CRITTALL MANUFACTURING CO. LTD  
BRADTREE, ESSEX. Branches and  
depots throughout the country

*This fifteen storey  
OFFICE BUILDING AT  
KUALA LUMPUR is fitted with  
Crittall aluminium curtain  
walling and casements.  
Architect: E. S. Cooke  
Contractors: K. C. Boon  
and Cheah*

25W/121

*a* **BURGESS SULZER** *heated ceiling*

**has successfully withstood  
a two hour fire test at 1000°C  
providing adequate protection to  
supporting steel beams above**

TEST F.R.O.S.I. No. 1090 CONDUCTED TO B.S. 476/1953

ACOUSTICS BY BURGESS PRODUCTS CO. LTD. ACOUSTICAL DIVISION, HINCKLEY, LEICS.

HEATING BY SULZER BROS. (LONDON) LTD. 12 DYOTT ST. LONDON W.C.1.



# The sign of a Nation-Wide Service...

representing  
the total resources of the  
Rubber and Thermoplastic  
Cablemaking Companies  
of the BICC Group  
— now combined to give  
the Electrical Industry  
the service it needs.



## HIGHEST QUALITY

*The result of many years' research and manufacturing experience.*

## WIDEST RANGE

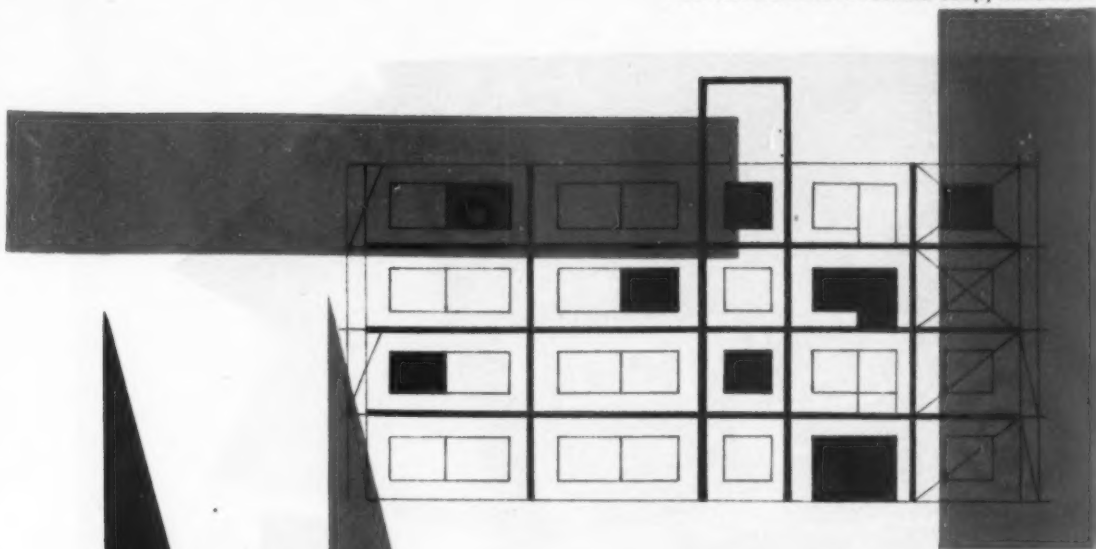
*Off-the-shelf service for every kind of rubber and thermoplastic wiring cable.*

## QUICKEST DELIVERIES

*Provided by a network of branches and depots throughout the country.*

**Backed by an alert technical advisory service  
freely available to you at all times**

BRITISH INSULATED CALLENDER'S CABLES LIMITED 21 Bloomsbury Street, London W.C.1



## less weight . . . less work with 'MURILITE' the Pre-mixed Perlite Plaster

'MURILITE' is a pure Gypsum plaster pre-mixed with Perlite, a lightweight aggregate which is a type of rhyolitic glass material honeycombed with air cells and is one-tenth the weight of sand.

Pre-mixed at our Works, ensuring strict conformation to specification, 'MURILITE' simply needs the addition of water on site before use — no sand whatever being required.

Three times lighter than traditional sanded plasters 'MURILITE' is much easier to work and makes a major reduction in all-round 'dead load'—a most important point, architecturally, in the planning of multi-storey buildings.

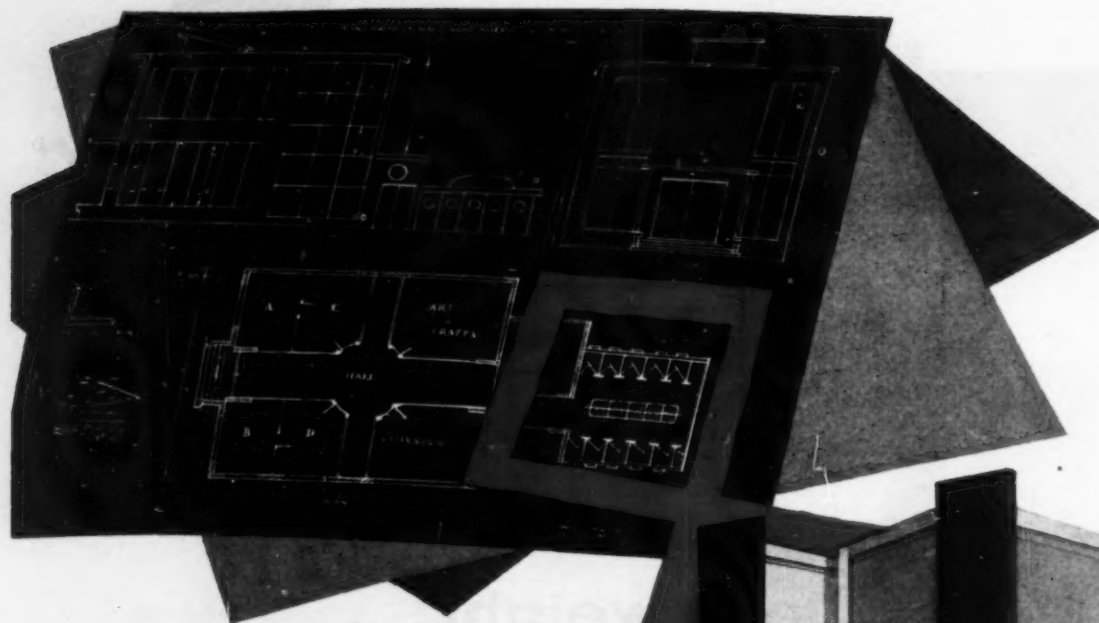
Unlike sand, the Perlite aggregate is of consistently high quality. It provides 'MURILITE' with extremely good properties of fire resistance plus improved thermal insulation which reduces heat-loss through walls and ceilings, minimizes condensation and the subsequent risk of pattern staining. The Bonding Coat grade of 'MURILITE'—which incorporates 'Vermiculite' as the aggregate—adheres excellently to concrete, and, like all other 'MURILITE' plasters is free from lime, thus allowing early decoration.

Being a Gypsum-based plaster, 'MURILITE' is free from shrinkage cracks. We should like to give you further details of this versatile lightweight plaster—or provide advice on your plastering problems.

**CAFFERATA & CO. LTD.**

NEWARK · NOTTS · TEL: NEWARK 2060 · GRAMS: CAFFERATA NEWARK

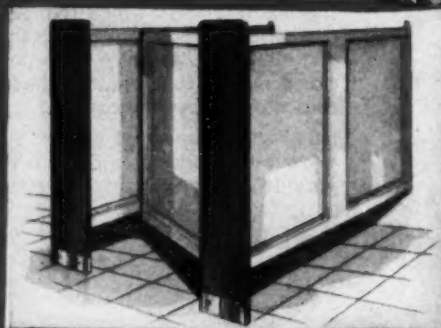




## Toilet cubicles take on a new look

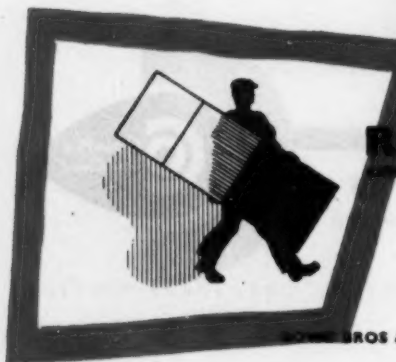
In no part of the building is the provision of maximum accommodation within minimum limits of greater importance than in the 'usual offices.' The new ultra-flexible Rowe system of Pressed Metal Toilet Cubicles completely satisfies all considerations, practical and aesthetic. Ceiling or floor fixed, flush or semi-flush, Rowe Toilet Cubicles are in four standard types, covering between them the needs of civic, hospital or commercial buildings, factories and junior or senior schools. Construction is robust and ingenious, a special feature being that rails over doors can be dispensed with. Styling and finish are unusually handsome and the partitions are available in a choice of twelve colours. Before you get down to the detailed planning of the smallest room, let us send you a brochure containing detailed specifications of Rowe Pressed Metal Toilet Cubicles.

*Illustrated are Types FMC (Floor Mounted Semi-Flush) a robust design, suitable for Factories, Junior and Senior Schools—and FMN (Floor Mounted Nursery) similar in design but to dimensions laid down for Nursery Schools.*



TYPE FMC

TYPE FMN



## ROWE INDUSTRIES (KIRKBY) LTD.

KIRKBY INDUSTRIAL ESTATE, LIVERPOOL, ENGLAND. TELEPHONE: SIMONSWOOD 2481

Samples also available for inspection in the Showrooms of our Associates  
**MESSRS. ROWE BROS. & CO. LTD., in:**

**LONDON**  
**LIVERPOOL**  
**BIRMINGHAM**  
**BRISTOL**  
**EXETER**  
**GLASGOW**

10 DOVER STREET, PICCADILLY, W. 1. Tel. Hyde Park 5761  
PALL MALL, LIVERPOOL 3. Tel. Central 5401  
BERKLEY STREET, BIRMINGHAM, 1. Tel. Midland 2791  
CANONS MARSH, BRISTOL 1. Tel. Bristol 23171  
QUEEN STREET, EXETER. Tel. Exeter 74134  
22/30 SHAMROCK ST., GLASGOW, C.4. Tel. Douglas 8211

ROWE BROS. & CO. (CANADA) LTD. FIRST AVENUE, AJAX, ONTARIO. 1396. RICHARDS STREET. VANCOUVER, 2, B.C.





showers  
used to  
play tricks...

but not now

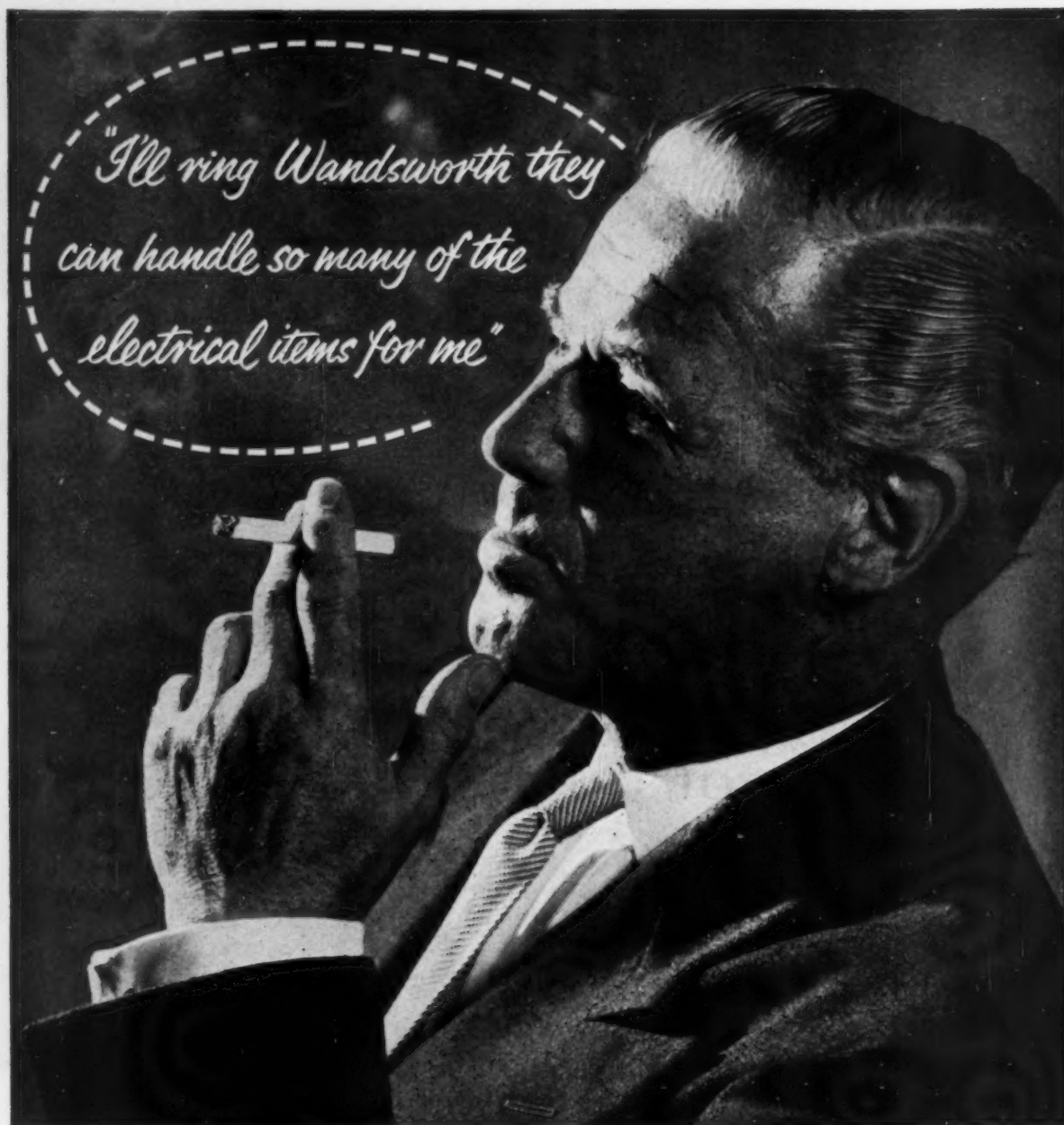


they're fitted with  
Leonard thermostatic valves

Of the 220 education authorities  
in this country alone,  
209 (95%) specify Leonard  
thermostatic valves for schools.

Write for literature T.2.

WALKER, CROSWELLER of Cheltenham



**A**T THE ELECTRICAL specification stage of planning it is reassuring to know that the Wandsworth representatives can help to decide so many details at one briefing.

Is the task a hospital with special bedhead units, and with the tricky problem of sparkless switches for operating theatres?—is it a school where robustness and reliability are paramount?—are incinerators for surgical or hygienic disposal a part of your problem?

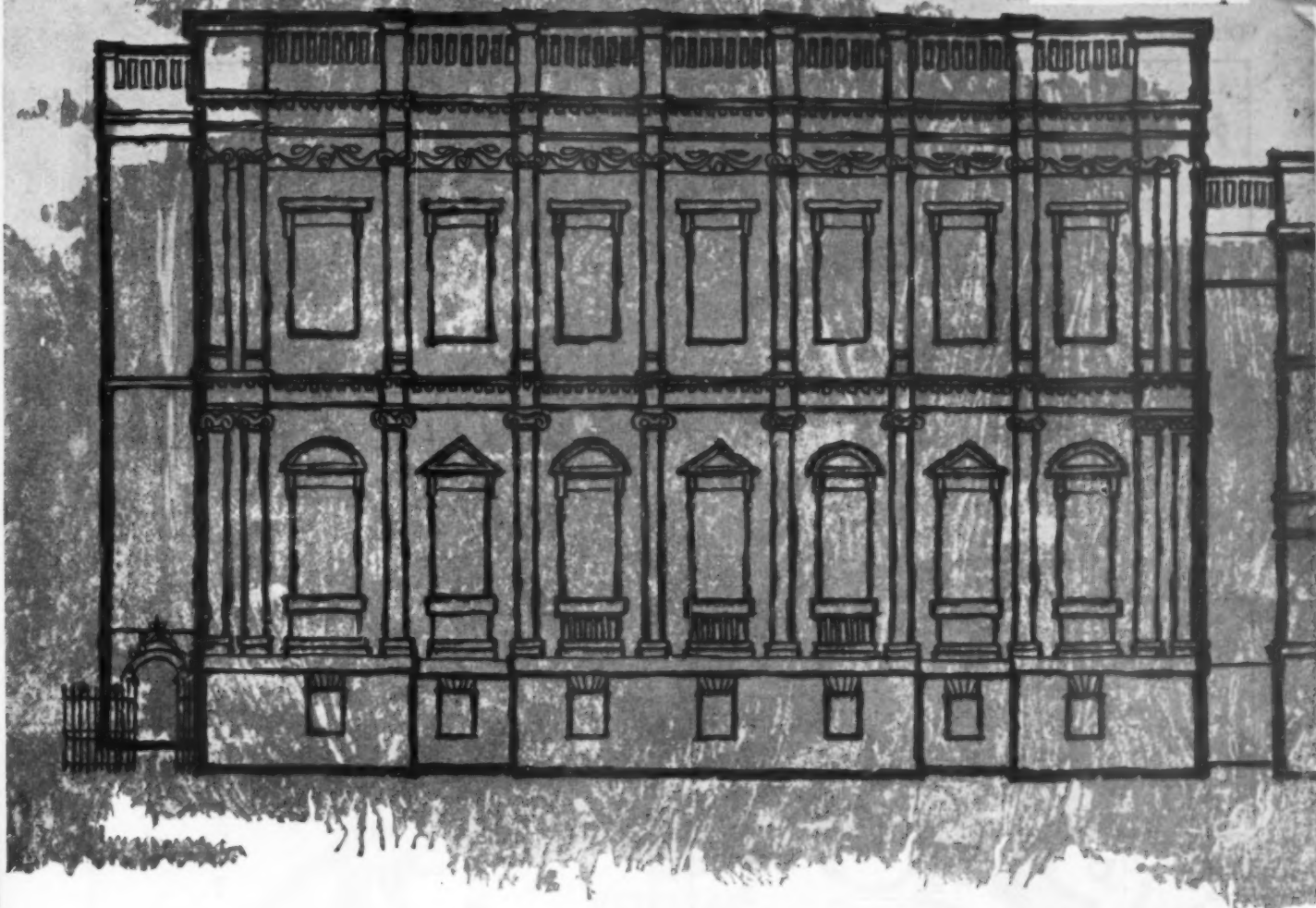
All these and many other question marks can be erased by the Wandsworth representatives. Whether you are concerned with getting the right equipment for a specialist job or wish to be certain of the quality of units needed for a huge contract you can safely leave it to the experience and resources of Wandsworth.

Write for the Wandsworth catalogues which contain hundreds of products needed in electrical planning today.

# Wandsworth

THE WANDSWORTH ELECTRICAL MANUFACTURING  
COMPANY LIMITED

(Dept. AJ27) Albert Drive · Sheerwater · Woking · Surrey  
Telephone: Woking 3576



## Inigo Jones—the first professional

Inigo Jones was the first English architect in the modern sense, i.e. a professional man rather than a master-mason; but it must be confessed that he was in many ways quite different from the architect of today. He was never trained as such, and he started almost from the gutter. The only record of his parentage is that his father, a Smithfield meat-porter, was fined by a jury in 1581 for using bad language to a lady—a strange ancestry for a man who was to die as a famous courtier! At an early age, Inigo showed a talent for drawing; and, somehow, managed to study in Italy between 1597 and 1603 as the protégé of the Earl of Pembroke. Later, he appears to have worked for King Christian IV of Denmark. It was at this point that he came to be employed by King James I (who had married Princess Anne of Denmark), as a designer of stage-scenery and costumes for one of those "masques" or pageants which had been made popular by Elizabeth I.

Italian art and antiquities having become fashionable, it was natural that the organisers "hired one Mr. Jones, a great traveller, who undertook to further them much, and furnish them with rare Devices, but performed very little to that which was expected". So wrote a contemporary gossip-columnist in 1605, but in fact Inigo had secured a foothold on the Court ladder. He became Surveyor to the young Prince of Wales in 1611, and "Surveyor-

General to the King's Works and Buildings" in 1615. It was only then that he really blossomed out as an architect; and thereafter his architectural practice was only interrupted during a single year, when he was M.P. for Shoreham in Sussex.

A large number of buildings have been rashly attributed to him, but the only surviving works which are quite definitely his are the Queen's House at Greenwich (1616-35); the Banqueting Hall (now the Royal United Service Institution) in Whitehall (1619-22), intended as the first instalment of a huge new palace; the Chapel of Marlborough House, London (1623-6); and a few fragments of other buildings. Because his work was mainly for the Court, it naturally followed that it was interrupted by the Civil War in 1640. When he was 72 years of age, in 1645, he was arrested as a Royalist supporter, at Basing House, Hampshire, by Parliamentary troops, and fined. A contemporary reported that "there was the famous Surveyor, Inigo Jones, who was carried away in a blanket, having lost his clothes". He had taken the precaution of burying his money in "Scotland-yard" just before this happened; and reburied it in "Lambeth-Marsh" soon after the House of Lords pardoned him in 1646. (For all we know, it may still be there). After his release, he carried on a little practice, but died in 1652. The importance of his work is that he introduced into England the mature Renaissance architecture of Palladio the Italian.

Nowadays architects are finding that so far as structural flooring is concerned the quickest way to translate good design into sound construction is to consult SIEGWART. Technical advice is freely given.

**SIEGWART**  
PRECAST FLOORS & ROOFS  
Siegwart Floor Company Ltd.,  
Gable House, Rickmansworth, Herts.  
Telephone Rickmansworth 2268.  
Berkeley House, Hagley Road,  
Birmingham 16.  
Telephone Edgbaston 3960.  
Carlton House,  
Blythwood Square, Glasgow, C.2.  
Telephone City 5156.



STING  
STACK  
PLUMBING



**TYPE SH.10A**  
3/4" and 1" Flange, without side connection

**TYPE SH.12A**



**TYPE SH.7**

**TYPE SH.7A**



**TYPE SH.1**

**TYPE SH.1A**



**TYPE SH.2 & SH.2A**



**TYPE SH.11 SH.11A & SH.11B**  
GROUND FLOOR



**TYPE SH.14 & SH.2**



**TYPE SM.3**  
on 1/2" and 3/4" connections



**TYPE SM.4 & SM.5**  
without side connections



**TYPE SH.11C & SH.11D**  
3/4" and 1" Flange, with side connection



**TYPE SH.14 & SH.2**



**TYPE SH.14 & SH.2**

designed for you

by **Econa**

PHONE SOLIHULL 4981

**MAKERS OF**  
**COPPER TRAPS**  
**AND MATCHING**  
**PREFORMED**  
**MULTI-BRANCH**  
**FITTINGS**

**ECONA MODERN PRODUCTS LTD.**  
D46 P 373

**ECONA MODERN PRODUCTS LIMITED**  
AQUA WORKS · HIGHLANDS RD · SHIRLEY · SOLIHULL · WARWICKSHIRE



**REYROLLE  
PLUGS AND SOCKETS**

The illustration shows one of a number of multi-system distribution-boards of various types, designed and manufactured by Reyrolle to customers' specification. System selection is achieved with "Easigo" metalclad protected-type plugs and sockets to B.S. 196.

*For details of our extensive range of plugs and sockets please send for Pamphlet 1252.*



**Reyrolle**

A. Reyrolle & Company Limited - Hebburn - County Durham - England

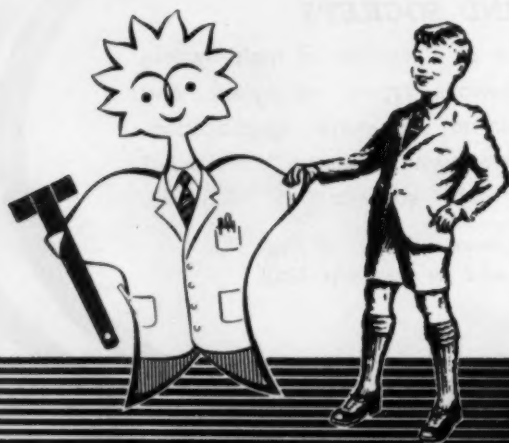
# it's his future...

## ...backed by MR. THERM who Burns to Serve architects and

... in all ways. He will grow up with Central Heating—yes gas central heating, for gas central heating has become increasingly popular in the home ... for only gas central heating offers no fuel delivery upsets, no wasted fuel storage space, complete automatic control—and—'buy out of income' facilities at only 5% interest up to 5 years with no deposit.

Through the twelve Area Gas Boards, the Gas Industry offers an unrivalled free advisory service on 'Perfect Central Heating' to Architects and Builders.

**Write or 'phone your problem to your Gas Board NOW**



Today architects and builders can keep up to date with new technical data on gas and coke appliances and their installation:—sections 1 and 2 (Domestic Space Heating), 3 (Domestic Water Heating), 4 (Gas Flues), 5 (Coke), 6 (Gas Appliances and Flues in Tall Buildings), 7 (Domestic Kitchen), 8 (Catering), 9 (Installation) are now available

ISSUED BY THE GAS COUNCIL







builders always ...



## SIGNS OF THE TIMES

	MIST
	FOG
	DRIZZLE
	RAIN & DRIZZLE
	RAIN
	RAIN & SNOW
	SNOW
	HAIL SHOWER



**CONSTANT WARMTH** for Heating & Drying  
**AUTOMATICALLY CONTROLLED**  
*when and where you want it*

# Thermobloc

## AIR HEATING AND DRYING

Literature and technical information from:

**WANSON COMPANY LTD.** 7 ELSTREE WAY, BOREHAMWOOD, HERTS Tel: ELSTREE 5696





**Armstrong**  
CORK COMPANY LTD.

## AN ACCOFLEX FLOOR FOR HARD- TREADING FEET



*Accoflex floor tiles were used throughout the Watford Police Station, North Orbital Road, Watford, Herts.*

ARCHITECT: WILLIAM CRABTREE, F.R.I.B.A., in association with the HERTFORDSHIRE COUNTY ARCHITECT: MR. G. C. FARDELL, M.B.E., A.R.I.B.A.

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

**Armstrong** **ACCOFLEX** \*FLOORING

\* BRITISH REGISTERED TRADEMARK ARMSTRONG CORK COMPANY LTD., REGISTERED USERS.

ARMSTRONG CORK COMPANY LTD., FLOORING DEPT., BUSH HOUSE, ALDWYCH, LONDON, W.C.2. TEL. COVENT GARDEN 1101  
*Manufacturers of Accoflex, Accotile, Cork Tile, Linotile, Rubber Tile Linoleum, and Vinyl floorings.*

F3008





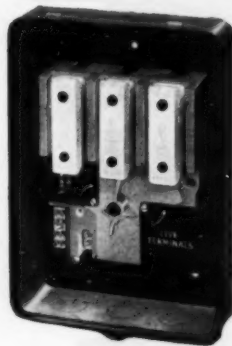
# NEW

all contractors and  
consulting engineers  
will want to use  
these **NEW**

## **"HIDUTAC" SWITCHFUSES**

**SINGLE POLE AND NEUTRAL - DOUBLE POLE -  
TRIPLE POLE - TRIPLE POLE AND NEUTRAL**

Men whose business it is to assess and advise are quick to appreciate the very real advantages offered by G.E.C.'s new Hidutac switchfuses. Unlimited full load switching. High breaking capacity. High fault current protection. Absolute safety. These are the performance features that the experts like so much, but they also welcome the smaller size and the good looks of this advanced range of switchfuses. As it is made by G.E.C., they naturally take its reliability for granted.



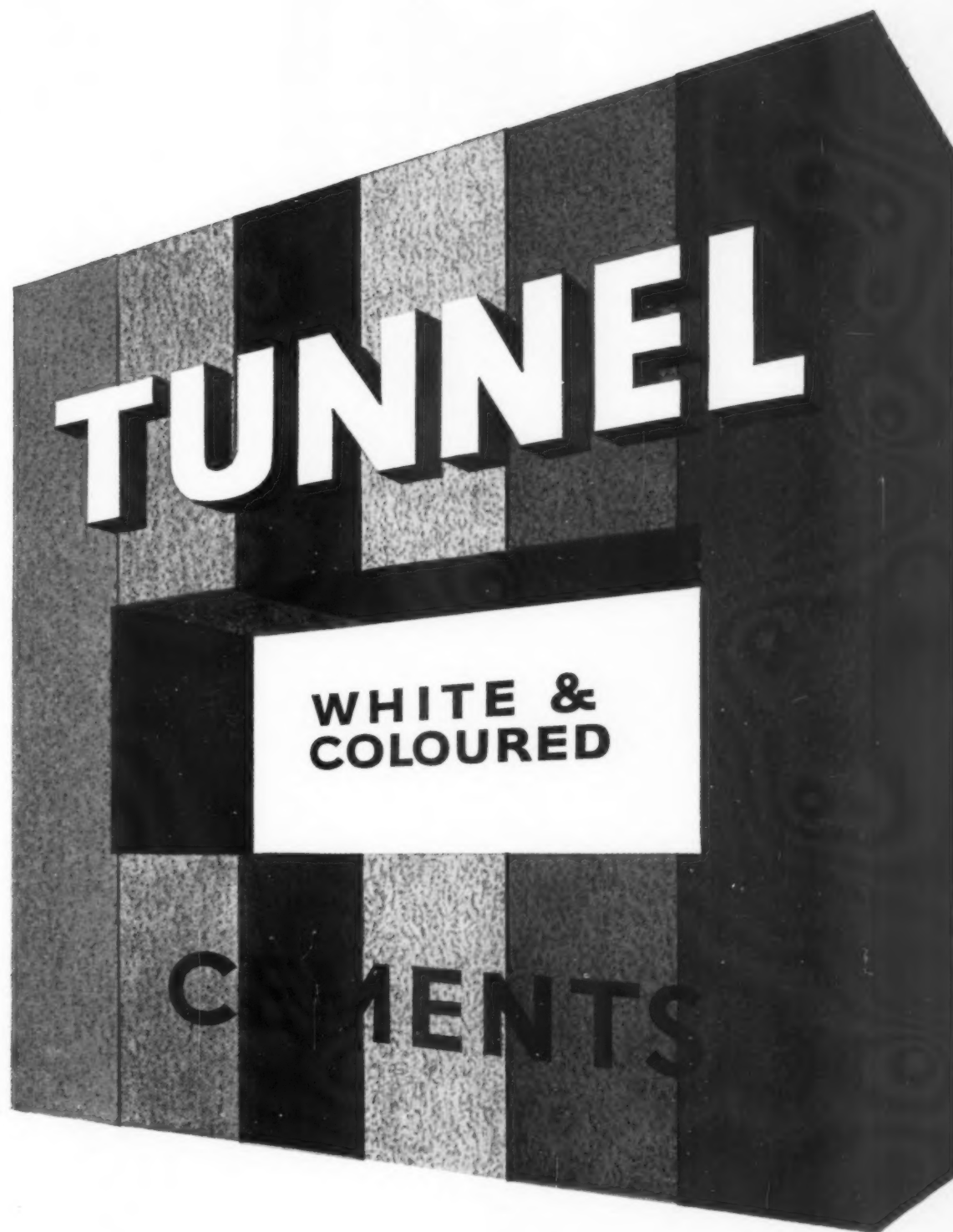
*15, 30 or 60 amp. 440 volt a.c. Single Pole and Neutral, Double Pole, Triple Pole, Triple Pole and Neutral Switchfuses with interchangeable H.R.C. or rewirable fuses.*



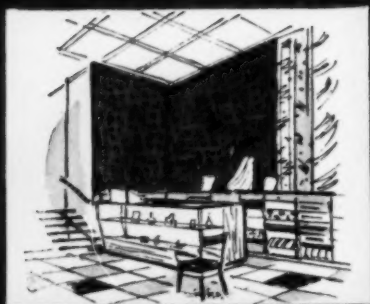
### **INSTALLATION EQUIPMENT GROUP**

**SWITCH AND FUSE GEAR • H.R.C. FUSES • OVERHEAD BUSBARS • RISING  
MAINS • CONDUIT • PIRELLI GENERAL CABLE • CABLE TRUNKING  
UNDER FLOOR CABLE DUCTS • ELECTRIC WIRING ACCESSORIES • BELLS**

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2



THE TUNNEL PORTLAND CEMENT COMPANY LIMITED · 105 Piccadilly, London W.1. GROSVENOR 4100  
CVS-37



## The quiet revolution

Whilst modern interior design has been making its unparalleled strides of recent years, a minor revolution has been taking place quietly in the background. This is the swing to vinyl as a wall covering. Now, with the introduction of Muralionide, this movement has gained rapidly in momentum. Muralionide is the first range of P.V.C. coated fabrics in the country to include patterns on large modular scales designed specifically for use as a wallcovering. It is most durable. Kicks, scratches and general wear and tear make little impression on its tough P.V.C. surface. Fabric-backed, Muralionide is chip-proof, peel-proof and washable. And the colours, fused in under high temperature, are resistant to fading. Yet practical as it is, Muralionide, with its matt finish and thick embossed texture, has the look and feel of luxury.

*(This section contains a list of agents and distributors for Muralionide, including names like J.A.C. Gillingham, J. & J. Gillingham, and others, but the text is too small to transcribe accurately.)*

# MURALIONIDE

vinyl wallcovering

For further information please write to:-  
JAS. WILLIAMSON & SON LTD · LANCASTER





# COLOUR

## the logical use of colour in building no.5

### **glare:**

The influence of the work of some of the leading Continental architects on the use of colours, of different light reflecting qualities, upon the various walls of rooms has been widely used in this country, but the principles of the use of colour in this way have been ill-understood and therefore inevitably abused when attempts have been made to transfer the attractive schemes of decoration often seen in European countries to buildings and rooms throughout the length and breadth of this country.

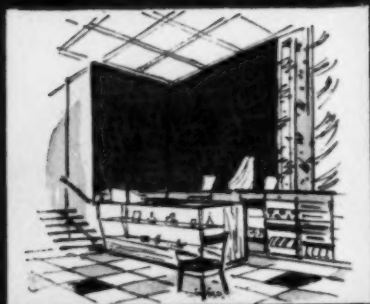
The original purpose of the continental architect was to obtain as nearly as possible equality of light intensity through the room and, at the same time, to reduce contrast to a minimum except where deliberately planned.

The first principle then is to use the lightest colour upon the walls containing the windows and the less light-reflecting colours upon the lightest. In this way equality of illumination by light reflection from the walls can be achieved, and a harmonious surrounding created by the elimination of glare due to violent contrasts. Glare just below the conscious level is a common fault in decoration. By attention to the principles enumerated above such a major fault can be entirely eliminated.

The next announcement in this series will be on "Highlights".

Goodlass, Wall & Co. Ltd., Corn Exchange, Liverpool 2 or 179/185 Gt. Portland St., London W1

# COLOUR



## The quiet revolution

Whilst modern interior design has been making its unparalleled strides of recent years, a minor revolution has been taking place quietly in the background. This is the swing to vinyl as a wall covering. Now, with the introduction of Muralionide, this movement has gained rapidly in momentum. Muralionide is the first range of P.V.C. coated fabrics in the country to include patterns on large modular scales designed specifically for use as a wallcovering. It is most durable. Kicks, scratches and general wear and tear make little impression on its tough P.V.C. surface. Fabric-backed, Muralionide is chip-proof, peel-proof and washable. And the colours, fused in under high temperature, are resistant to fading. Yet practical as it is, Muralionide, with its matt finish and thick embossed texture, has the look and feel of luxury.

# MURALIONIDE

vinyl wallcovering

For further information please write to:-  
JAS. WILLIAMSON & SON LTD - LANCASTER

# COLOUR

## the logical use of colour in building no.5

### **glare:**

The influence of the work of some of the leading Continental architects on the use of colours, of different light reflecting qualities, upon the various walls of rooms has been widely used in this country, but the principles of the use of colour in this way have been ill-understood and therefore inevitably abused when attempts have been made to transfer the attractive schemes of decoration often seen in European countries to buildings and rooms throughout the length and breadth of this country.

The original purpose of the continental architect was to obtain as nearly as possible equality of light intensity through the room and, at the same time, to reduce contrast to a minimum except where deliberately planned.

The first principle then is to use the lightest colour upon the walls containing the windows and the less light-reflecting colours upon the lightest. In this way equality of illumination by light reflection from the walls can be achieved, and a harmonious surrounding created by the elimination of glare due to violent contrasts. Glare just below the conscious level is a common fault in decoration. By attention to the principles enumerated above such a major fault can be entirely eliminated.

The next announcement in this series will be on "Highlights".

Goodlass, Wall & Co. Ltd., Corn Exchange, Liverpool 2 or 179/185 Gt. Portland St., London W1

# COLOUR





# age-old materials . . . modern methods



ASBESTOS



BITUMEN

Years of research have been spent in perfecting the combination of these materials and in developing the technique of manufacture and application of this modern roofing material . . . NURALITE.

With the ever increasing demand for Nuralite, we have substantially increased our technical representation . . . ensuring the maximum service to the many Nuralite stockists in nearly every town throughout the country.



## *Nuralite*

**SUPERSEDES CONVENTIONAL ROOFING METALS**



Please enquire at your nearest builders' merchant for full details or write direct to the Nuralite Company Limited for our nearest Regional Office. **POST THIS COUPON TODAY**

NAME .....

ADDRESS .....

THE 'NURALITE' COMPANY LTD., WHITEHALL PLACE,  
GRAVESEND, KENT.

*One of the British Uralite Group of Companies*

AJ2

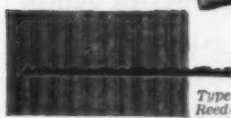


# TYPE 'A' (LINENFOLD) MOULDED HARDBOARD

*Now  
Available*  
**LONG AND  
CROSS  
MOULDED**



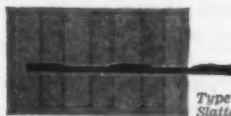
Type 'A'  
Linenfold



Type 'B'  
Reed and  
Bead



Type 'C'  
Striated



Type 'D'  
Slatted



Type 'E'  
Close Slatted



Type 'G' Wide Slatted

Type 'F' Tiled (4" Tiles)



Type 'H' 2" Corrugated



With its attractive design and exceptional strength, L.W. Type 'A' Moulded Hardboard is ideal for interior fitting and decorating of every description in home and office, shop and exhibition.

Now available with pattern running the 9' way or the 4' way, L.W. Type 'A' Linenfold gives greater scope for decorating and fitting than ever before.

L.W. Type 'A' is one of eight different types of L.W. Moulded Hardboards—all of which have the many advantages of L.W. Swedish Hardboard.

Available in sheets 9' x 4',  $\frac{1}{8}$ " thick.  
L.W. Moulded Hardboards are effective either in their rich natural colours, or painted.



## MOULDED HARDBOARDS

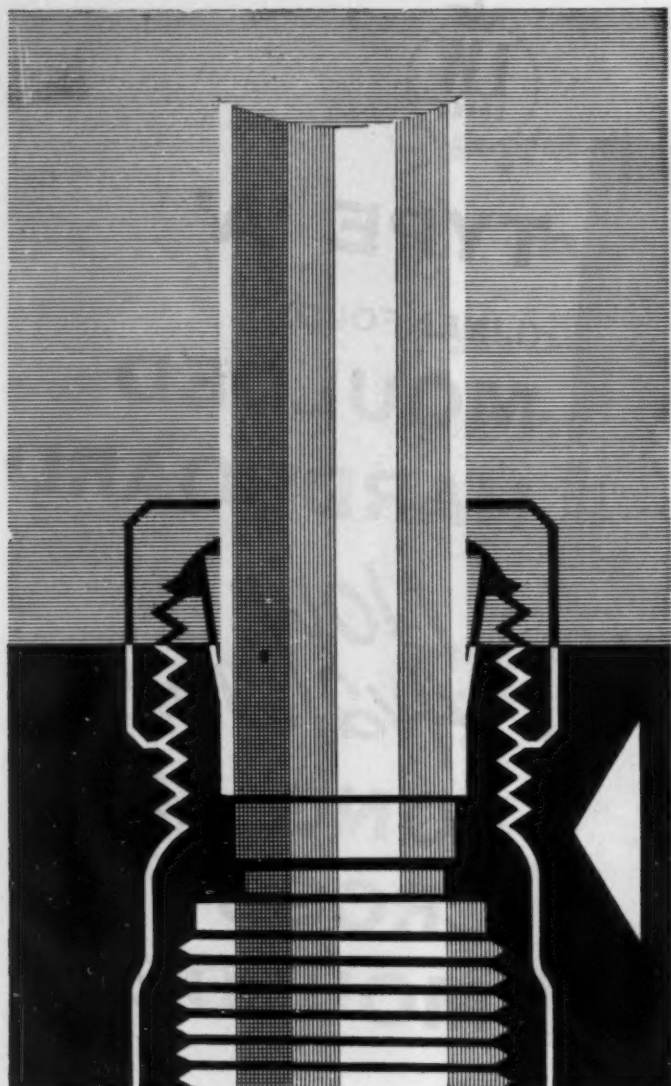
Manufactured by:

MESSRS. LJUSNE-WOXNA A.B., SWEDEN

Write for full details today to sole agents for U.K. (excluding Northern Ireland):

MESSRS. MARTIN OLSSON (FIBREBOARDS) LTD.,

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



Where  
the  
twain  
do  
meet

Top quality-low price

— in 'Prestex' Compression Joints

Did you know that high quality 'Prestex' Compression Joints *cost less* than any other comparable joint? This means you can keep your plumbing costs down wherever copper or polythene tubing is used, and yet be sure that the finished job conforms to the highest standards.

Have you got your copy of the new 'Prestex' Catalogue and noted the remarkably low prices? These are only made possible because Peglers have greatly increased their production to meet steadily growing demand... Fine Pegler craftsmanship, plus modern large-scale production—equals top quality at low price!

**Points worth noting** • 'Prestex' joints are simple to assemble • They can be fitted with a spanner • Joints can be made and re-made with the same copper cone • They are completely safe—do not weaken the copper tube nor restrict the bore.

Send for the New 'Prestex' Catalogue now

TO: PEGLERS LIMITED  
PRESTEX HOUSE, MARSHALSEA ROAD, LONDON S.E.1

Please send a free copy of your new Prestex Catalogue to:

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

A3



**PEGLERS LIMITED, BELMONT WORKS, DONCASTER**

ALSO AT 28 THORP STREET, BIRMINGHAM 5  
London Office and Warehouse: Prestex House, Marshalsea Rd., S.E.1

TGA 67



# COLT *Canadian Cedar Wood* SHINGLES



Colt supplied and fixed the shingles for these attractive houses for the Guildford Corporation at Merrow.

ADDING SHINGLES to new style walls is an old well-tried method of providing a distinctive elevation. Colt Canadian Cedar Wood Shingles weather to a pleasant silver grey. Nailed to battens on brick, breeze or timber studding, the construction is both economical and completely weatherproof.

The high thermal insulation of Western Red Cedar makes Shingles a valuable addition to the range of modern cladding materials available to the Architect. Fixing is extremely simple but, for those who prefer it, Colt can offer an efficient fixing service.



Send for full details to Dept:— 135

**W. H. COLT (LONDON) LTD., SURBITON, SURREY**

Telephone: ELMbridge 6511 (10 lines)



Fixing can also be undertaken if required.



## ***No Guesswork***

at Colneside Works, West Drayton. Control of noise is an exact Science these days—we know because we practise it. Few Architectural or Industrial noise problems now exist for which an acoustically correct solution cannot be found. We know because we find them—and what is more, we warrant the results. Yet how many of our otherwise enlightened Architects or Industrialists know this simple truth, or realise just how much modern Acoustic Engineering can in fact achieve? Do you? If you are saddled with a noise problem and we of Sound Control Limited, at West Drayton, 3685, are sitting on the answer, why read further?

*A Member of the Hall—Thermotank Group*



## Once again, SKIRTING HEATING by Crane



HEATING ENGINEERS: Raines (H & V) Ltd., Wakefield, Yorks.  
BUILDING CONSTRUCTION: Montague Burton Construction Co. Ltd., Leeds.

The new Montague Burton shop in Kirkgate, Wakefield, has been planned on the most modern lines. And one of its most contemporary features is the Crane Skirting Heating system that has been installed. This offers enormous advantages for any modern building. It is inconspicuous, merely taking the place of the normal skirting. It does not take up valuable floor area—it heats evenly. Radiant/Convactor type 9 inch panels were installed throughout together with No. 3 Series 'L' Whitehall Cast Iron Sectional Boiler—oil burning. The other type of Crane Skirting Heating is Type R (Radiant) which has recently been made available in the 9-inch size as well as the 6-inch size. The panels are in 2-foot and 1-foot lengths, are made of cast iron and will not buckle or yield under the most arduous duty.

# CRANE

**SKIRTING HEATING, BOILERS,  
RADIATORS, VALVES & FITTINGS**

CRANE LTD., 15-16 RED LION COURT, FLEET STREET, LONDON, E.C.4. Works: IPSWICH  
Branches: Birmingham, Brentford, Bristol, Glasgow, Leeds, London, Manchester





## Illuminated Display Stand

constructed  
basically with

**VIZUSELL**

Write now for details  
of this WORLD-WIDE  
System of suspension

### VERSATILE FITTINGS (WHS) LTD.

10 New Fetter Lane, London, E.C.4  
FLEET STREET 3501

### MANCHESTER:

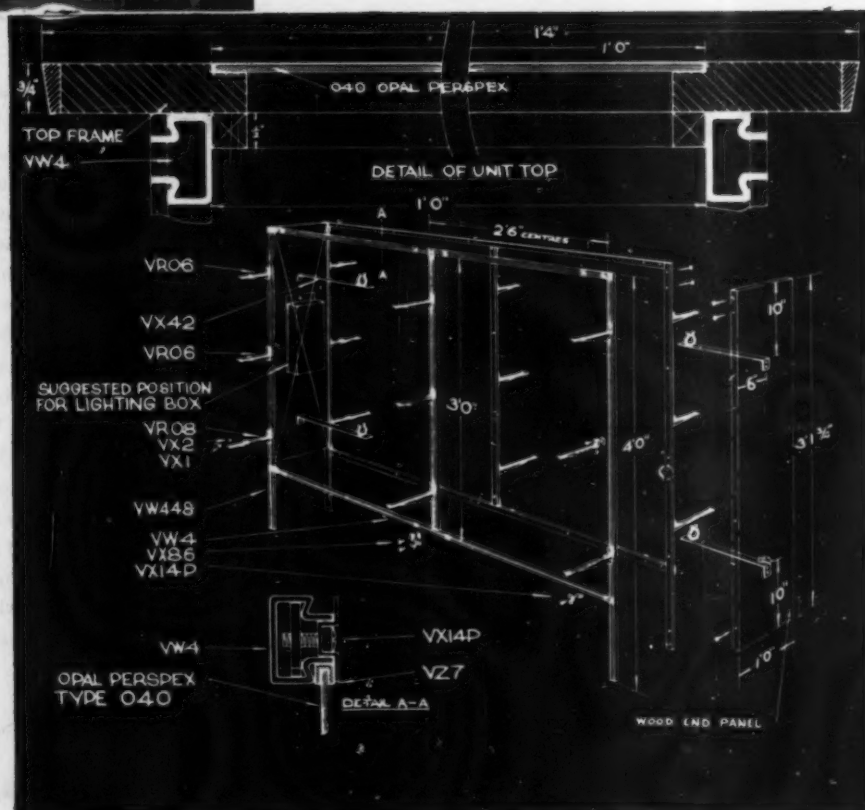
33 BLACKFRIARS STREET,  
MANCHESTER.  
Phone: Deansgate 2564.

### BRISTOL:

HERBERT HOUSE,  
TEMPLE GATE,  
BRISTOL 1.  
Phone: Bristol 28215.

### GLASGOW:

GRAHAM & WYLIE LTD.  
MILL STREET,  
BRIDGETON, GLASGOW.  
Phone: Bridgeton 4831.



ONLY YOUR IMAGINATION LIMITS THE USES OF

**VIZUSELL**



**Put more  
offices here!**

A tough problem? Yes, but  
there's a simple solution... contact  
British Plaster Board. They have the answer  
to the problem of making maximum use of existing  
space. In fact they've written a booklet on the subject.  
Send for your copy NOW!

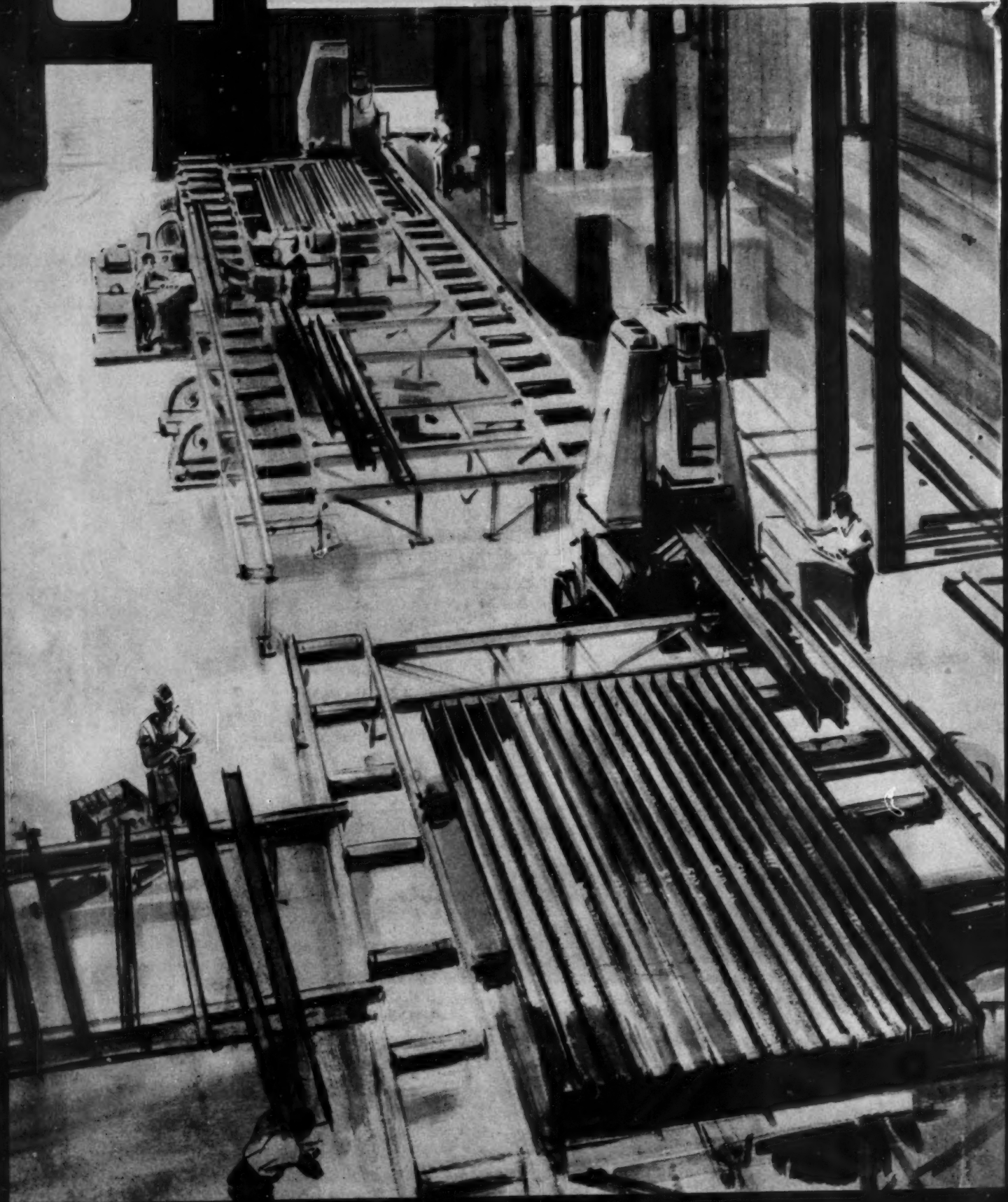


**THE BRITISH PLASTER BOARD (Manufacturing) LTD.**  
FERGUSON HOUSE, 15/17 MARYLEBONE ROAD, LONDON, N.W.1

AP 21/8

# S & F

## STANDARD STEEL-FRAMED





# BUILDINGS *COST LESS* BECAUSE...

...a completely mechanised fabricating technique reduces costly manhandling of materials...reduces labour requirements...keeps work flowing smoothly and fast... makes *big* savings in production costs—*savings that are passed on to the purchaser.*

## WIDE RANGE OF TYPES AND SIZES

Tied portal, Clearportal, Crane and Sawtooth (northlight) buildings are available, each type being produced in a wide choice of spans and heights... a comprehensive range of buildings designed to serve almost every industrial requirement.

## ADAPTABILITY, SPEED AND SIMPLICITY

S & F buildings are *permanent* structures and can be extended on all sides as and when the need arises. Frame spacing of 20ft. reduces foundation and maintenance costs... speeds erection.

S & F Unified Site Control is an all-embracing service covering steel erection, cladding and insulation by SANDERS & FORSTER'S own skilled teams—a service that ensures *completion on time.*

S & F standard buildings are being erected at the rate of  $2\frac{1}{2}$  million square feet each year, serving industrial activities in the United Kingdom and overseas territories in widely varying climatic conditions.

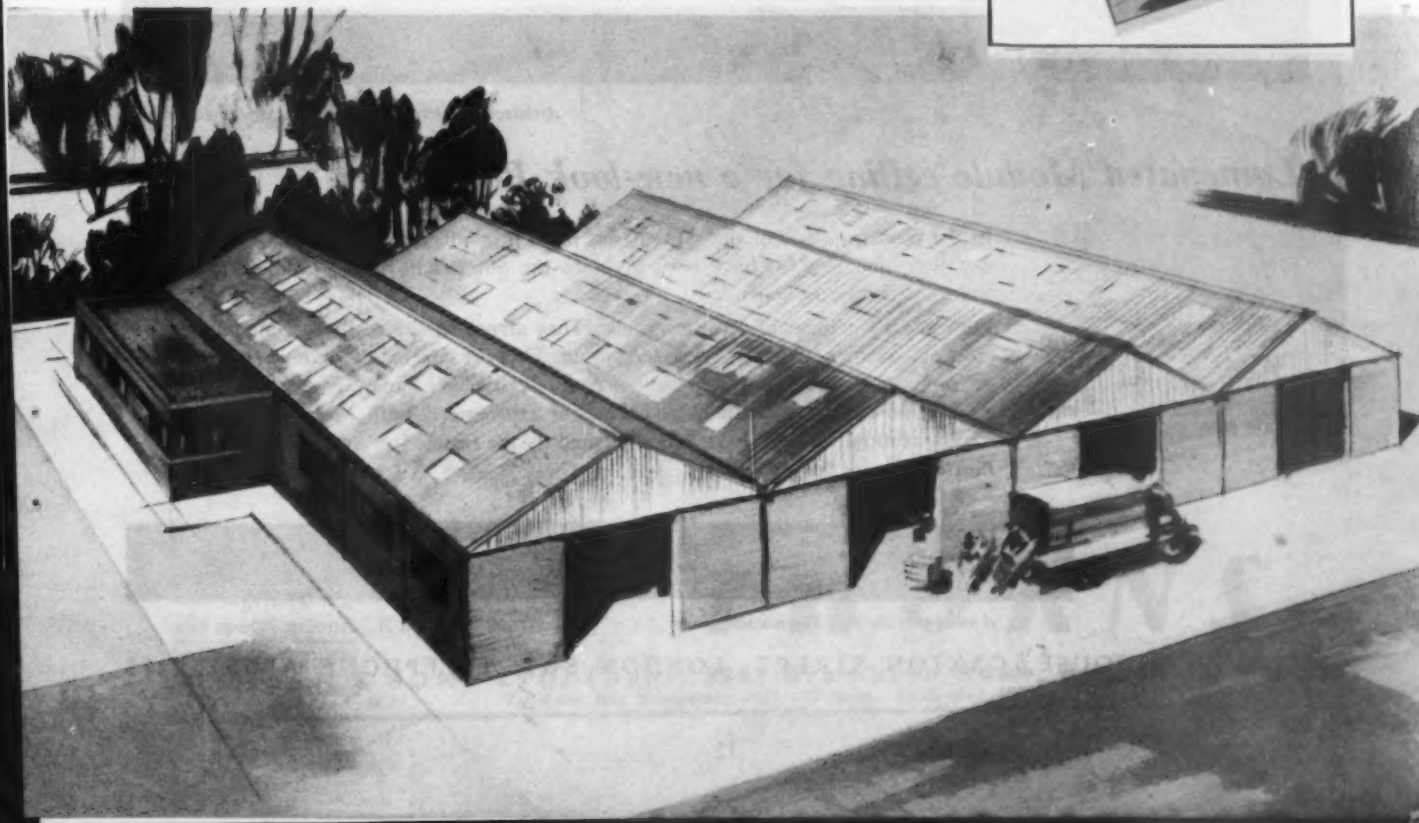
**SANDERS & FORSTER**  
LTD

(DEPT. AJ14) 3 BUCKINGHAM PALACE GARDENS, LONDON, S.W.1.

Telephone: SLOane 0833 (10 lines). Cables: Sanforsted, London

ONE OF THE CHAMBERLAIN GROUP OF COMPANIES

This brochure illustrates how S & F buildings can solve factory accommodation problems quickly, permanently and at low cost. Have you had a copy?



## The ceiling that lights



*Architects: Architect's Department, Ministry of Works.*

### ***Lumenated Module ceiling for a new-look Post Office***

In the modernisation of the 50-year-old main post office at Eastbourne, Sussex, new light and new life have been given to the public hall by the installation of Lumenated Module units.

Lumenated Ceilings are precision made. They arrive on site ready for immediate erection—using a minimum of skilled labour. They are covered by a comprehensive guarantee and a full maintenance service is provided. Expert co-operation on design and installation can be given by our experienced staff. Most Lumenated Ceilings diffuser designs have been accepted by the Council of Industrial Design. Please write for full details.

**LUMENATED CEILINGS LIMITED**

*A member of the Hall-Thermostat Group*

**ALLIANCE HOUSE, CAXTON STREET LONDON SW1. TELEPHONE ABBEY 7113**

TDA 191

SOME EXAMPLES OF  
FINE TIMBER BUILDINGS

*Pavilions*  
*Clubs*  
*Schools*  
*Libraries*  
*Shops*  
*Hospitals*  
*Offices*  
*Canteens*  
*Showrooms*  
*Estate Offices*



CLUB HOUSE. 80ft. by 40ft.

Photograph by courtesy of Harts Holiday Club, Leysdown, Isle of Sheppey.



TEMPORARY SHOPS

Photograph by courtesy of The City Architect, City of Exeter.



TEMPORARY SERVICES BLOCK 150ft. by 30ft. for SALISBURY CATTLE MARKET

Photograph by courtesy of The City Engineer, City of New Sarum.

Full details of these buildings, and all Thorns Building Systems, are shown in their New Catalogue which is unique, in that it gives at a glance, sizes, prices, plans and specifications. It is available, free, to bona fide enquirers.

**J. THORN & SONS LTD. (Dept. 188) Brampton Road, Bexleyheath, Kent**  
Telephone No: Bexleyheath 0021 (10 lines). Established 1896.

PRE-FABRICATED BY

**THORNS**



# MOISTOP

TRADE MARK

POLYTHENE  
COATED

## REINFORCED MOISTURE VAPOUR BARRIER

MOISTOP — is a SISALKRAFT product reinforced with unspun sisal fibres in the longitudinal and cross directions. The fibres are totally enclosed by two layers of high grade bitumen, which in turn are faced with tough, kraft paper, and one surface is coated with a layer of POLYTHENE.

The result of this combination is an effective MOISTURE VAPOUR BARRIER that combines the strength of SISALKRAFT with the virtues of POLYTHENE.

### APPLICATIONS

- Sarking under tiles and slates
- Moisture barrier in timber frame construction
- Under timber floors
- Moisture and air stop in walls
- Underlay to concrete
- Separation layer between concrete
- Curing concrete
- Form lining
- Protection from frost
- Temporary tarpaulin

A PRODUCT OF BRITISH SISALKRAFT LTD

Information and samples from the

SOLE DISTRIBUTORS

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

Established over a Century

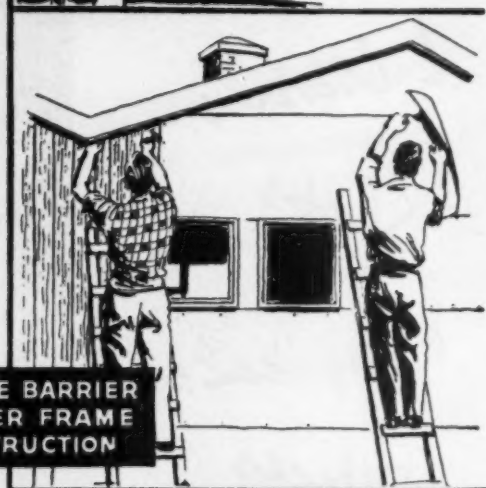
ESSEX WORKS · RIPPLE ROAD · BARKING · ESSEX

Phone: DOMinion 6886

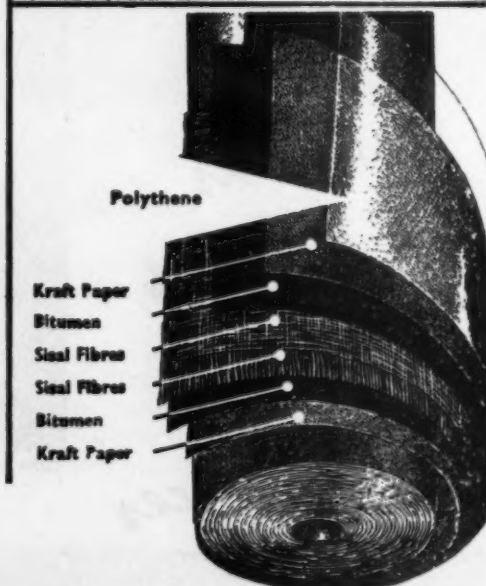
GRAMS: Brickwork Barking



SARKING UNDER  
TILES AND SLATES



MOISTURE BARRIER  
IN TIMBER FRAME  
CONSTRUCTION



Polythene

Kraft Paper

Bitumen

Sisal Fibres

Sisal Fibres

Bitumen

Kraft Paper



Joining Chemidus pipe by means of a special cemented socket and spigot joint developed by Chemidus Plastics Limited.

Four 20 foot lengths of Chemidus pipe being carried on to the site.



## British Railways, Eastern Region specify corrosion-free 'Chemidus' water pipes made from 'Corvic'—I.C.I. vinyl polymer



Corrosion resistant 'Chemidus' 2" pipe made from 'Corvic' vinyl polymer lowered into its trench after jointing at new carriage sidings near Vauxhall Station, Great Yarmouth. The pipe was made by Chemidus Plastics Limited, Progress Way, Purley Way, Croydon, for British Railways, Eastern Region.

When British Railways, Eastern Region built new carriage sidings near Vauxhall Station, Great Yarmouth, 1300 feet of 2 inch water pipe had to be laid. To avoid the risk of corrosion and simplify the job, they specified pipes made by Chemidus Plastics Limited from 'Corvic' I.C.I. vinyl polymer.

As the photograph above shows, these pipes were light enough for four, 20 foot lengths, to be carried by two men with ease. They were cemented together quickly—each joint took about five minutes. Some standard compression fittings were also used, and the whole pipe line, being fairly flexible, was assembled

before being lowered into the trench. On other sites this flexibility has been used to negotiate long radius bends without the usual 'specials'.

Chemidus Plastics Limited, like so many other large users of vinyl polymer, know that in specifying 'Corvic' they are drawing on the results of years of research into vinyl polymers at I.C.I. They are also assuring themselves and their customers of the continued advice and assistance of the finest plastics technical service in the world.

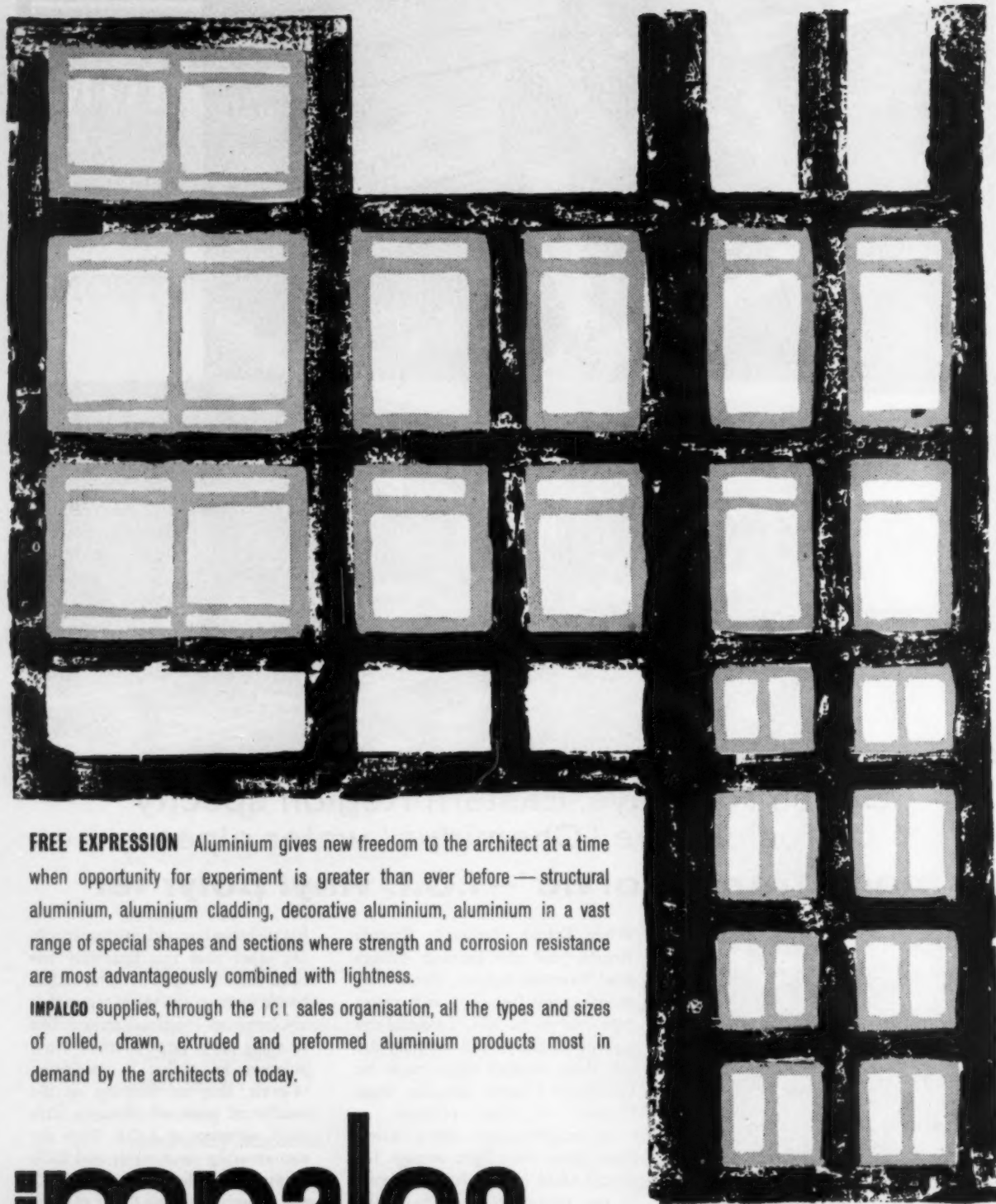
**'CORVIC'**



'Corvic' is the registered trade mark for the vinyl polymers manufactured by I.C.I.

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

PC49



**FREE EXPRESSION** Aluminium gives new freedom to the architect at a time when opportunity for experiment is greater than ever before — structural aluminium, aluminium cladding, decorative aluminium, aluminium in a vast range of special shapes and sections where strength and corrosion resistance are most advantageously combined with lightness.

**IMPALCO** supplies, through the ICI sales organisation, all the types and sizes of rolled, drawn, extruded and preformed aluminium products most in demand by the architects of today.

**impalco**  
 **aluminium**

*Imperial Aluminium Company Limited · Birmingham*





# SPANBOARD



MANUFACTURED BY

**THE ULSTER CHIPBOARD  
COMPANY LIMITED**

**COLERAINE, NORTHERN IRELAND**

**THE ONLY HOMOGENOUS GRADED - DENSITY WOOD  
CHIPBOARD MANUFACTURED IN THE BRITISH ISLES**

*FOR FULL DETAILS APPLY:*

**HARRISONS & CROSFIELD LTD.**

**1/4 GREAT TOWER STREET, LONDON, E.C.3**

**THE ULSTER TIMBER COMPANY, BELFAST, NORTHERN IRELAND.**

## MORRIS FOR TEAK

Importing and handling genuine *Tectona Grandis* is essentially a specialists' field, calling for a wide range of stocks, from the smallest short scantling to the 25 ft. fitch.

*We are such specialists.* We have very long experience of selecting to users' specifications with careful regard to lowest price and waste factor. Our service is just as complete for one piece as for a bulk shipment.

M·A·MORRIS·LTD



Ravensdale Wharf, Stamford Hill

London, N.16. Tel: STAMFORD HILL 0611



reliable hardwoods:

MAHOGANY, TEAK

IROKO, AFRORMOSIA

What are those  
keyholes for?





Charles' "keyholes" are in fact part of the ingenious new Metsec Macomber V-Lok structural system. It can be used in conjunction with all types of Metsec Joists. V-Lok provides rigid construction, without bolts, rivets or welding with a consequent reduction in building time from weeks to days.

*The V-Lok structural system manual is being prepared  
Reserve your copy NOW!*

METAL SECTIONS LTD

**OLDBURY • BIRMINGHAM • Telephone: BROadwell 1541**

PLEASE SEND 'JOISTS' CATALOGUE (CAJ)

NAME.....

POSITION .....

COMPANY ADDRESS .....

.....

.....





**NEWAY**

## **THE FLEXIBLE DOOR**

has more than proved its value,  
manufactured after extensive tests  
this super quality door is not the  
cheapest, but a product worthy of  
specification, and is already in use  
in factories and industry through-  
out the world. If you have a door  
problem, Neway Flexible Rubber  
Doors could well be the answer.  
May we invite you to send for full  
Specification Sheets.

*Rubber panels made by*

**DUNLOP**

*Rubber Company Limited*

**NEWAY**

## **FLEXIBLE RUBBER DOORS**

*See Neway Flexible Doors at the Building Centre, 26 Store Street,  
London, W.C.1. or write for free leaflet to the Manufacturers.*

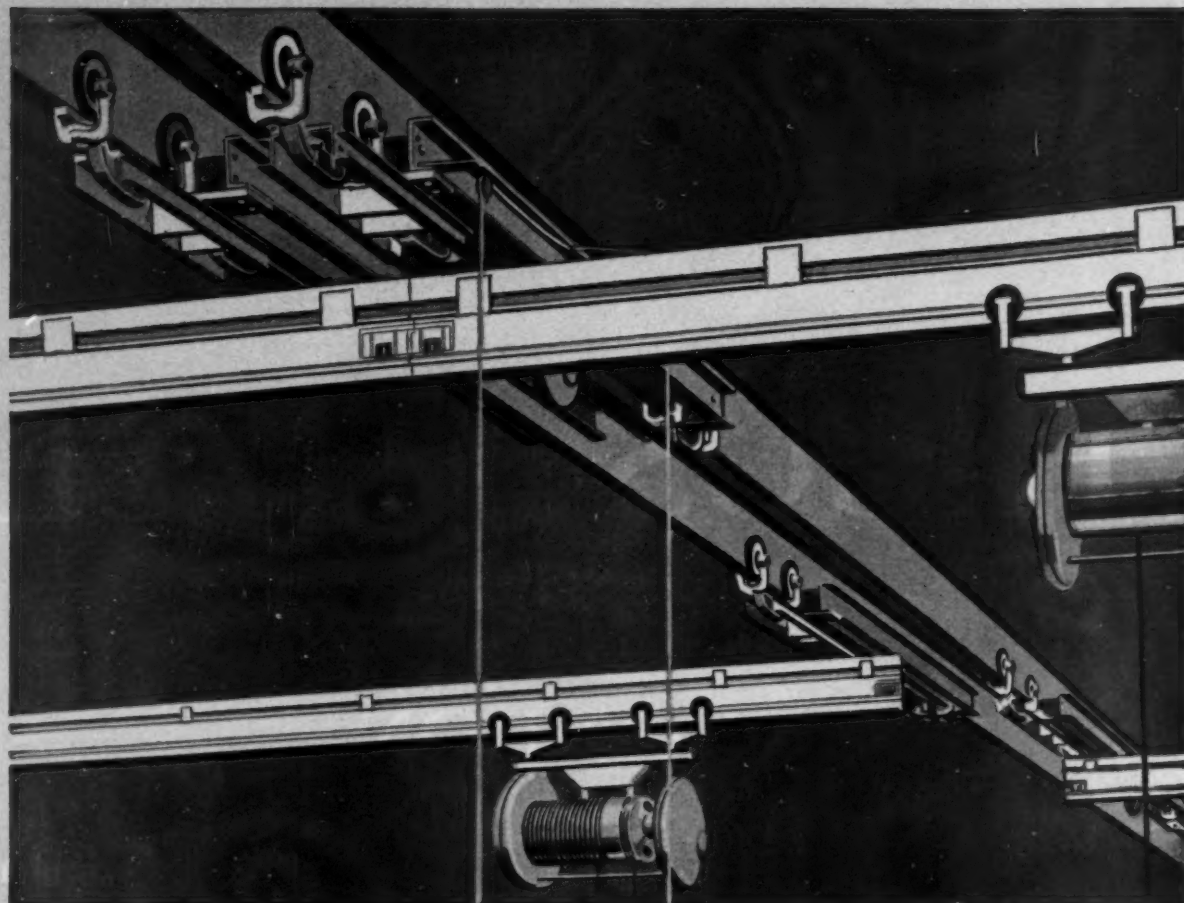
**WILLIAM NEWMAN & SONS LTD. (Dept. AJ8), HOSPITAL STREET, BIRMINGHAM 19**

HIGGS <sup>AND</sup> HILL  
LIMITED

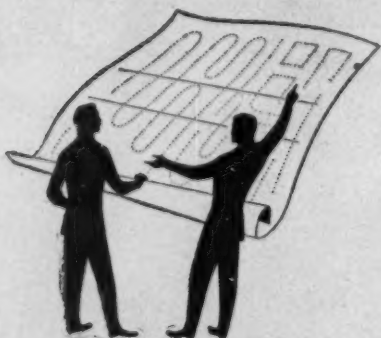
LONDON

LEEDS

COVENTRY



## Unobstructed movement **OVERHEAD** with underslung interlocking cranes



*After a survey of your plant, we produce a tailor-made plan. This and the estimate are free.*

Underslung interlocking bridge cranes in the MonoRail System give extreme flexibility of movement overhead. One lifting hook can cover an entire factory floor, and loads of up to 5 tons can be moved and set down to order. The special 'latch bolt' design of the cranes ensures the safe, efficient and simple transit of trolley wheels across connecting interlocks. Further, bridges can be interlocked at every point with spur tracks of MonoRail for transferring loads beyond the factory area into store, or to and from despatch bays.

**More advantages of MonoRail.** All materials and track especially developed for the job. Rubber-tyred crane drive eliminates track wear. Standard track flange width.

**A complete overhead system.** Interlocking bridge cranes are only part of the complete MonoRail handling and transfer system which can be tailored for almost every overhead handling need and any size of floor space.

**IF YOU WANT TO GET A MOVE ON**

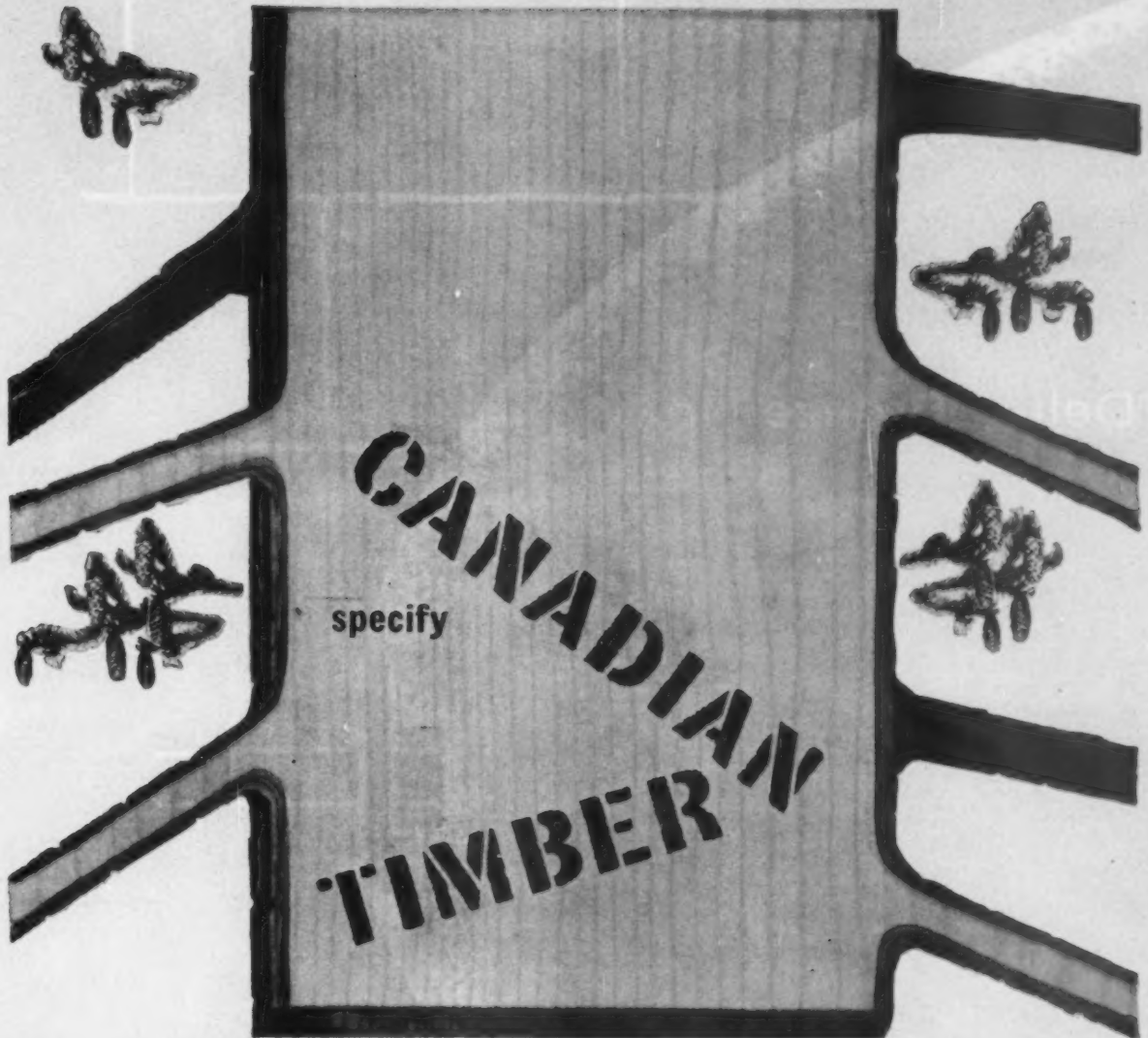
## Send for the man with the **MONORAIL** plan

**BRITISH MONORAIL LIMITED • WAKEFIELD ROAD • BRIGHOUSE • YORKS • TELEPHONE: BRIGHOUSE 2244**

*Members of the Herbert Morris Group of Companies*

TGA 5H7





### **Spruce**

Canadian spruce is prized for its light weight and resilience. It is soft of texture and even of grain. It handles easily, takes a smooth finish and holds nails well. When properly seasoned, it will not warp, twist or check. These properties strongly recommend Canadian spruce for light and medium construction work, boat building, case-making, scaffold planks, aircraft manufacture, musical instruments and many other purposes. *For further information, contact The Commercial Secretary (Timber), Canada House, London, SW1*



Construction framing  
with tough  
resilient Canadian  
spruce

## "Delta" Bronze No.IV

*For the Bronze Age and  
the Modern Architect*

"Delta" Bronze No.IV is a new alloy of copper and tin, which has been specially developed for the modern architect. It is a strong, tough, and highly resistant material, which is also highly decorative. It is suitable for the repair and replacement of old buildings, and for the construction of new buildings. "Delta" Bronze No.IV is a highly resistant material, which is also highly decorative. It is suitable for the repair and replacement of old buildings, and for the construction of new buildings.

for restoration or new construction.

Maximum resistance  
to corrosion

Excellent as  
a building material

Excellent for wall  
coverings

High tensile  
strength

Does not  
corrode

Excellent adhesion  
to concrete

Does not discolor  
with age

Readily forgeable



Cap of pinnacle at Houses of Parliament  
split by corrosion of iron centre rod (after-  
wards replaced with "Delta" Bronze No.IV).

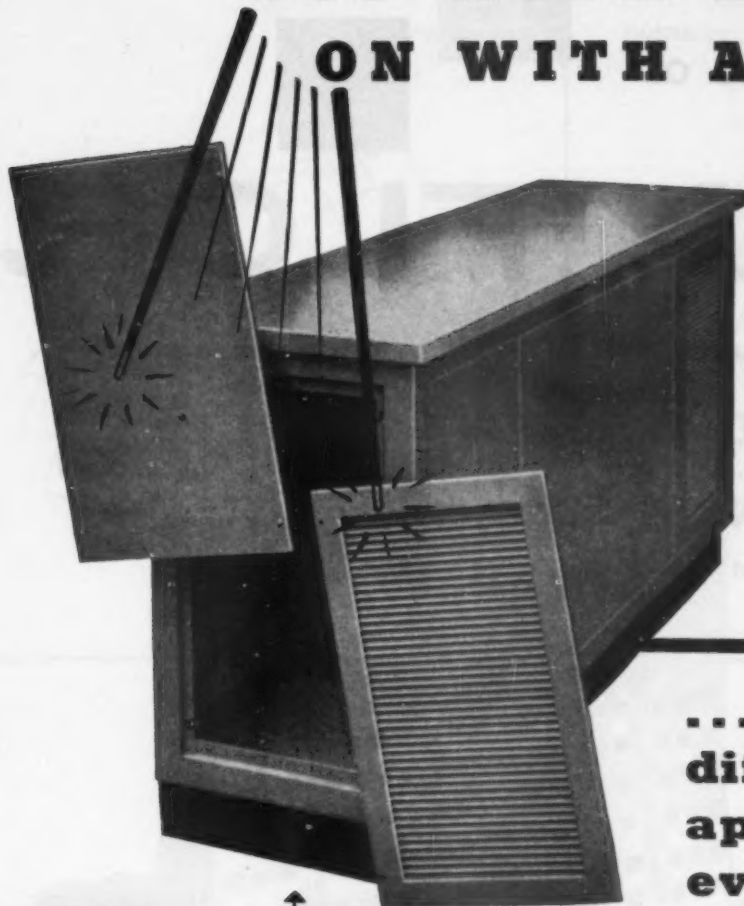
**The Delta Metal Company Limited**

TUNNEL AVENUE, EAST GREENWICH, LONDON S.E.10

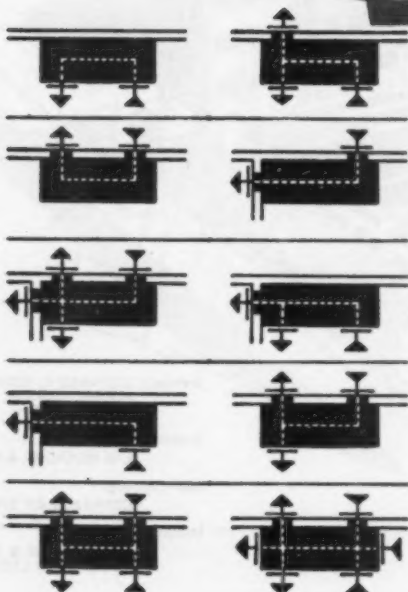
Telephone: Greenwich 0123

Telegrams: Delta London SE10

**OFF WITH A PANEL...  
ON WITH A GRILLE...**



**...a completely  
different  
application  
every time**



A recent addition to the "Tempaflex" range, the CONSOLE offers plenty of scope for shrewd design... its construction allows for adaptation *on site* if necessary. As a standard unit the CONSOLE is intended for incorporation into all types of building fitment—library bookcase, laboratory bench, isolated table or counter—with a wide choice of inlet and discharge arrangements. By the provision of additional grilles, panels and spigots, one unit can be used to heat one, two, even three rooms either as a fitment or as a concealed unit.

Fitted with the Flexaire "Mute" variable-speed motor and fan, *new* high efficiency heater coils, quick-release panels for ease of inspection—the CONSOLE is a big step forward in convection heater design.

*Please send for further details*

**The FLEXAIRE Console  
is Britain's most adaptable  
Forced Convector Unit**

**FLEXAIRE LTD** 268/270 VAUXHALL BRIDGE ROAD, LONDON, S.W.1 • Tel: VICtoria 2006  
BRANCHES AT: BIRMINGHAM • GLASGOW • MANCHESTER • NEWCASTLE • BRISTOL • BELFAST



## "Delta" Bronze No. IV

### The Bronze Age and Modern Architecture

The Bronze Age began in the 19th century with the introduction of "Delta" Bronze No. IV, which has been at the forefront of design and high performance ever since. It has been used for a wide range of applications, from the repair and restoration of ancient buildings to the construction of modern structures. A century later, "Delta" Bronze No. IV is still extensively used in the most demanding and increasingly used, modern architecture, for new buildings and the restoration of old buildings. It is a versatile material, suitable for all kinds of work, and its use is growing steadily.

for restoration or new construction.

Maximum resistance to corrosion

Resistant to acid fumes

Resistant to salt laden air

High tensile strength

Stable in colour

Excellent adhesion to concrete

Does not draw verdigris

Readily forgeable



Cap of pinnacle at Houses of Parliament split by corrosion of iron centre rod (afterwards replaced with "Delta" Bronze No. IV).

**The Delta Metal Company Limited**

TUNNEL AVENUE, EAST GREENWICH, LONDON S.E.10

Telephone: Greenwich 0123

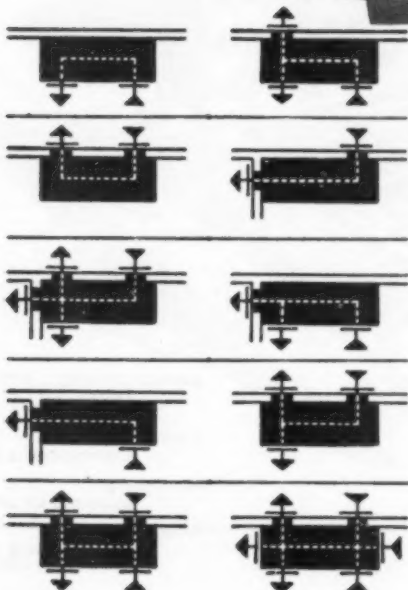
Telegrams: Delta London SE10

SH/DO, DIN 6118

# OFF WITH A PANEL... ON WITH A GRILLE...



**...a completely  
different  
application  
every time**



A recent addition to the "Tempaflex" range, the CONSOLE offers plenty of scope for shrewd design... its construction allows for adaptation *on site* if necessary. As a standard unit the CONSOLE is intended for incorporation into all types of building fitment—library bookcase, laboratory bench, isolated table or counter—with a wide choice of inlet and discharge arrangements. By the provision of additional grilles, panels and spigots, one unit can be used to heat one, two, even three rooms either as a fitment or as a concealed unit.

Fitted with the Flexaire "Mute" variable-speed motor and fan, new high efficiency heater coils, quick-release panels for ease of inspection—the CONSOLE is a big step forward in convection heater design.

*Please send for further details*

**The FLEXAIRE Console  
is Britain's most adaptable  
Forced Convector Unit**

**FLEXAIRE LTD** 268/270 VAUXHALL BRIDGE ROAD, LONDON, S.W.1 • Tel: VICtoria 2006  
BRANCHES AT: BIRMINGHAM • GLASGOW • MANCHESTER • NEWCASTLE • BRISTOL • BELFAST

3,715 SQUARE YARDS OF

# POLY-FLOOR

were specified for the new  
**DOMESTIC AND TRADES  
COLLEGE, MANCHESTER**

Polyflor, probably the most practical vinyl flooring in the world, was chosen to withstand the hard wear in the teaching rooms and other important areas in this most interesting building project.



Architect: LEONARD C. HOWITT,  
M.Arch., Dip.T.P., D.P.A.,  
F.R.I.B.A., M.T.P.L.

Consulting Civil Engineers:  
L. G. MOUCHEL & PARTNERS

Main Contractor:  
GERRARDS OF SWINTON

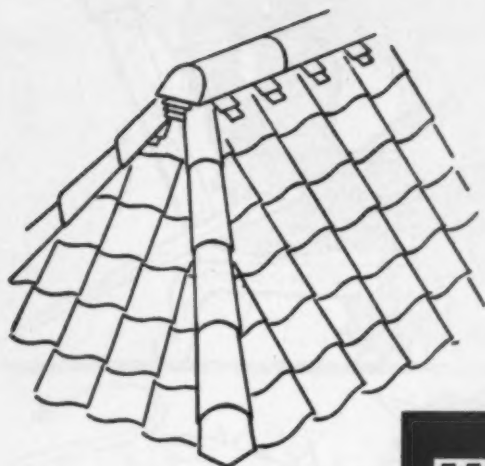
Flooring Contractor:  
ROBERT KERR & SONS  
(FLOORINGS) LTD.

Architects and Building Contractors are invited to  
get in touch with our Contracts Manager: Leslie Jennings

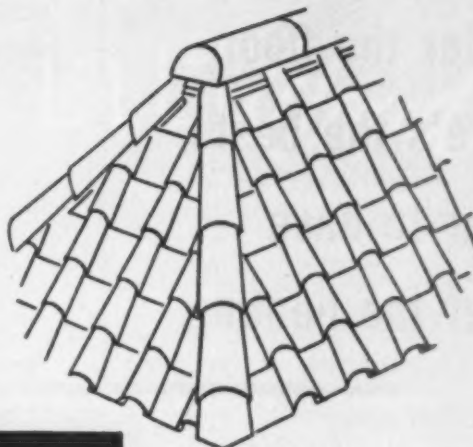
**James Halstead Limited, Crow Oak Works, Whitefield, Manchester**



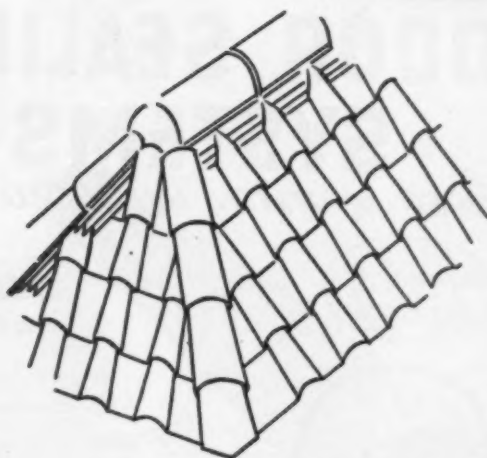
PANTILES



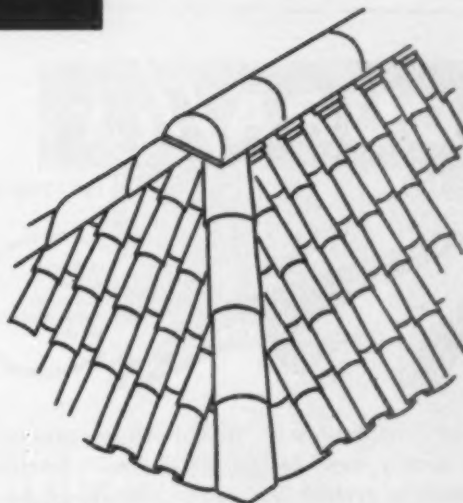
ROMULUS



# TILES by WHEATLY



MILAN



SEVILLE

WHEATLY



triton

WHEATLY & COMPANY LIMITED

SPRINGFIELD TILERIES, TRENTVALE, STOKE-ON-TRENT

Tel: NEWCASTLE (STAFFS) 66251/66252

GRAMS: WHEATLY, TRENTVALE

Illustrated are the 4 patterns of our hand-made clay roofing tiles, all of which are available in red, medium brindled and stained green. Full details, samples and prices of any of these tiles (and fittings) will be sent on request.

Specimens of Wheatly 'triton' floor quarries, air bricks and single-lap roofing tiles may be seen at the Building Centre, London. Other products include ridge tiles (blue and red) and briquette fireplaces.

WH107

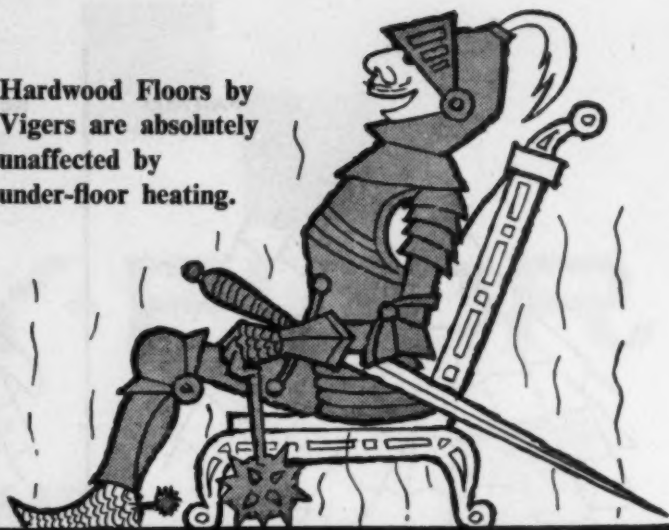
When the heating's  
under the floor—  
here's the best  
floor to have  
over the heating

There's nothing  
to touch a **VIGERS**  
HARDWOOD FLOOR

We hold large stocks of many different hardwoods  
seasoning in our yards.

MANUFACTURED AND LAID BY  
**VIGERS**

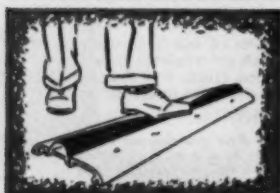
Hardwood Floors by  
Vigers are absolutely  
unaffected by  
under-floor heating.



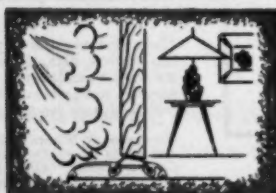
Write for leaflet AH  
VIGERS BROS LTD., Ludgate Broadway, London, E.C.4. CITY 2111  
AND AT BELFAST - EXETER - CARDIFF - BIRMINGHAM



This new revolutionary British-made product, utilizes totally new design principles. Flexible vinyl plastic is arched in a sturdy aluminium base to provide "spring action" against the bottom of the door, thus providing a tight, effective seal. Vinyl strips along the bottom of the threshold prevent water seepage.



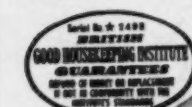
Does away with winter draughts—keeps out rain, snow, dust and insects.



Makes housecleaning easy—dirt sweeps right over it! Flexible vinyl arch flattens under foot!

## DOOR SEALING SYSTEMS

KEEP WARMTH IN - COLD OUT



**DIMENSIONS  
and PRICES**

Height  $\frac{3}{4}$ " Width  $3\frac{1}{2}$ "  
Clearance  $\frac{3}{4}$ "

Length	Retail Prices
30 $\frac{1}{2}$ "	£1/13/9
32 $\frac{1}{2}$ "	£1/16/0
34 $\frac{1}{2}$ "	£1/17/6
36 $\frac{1}{2}$ "	£1/19/0

Longer Lengths available

Post this Coupon to :—  
**DURAflex HOUSECRAFTS LIMITED**  
Union Works, Carpenter Street, Manchester, 1  
for illustrated Literature

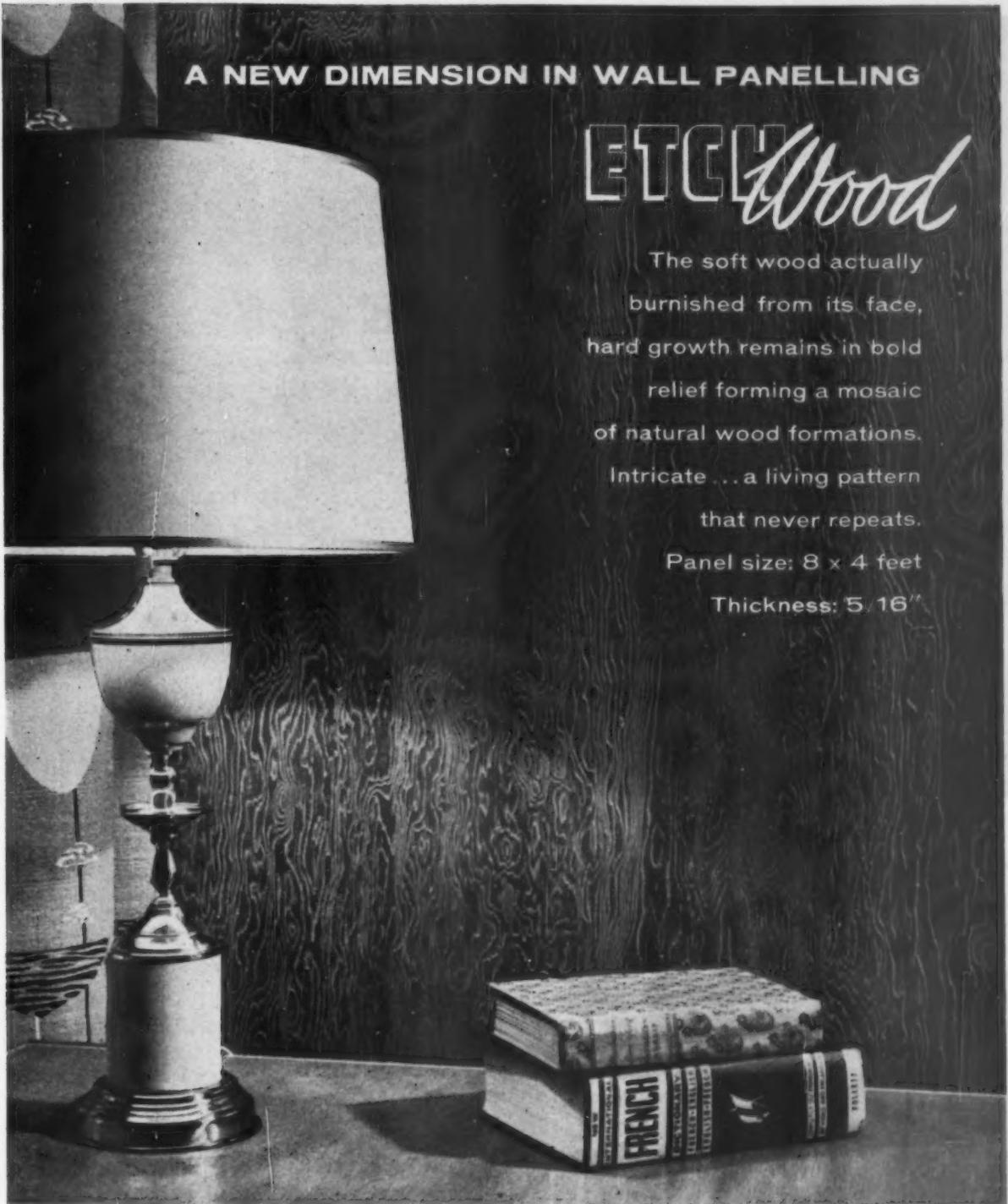
NAME .....

ADDRESS .....

A NEW DIMENSION IN WALL PANELLING

# ETCH<sup>W</sup>ood

The soft wood actually  
burnished from its face,  
hard growth remains in bold  
relief forming a mosaic  
of natural wood formations.  
Intricate ... a living pattern  
that never repeats.  
Panel size: 8 x 4 feet  
Thickness: 5/16"



N. R. M. Morison Esq.,  
1-3 Regent Street, London S.W. 1  
Please send me a free ETCHWOOD folder.

Name .....

Address .....



# SEABOARD

CANADIAN DOUGLAS FIR

# PLYWOOD

UK - 60 - 41 - 15

Seaboard Lumber Sales Co. Ltd. Seaboard House, Vancouver 1, Canada.



A NEW WHITE

OUT OF THE ORDINARY

This new Luxol Dense White is the whitest white gloss paint there is. New Luxol Dense White has extra density—a packed 'snow-depth' of pigment that gives the paint quite remarkable opacity. It is this extra density that makes the new Luxol outshine and outlast all ordinary white paints—and offers the Decorator an immaculate white gloss to put all others in the shade. New Luxol Dense White Enamel is easy to apply—giving a fluent build of paint that for lasting brilliance of whiteness is unsurpassed.



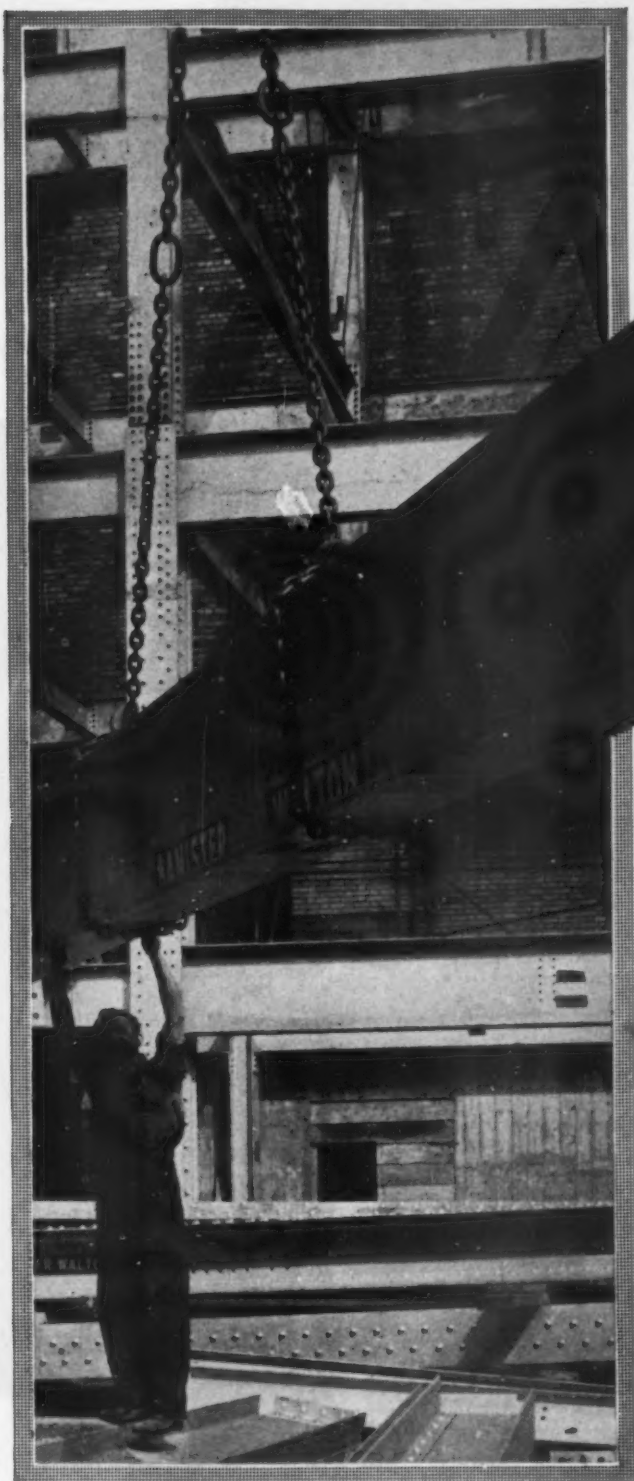
**NEW LUXOL 'DENSE WHITE'**

**White has never covered like this before!**

**BRITISH PAINTS LIMITED** DECORATIVE DIVISION

Portland Road, Newcastle upon Tyne, 2, Northumberland House, 303-306 High Holborn, London, W.C.1. 31 Wapping, Liverpool  
Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Glasgow, Edinburgh, Manchester, Middlesbrough,  
Norwich, Nottingham, Sheffield, Southampton and all principal towns.





WCH 0480

**Banister,**

**Walton**

**build**

**in**

**steel**

**BANISTER, WALTON & CO. LTD.**

MANCHESTER · 17

Trafford Park. Tel: Trafford Park 2361

LONDON · S.W.1

82 Victoria Street. Tel: Victoria 7846

BIRMINGHAM · 18

61/63 Western Road. Tel: Northern 4518

## ABSOLUTELY OUTSTANDING !

Two winters' weathering proves Manderlac's superiority

As a test, an architect in North Wales had eight caravans on one of his sites painted with different manufacturers' materials. Two and a half years' weathering have left the caravan painted with Manderlac as good as new—in the Architect's own words. "Manderlac is absolutely outstanding".

a **MANDERS** case history



**MANDERLAC Alkyd Enamel** dries quickly, to a hard surface that stays bright, and keeps its protective powers for years. It is easy to clean, covers well even on sharp edges and is so lustrous that it 'looks wet when it's dry.'

WRITE FOR FULL DETAILS AND COPIES OF THE WONDERFUL MANDERLAC COLOUR RANGE.

**MANDERS**

**M A N D E R L A C**

... proved the best

MANDER BROTHERS LTD., Dept. E3, WOLVERHAMPTON · Tel. WOLVERHAMPTON 20601





## STEEL GIVES STRENGTH

Colvilles have built up a reputation as suppliers of all types of Structural Steel - Light and Heavy Sections, Joists and Plates - to all specifications. Colvilles can supply a range of High Strength Steels under our DUCOL series with a minimum yield strength of 23 tons per square inch and upwards.

These special steels are in regular production and can be supplied in accordance with our rolling programme.



# COLVILLES

FITNESS FOR PURPOSE STEELS

COLVILLES LIMITED 195 West George St., Glasgow C.2.



**52,500 sq. ft. under one roof**

by

**Coseley Buildings Ltd.**

8-12 LANESFIELD, WOLVERHAMPTON, ENGLAND  
Tel. BILSTON 41927 (10 lines)

London Office: Adelphi, Adam St., W.C.2. Tel. WH1 5228/9

WRITE FOR  
ILLUSTRATED  
LITERATURE  
AND DRAWINGS

credit facilities available.

Picture by courtesy of the Rover Co; Ltd;

# this is INFINILITE...

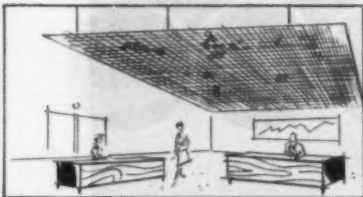
## the world's first non-modular suspended ceiling

lightweight sections interlock without visible joints

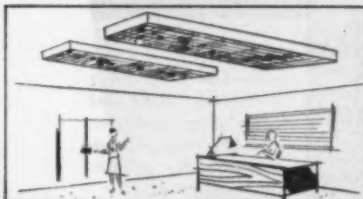
Consider the architectural possibilities of a luminous ceiling material that cuts to any size and shape, that is dimensionally stable, yet so light that it is suspended only by slender wires. This is Infilite. Its light transmission value is one of the highest of any luminous ceiling material, yet brightness control rings ensure remarkably low surface brightness.

Infilite comes in standard 24" x 25" interlocking panels that clip together to form ceiling areas of any size.

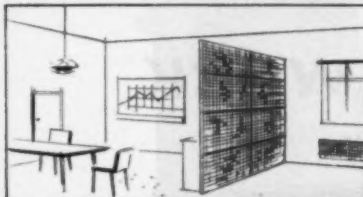
Investigate Infilite — luminous ceiling — room divider — decorative material — and in imaginative hands much more besides.



*Infilite weighs so little, it is suspended by slender wires only. No T beams.*



*Infilite has a high light transmission value yet surface brightness is exceptionally low.*



*Infilite is versatile and offers numerous design and decorative possibilities.*



# INFINILITE

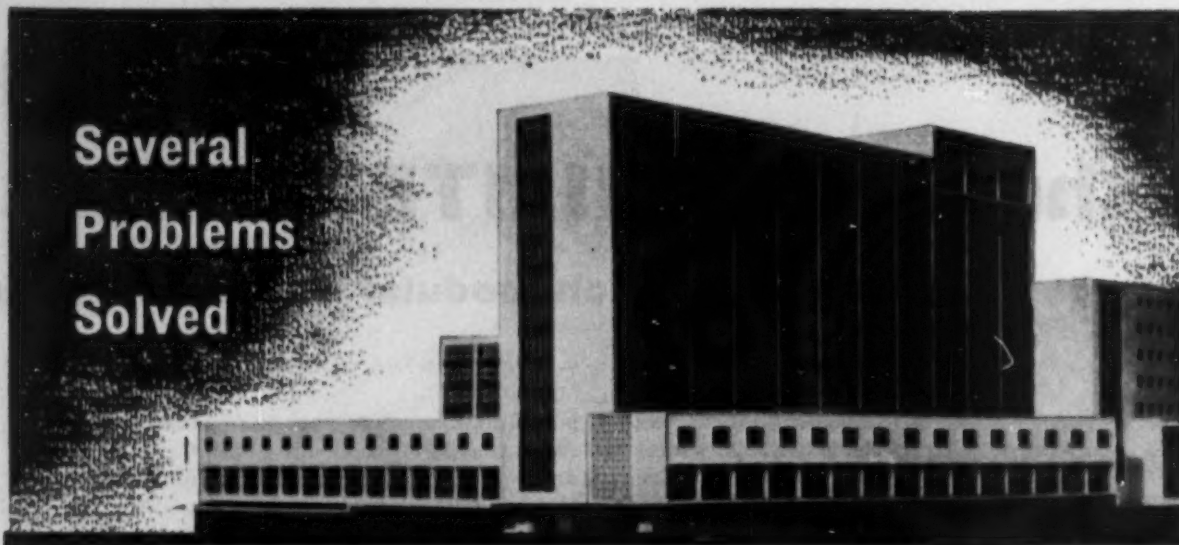
the revolutionary new suspended ceiling

THE GENERAL ELECTRIC CO. LTD.,  
MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

**G.E.C.**  
LIGHTING DIVISION



## Several Problems Solved



### in Birmingham's Biggest Building

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

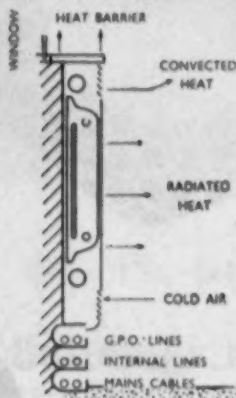
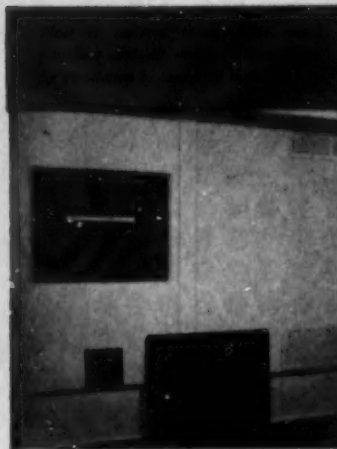
The heating and service trunking system devised for The Big Top is of special interest to all concerned with the design, construction and equipment of new buildings.

It provides both radiant and convected heating at low fuel cost. All telephone, lighting and power cables are completely concealed yet instantly accessible. Installation can keep pace with construction, thereby speeding up completion of curtain wall types of building.

The metal panelling and sill units for this important contract are typical of the work developed and produced by Harveys to architects' individual requirements.



*The steel panels which conceal all radiators and electrical services are stove enamelled to the same high standard as Harvey Desks and Partitioning.*



## METALWORK by



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

*Other Harvey Products: CHIMNEYS, COWLS AND VENTILATORS • DUCTING • FUEL OIL STORAGE TANKS • ORNAMENTAL PERFORATED METAL AND WIREWORK • RAINWATER GOODS IN STEEL, ZINC AND COPPER • ROOFS, TURRETS AND DORMERS IN ZINC AND COPPER*

SM/18



## An 8-foot, ONE-piece reflector?

*Yes!  
'New-Range'  
has this too!*

The latest additions to 'New-Range' are 8ft. fittings which have reflectors in one piece from end to end, positively locked in one central position. The fixing of these reflectors and the insertion and removal of the lamps can easily be carried out by one man from one position. Retractable (RDC) pattern lampholders ensure easy location and perfect contact under all conditions. 'NEW-RANGE' has everything that fluorescent fittings should have—infinite choice of type and size in lengths from 2ft. to 8ft. Time and money saving features for installation in all conditions are always included without extra charges. Open top, closed top; open end, closed end; Enamelled or 'Perspex' Reflectors; Louvres—in fact the lot! Low loss, instant-start control gear of the highest quality; well-designed components of excellent finish; an unrivalled reputation for reliability and economy; these explain why over HALF A MILLION Crompton 'NEW-RANGE' fittings have already been sold since their introduction in 1954.

*Send now for our latest catalogues and prices.*



# Crompton

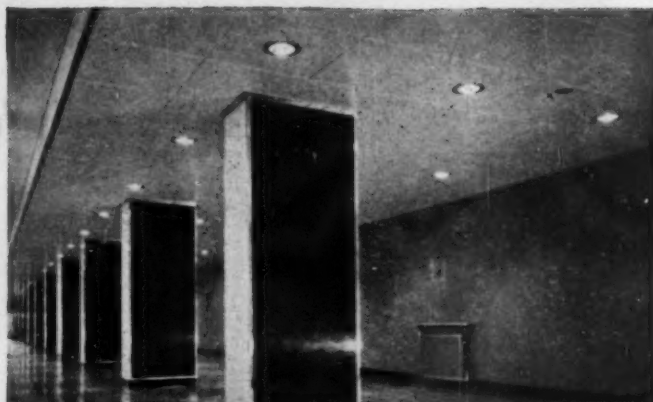
## 'NEW-RANGE'

FLUORESCENT FITTINGS

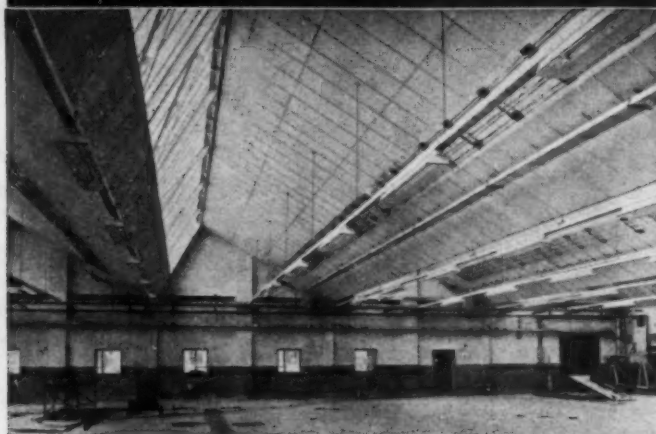
CROMPTON PARKINSON LTD., CROMPTON HOUSE, ALDWYCH, LONDON, W.C.1

**acoustic  
and  
insulation  
lining ...**

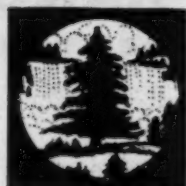
**in any material  
using  
TENTEST  
patent fixings**



**anywhere in the U.K.**



**and TENTEST unequalled know how**



**TENTEST CONTRACTS DEPARTMENT  
THE TENTEST CO. LTD.**



# vitreous enamel

**THE MODERN  
COLOUR FAST  
WEATHERPROOF  
FINISH**



Depot for H. J. Heinz Co. Ltd., Anlaby, Nr. Hull.  
Architects: Messrs. Grenfell Baines &  
Hargreaves, Preston. Metal Windows by  
John Williams & Sons (Cardiff) Ltd. General  
Contractors: F. Hall & Sons Ltd., Hull.



Factory at Swindon for the Plessey Co. Ltd.  
designed by the Swindon Borough Architects.  
Metal Windows by Henry Hope & Sons Ltd.,  
Smethwick. General Contractors: T. Wilson  
& Sons Ltd., Northampton.

Vitreous enamel, whether used as a finish for exterior panels or for interior applications, offers the architect many advantages. Vitreous enamel is available in permanent, stable colours, which will not fade. They may vary from delicate pastel to vivid shades, using BS 2600 colour range as a guide. Vitreous enamel is self-cleaning, non-porous and resistant to the most adverse atmospheric conditions.

"Vitreous Enamel in Architecture" gives a comprehensive summary of its applications and is lavishly illustrated with examples in colour and monochrome. Copies and further information may be obtained from the Vitreous Enamel Development Council.



THE ARCHITECTURAL DIVISION OF THE  
VITREOUS ENAMEL DEVELOPMENT COUNCIL • 28 WELBECK ST. • LONDON W.1  
TELEPHONE: HUNTER 2237.



THE  
**DEPENDABLE**  
HARDWARE

Today's taste demands wide choice, fine quality and clean design. You will find these in SURREYWARE. Catalogue No. 436 gives details of this comprehensive range of fittings in Zinc Alloy, Brass, Real B.M.A.—your free copy will be mailed by return. Send your request now to:

**EVERED AND COMPANY LIMITED**  
SURREY WORKS, SMETHWICK 40, STAFFS. Established 1809.

*Surreyware*

**IMPERIAL ALUMINIUM COMPANY  
LIMITED**

require a



**SENIOR  
DEVELOPMENT ENGINEER**

experienced in technical sales development, to be responsible for the development of new aluminium products and their sales in the

**BUILDING INDUSTRY**

Applicants should preferably be graduate engineers with several years' experience of design, development or sales activities in, or associated with, the Building Industry.

The successful applicant will be based in either the London or Birmingham areas. Commencing salary will be commensurate with experience and the responsibility involved. Assistance can be given to married men towards house purchase and removal expenses.

Please write for an application form to the

Personnel Manager,  
**IMPERIAL ALUMINIUM  
COMPANY LIMITED,**

Kynoch Works, Witton, Birmingham 6, quoting DEV/450/AJ.

**No mains water...?**



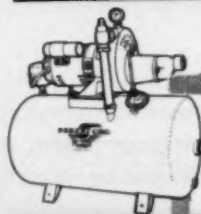
**—this is the complete answer....**

The smallest of these units, costing £49.8.0, is designed to raise water 20ft. The deep-well version will increase this lift to 45ft. The pump is driven by a ½ h.p. motor and mounted on an 18 gallon pressure-storage tank. Maximum capacity of shallow well unit at 20ft. suction lift 205 gallons per hour.

... and the ideal way to provide the country home, farm, inn, etc., with a pressurized water supply equal to the town mains. It's simple to install, fully automatic, quiet (the electric pump is not in continuous operation) and capable of providing adequate water to the entire house system, including the hot-water tank. It operates from a well, bore-hole or other source and units are available to pump from practically any depth and for a cottage or an entire village. May we send you further details?

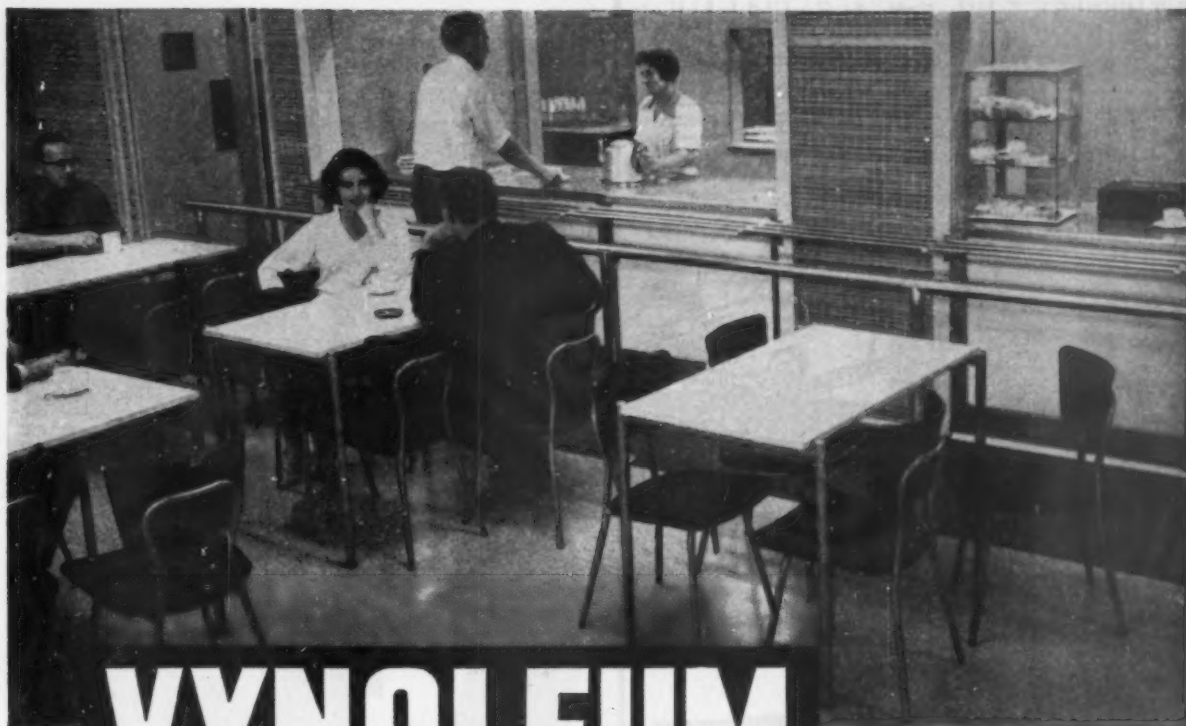
**PRICES FROM £49.8.0**

**JAMES BERESFORD AND SON LIMITED**  
(Subsidiary of the Cornecraft Group of Companies), Ace Works, Kitts Green, Birmingham 33. Telephone Stechford 3CF1.



**BERESFORD**  
*automatic*  
**WATER SYSTEMS**

BN 276



# VYNOLEUM

**THE FLOOR COVERING  
WITH TWO 'BEST SIDES'**

*Pure P.V.C. for durability*

New range of  
30 colours and patterns.  
Tough. Resistant and hard-  
wearing. Can be made jointless  
by welding.

Vynoleum can be laid, from 21/- per yard super, by one of our  
Contract Departments available for this work throughout the country.

Please write for samples and details of certified tests.\*

**THE ADAMITE COMPANY LIMITED**

94-98 PETTY FRANCE, LONDON, S.W.1.

Telephone: ABBey 5911

*Combined felt underlay  
for warmth and quiet*

High wear resistance.  
Co-efficient of wear 0.79\*  
High thermal resistance (0.2).  
Reduces transmission of  
impact noises to rooms  
below by 24%—to room  
itself by 13%\*







Give some forethought  
to the forecourt

Hume Atkins

## TRAFFIC BEACONS

solve traffic flow  
problems day and night

The Hume Atkins Traffic Beacon has been designed specially for forecourts in Petrol Stations, Garages, Hotels, Car Parks and wherever constant control of busy traffic is essential.

Made in steel, enamelled middle Graphite BS671.

White opal plastic diffuser with background for lettering in Traffic Blue.

3 Types: "IN", "OUT", or "OPEN".

Complete with control gear for one 2ft. 40w. lamp.

Dimensions 34in. by 10in. by 5in.

Specify Hume Atkins TRAFFIC BEACONS

Leaflet and prices on request from

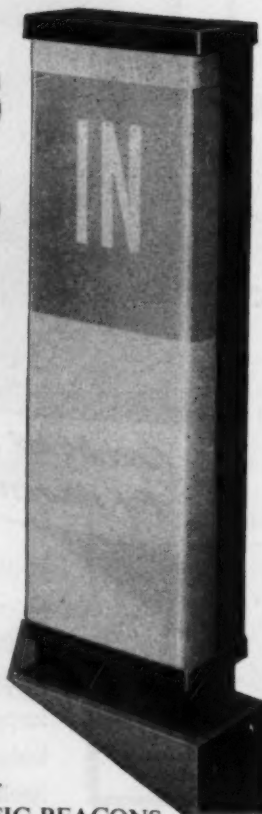


## Hume Atkins & Co. Ltd.

163 Victoria Street London S.W.1

Telephone: VICTORIA 2766/7

Works: Icknield Way Letchworth Herts  
Letchworth 2011/2



LEAD that is Good –  
*with a capital G!*

# G LYNN

Glynn Brothers Limited have a capital reputation for their milled lead sheet and strips to B.S.1178/1944, for building purposes... lead pipes to B.S.602/1956... chemical lead sheet and pipe to B.S.334/1934 for use mainly in chemical plant or where acid-resisting receptacles and laboratory plumbing are needed.

Silver, copper, lead alloy pipes to B.S.1085/1956, and B.N.F. Ternary alloy No. 2 lead pipe to B.S.603/1941 can also be supplied speedily to all parts of the country.

## GLYNN BROS. LTD.

PARK ROYAL ROAD, LONDON N.W.10. Telephone: Elgar 7011  
Other Works: TRAFFORD PARK, MANCHESTER 17 & BILSTON, STAFFS. Telephones: TRAFFORD PARK 1444 and BILSTON 41615  
SOUTH WALES WAREHOUSE: PENARTH ROAD, CARDIFF (TEL: 22502)

Manufacturers of LEAD SHEET AND PIPE. SOLID DRAWN COPPER TUBES. STEEL TUBES AND FITTINGS. STEEL TUBE FABRICATIONS. MALLEABLE TUBE FITTINGS.



The London Electricity Board showrooms at Shepherd's Bush.  
Architects: Stanley Peach & Partners.

# Lino

**Service** Catesbys have laid lino for 60 years. Service built upon the fruits of this experience—full understanding and knowledge of the craft—is worth having. Only Catesbys can give it.

**Staff** Well laid lino gives longer, better service than lino laid indifferently. Catesbys send an expert and their own trained fitters to every contract. They ensure perfect lino laying.

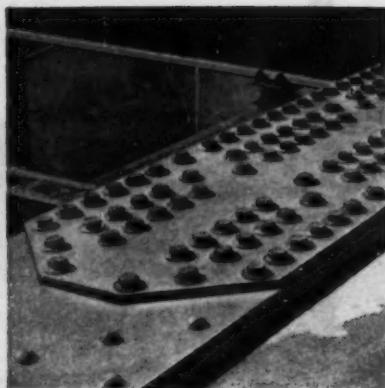
**Advice** Catesbys advice is impartial. They will recommend lino only when lino is known to be the ideal floor covering. Catesbys will suggest the most suitable grade.

**Stock** It is always easier and quicker to choose a design, colour and grade from lino in stock. At Catesbys you see lino in the piece—and you can choose from the biggest stock in Europe.

## Catesbys

*Contracts (Linoleum Division)*

TOTTENHAM COURT ROAD, LONDON, W.1. MUSEUM 7777



**THE RELIABILITY OF GKN  
HIGH STRENGTH BOLTS**

is due in part  
to Quality Control  
during manufacture;  
but their nature  
makes them superior  
to any other  
fastening method  
for structural steel.

The tension put into them  
transmits the load  
to the members they join.  
The clamping force  
produced by the bolts  
leaves them subject  
only to tensile  
and not to shear stress.  
They defy vibration  
and temperature changes;  
save on erection costs;  
carry no fire risk,  
make less noise,  
need less inspection.

**WITH THIS EXTENSION  
HIGH STRENGTH BOLTS  
BECOME TORSHEAR BOLTS:**

—the torque required  
to twist it off  
exactly equals  
the torque required  
to tighten the nut.

**GKN HIGH STRENGTH BOLTS  
AND TORSHEAR BOLTS**

*are made under strict Quality Control  
to the latest  
British and American specifications.*

GUEST KEEN & NETTLEFOLDS (MIDLANDS) LTD  
BOLT & NUT DIVISION • ATLAS WORKS • DARLASTON • S. STAFFS  
TELEPHONE: JAMES BRIDGE 3100 (10 LINES) TELEX 33—228

D/HS/666



From flagpoles  
to furniture...



Wood preservatives based on Penta are the most powerful in commercial use. For Penta gives sure, long-lasting protection against wood's oldest enemies . . . dry rot, termites, furniture beetles, and long-horned and powder-post beetles.

**EFFECTIVE PROTECTION IN WIDE RANGE OF USES.** Penta can be easily applied to seasoned timber, fabricated timber or timber already in service. All with equally successful results.

**NO HARMFUL EFFECT ON TIMBER.** Penta-treated timber is clean, unpainted and does not require re-seasoning. Dimensional changes are negligible. Penta is chemically stable and virtually insoluble in water.

**ARCHITECTS AND CORPORATIONS** can now specify timber Penta-treated by pressure or non-pressure methods; Penta-treated timber is now available from timber merchants throughout Britain.

**BUILDERS AND HOUSEHOLDERS** can obtain Penta-based preservatives from the majority of wood preservative manufacturers. Monsanto will be glad to provide you with a list of suppliers in your area.

Monsanto

Monsanto  
chemicals  
help industry—  
to bring a  
better future  
closer

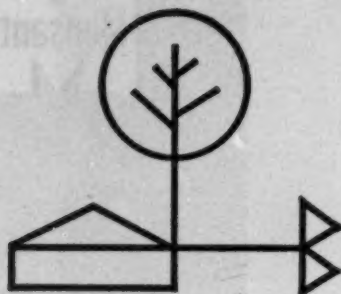


**MONSANTO CHEMICALS LIMITED,**

739 Monsanto House, Victoria Street, London, S.W.1, and at Royal Exchange, Manchester, E.

In association with: Monsanto Chemical Company, St. Louis, U.S.A. Monsanto Canada Limited, Montreal. Monsanto Chemicals (Australia) Ltd., Melbourne. Monsanto Chemicals of India Private Ltd., Bombay. Representatives in the world's principal cities.

Regd.



1



2



3

4



Enquiries are welcomed

## BEVES & CO. (STRUCTURES) LTD.

Head Office: Kingston Wharf, Shoreham-by-Sea, Sussex  
Telephone: Southwick 2285

London Office: 110 Cannon St., London, E.C.4  
Telephone: Mincing Lane 9161

CV9-47

Members of the BEVES GROUP  
of companies—

BEVES & CO (STRUCTURES) LTD  
BEVES & CO (LONDON) LTD  
BEVES & CO (FLOORS) LTD  
BEVES & CO (JOINERY) LTD  
BEVES & CO LTD., Timber Importers

The **Demolition & Construction** Co. Ltd.

LONDON · CARDIFF · LIVERPOOL · NEWCASTLE-ON-TYNE ·

**BUILDING AND CIVIL ENGINEERING CONTRACTORS**  
A Member of the Cementation Group of Companies



**9 MILLION  
TRAMPING**

**FEET  
ON A  
HARDWOOD  
FLOOR**



Strolling dancing, shuffling, tramping. Nine million pairs of feet have passed this way. But the floor today still keeps its luxury look, its new appearance. It is a hardwood floor installed nine years ago at the Royal Festival Hall, London. No doubt about hardwood floors—they last.

For their permanence, unmatched durability, pleasing character, ease of maintenance, unrivalled value during years and years of hard service, choose hardwood floors and you make the best investment of all.

**TAKE STEPS  
TO FIND OUT MORE  
ABOUT HARDWOOD FLOORS  
THEY'RE CHEAPER  
IN THE LONG RUN**

The Hardwood Flooring Manufacturers' Association or the Timber Development Association will be glad to supply you with design data and full information on the characteristics of the many hardwood species now available for floors to meet all conditions of service. Write to The Hardwood Flooring Manufacturers' Association, 68/70 Queen Street, London, EC4



## Brush off the fear of FIRE!

With OXYLENE BORAM Fire Retardant Coating which raises inflammable surfaces to Class 1 "surface spread of flame" (B.S. 476-1953).

OXYLENE BORAM can be over-painted or applied to painted surfaces without loss of fire retarding qualities. It gives real fire protection and is approved by Local and Fire Authorities.

"Used in every Industry"

Write for particulars.

# OXYLENE BORAM

Use  
TRANSPARENT  
for Veneers  
and  
Fabric RINSE  
for Textiles

**FIRE RETARDANT COATING**

**THE TIMBER FIREPROOFING CO. LTD.,**

13a Old Burlington Street, LONDON, W.1.

Tels: Regen. 2489 (2 lines)

Works at:—

Market Bosworth, Nuneaton

Queen Elizabeth Avenue, Hillington, Glasgow, S.W.2.

DHB2376 B



straight sliding

## DOOR

gear ...

folding

## DOOR

gear ...

around the corner

## DOOR

gear ...

power operated

## DOOR

gear ...



REGISTERED TRADE MARK

make the lot....

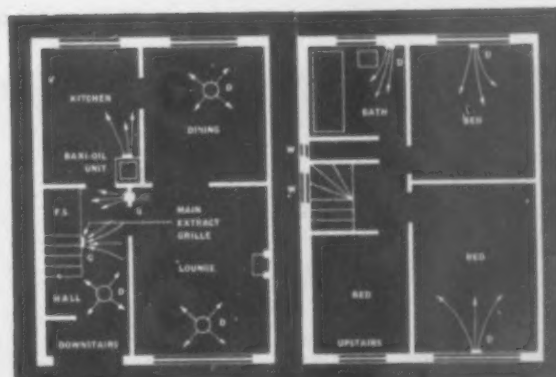
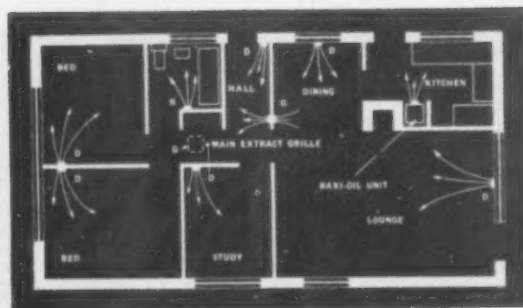
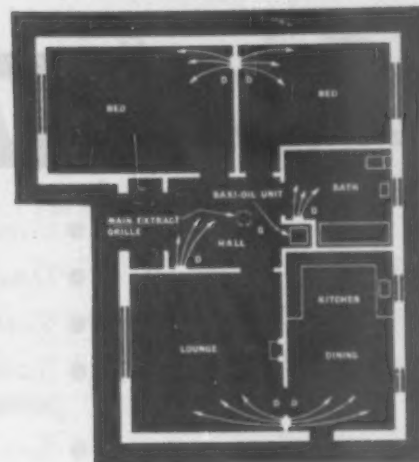
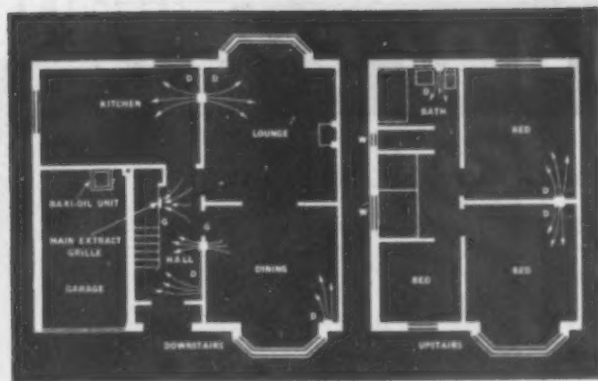
## a lot better!

get in touch with

## GEO. W. KING LIMITED

Argyle Works (10/AJ), Stevenage, Herts. Telephone: 440





## FILL THE HOUSE WITH WARM, FRESH AIR...

... not with pipes or radiators

BAXI-OIL is an advance in oil-fired central heating comparable with the well-known Baxi achievements in the solid fuel field. Air, directly heated in a compact 32,000 B.t.u./hr. heat exchanger, is ducted to fully adjustable diffusers,

up to eight in number and unobtrusively flush-fitted in ceilings or walls. There are no radiators or pipework.

Designed for economy of space in houses of approximately 1,000 sq. ft. floor area,

the BAXI-OIL unit need occupy no living floor space. It can be installed in a cupboard 25in. by 25in.,

or may be placed in a garage or outhouse.

Domestic hot water is independent of the warm air supply.

A separate 8,000 B.t.u./hr. boiler eliminates

the wasteful practice of running a central heating boiler

below its economic output for summer hot water.



The BAXI-OIL '40', showing air heat exchanger with independent high-efficiency water heater. Also available: the BAXI-OIL '32', without water heater.

*Means*

**BAXI-OIL**  
WARM AIR  
CENTRAL HEATING  
SYSTEM

NO LEAKS—because there is no water in the heating system.

NO HEAT STAINS—because there are no radiators.

CONSTANT FRESHNESS—air is re-cycled about three times an hour.

QUICKER WARMTH—low thermal inertia.

COOL IN SUMMER—fan system can circulate unheated air.

SELECTIVE HEATING—all diffusers continuously adjustable.

EASY MAINTENANCE—fan is only moving part.

EASY INSTALLATION—bends in lightweight ducting can be fabricated on site.

ATTRACTIVE PRICE—£200 - £250 retail, if installed during building.

For free, comprehensive brochure, use enquiry service or write to:

**BAXI • DEPT. AJ.4. • CHORLEY • LANCASHIRE • Telephone: Chorley 2808 (3 lines)**

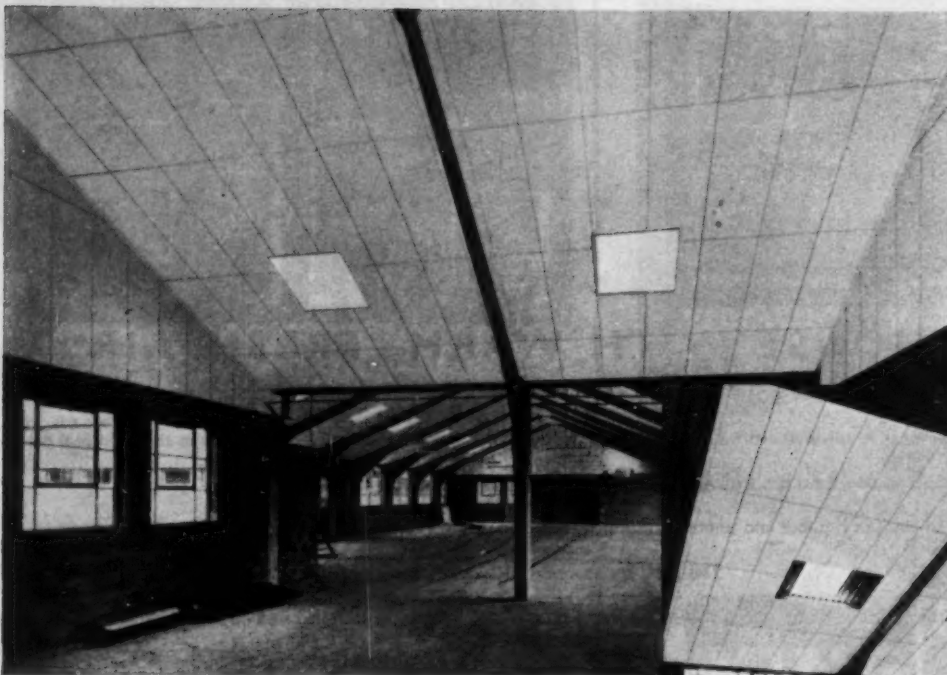
Efficient insulation with

**MARLEYcel**

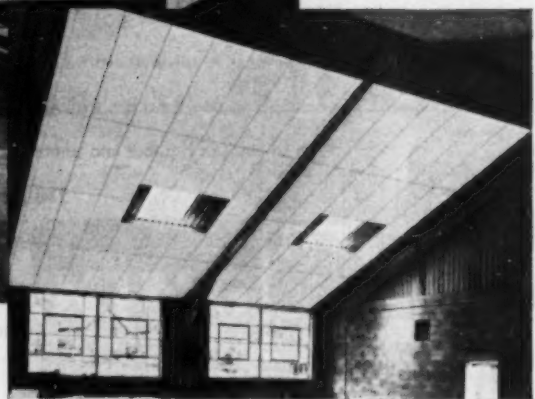


- U value=0.18 with  $\frac{1}{4}$ " Marleycel self-extinguishing grade
- Lower installed cost than any comparable alternative
- Greater light reflection improves working conditions
- Quick removal of individual panels with Grecon facilitates inspection of ceilings and roofs
- Speedier erection reduces loss of production time

Marleycel is quickly fixed using the new **GRECON** Fixing System



The standard system comprises 9' lengths of T-section galvanised steel, spring steel clips, steel hangers and sleeves. This method of fixing ensures the quick removal of individual panels.



Photography by courtesy of E. W. Tyler & Co. Ltd, Tonbridge.  
Marleycel installed using the Grecon Fixing System for  
R. Hewett Ltd, Boyn Valley Trading Estate, Maidenhead.  
The partially insulated roof in the smaller photograph illustrates the improved appearance and light reflection.

Marley Technical Staff will always advise on installation procedures including the Grecon Fixing System, and on the appropriate Marleycel thickness.

• **Marleycel Expanded Polystyrene**

A pure white insulating material of moulded cellular structure, supplied in featherweight sheet form. Manufactured by Shell and developed by Marley to serve the building industry.



SEVENOAKS • KENT Sevenoaks SE5255 London Showrooms: 251 Tottenham Court Road, W1

# Lasting beauty



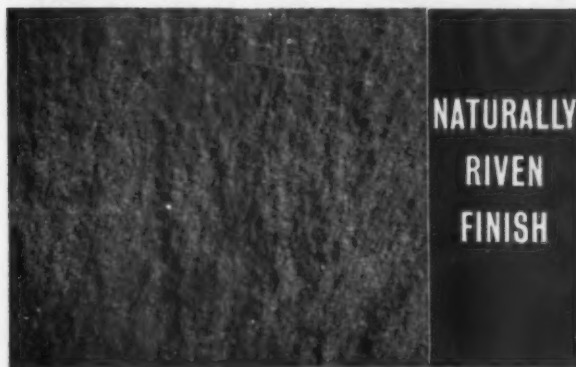
FRAME  
SAWN  
FINISH

## in Broughton Moor



FINE  
RUBBED  
FINISH

## Green Slate



NATURALLY  
RIVEN  
FINISH

Technical pamphlets showing typical methods of fixing are available on application:

1. Flooring 2. Facings. 3. Coping. 4. Cills
5. Riven Face Slabs.

In three distinct colours:

Light Sea Green, Olive  
Green and Pale Green  
Barred

### Broughton Moor

GREEN SLATE QUARRIES LTD.

CONISTON, THE LAKE DISTRICT, LANCs. Tel: CONISTON 225/6



The Architects' Journal

No. 3418. Vol. 132. October 20, 1960

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

Subscription rates: Post paid, inland £2 15s. 0d. per annum; abroad £3 10s. 0d. per annum. Single copies, 1s. post paid, 1s. 6d. Special numbers are included in subscriptions; single copies, 2s.; postpaid, 2s. 6d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for £1 17s. 6d.; carriage 2s. extra.

NOT QUITE ARCHITECTURE

## Meet the Auntie in Your Life

### Dangerous Union?

I am 25 years old and recently my employer offered me a partnership. I would certainly gain financially, if I were to accept, but he is much older than I am, and he designs mainly in a neo-Georgian manner. Should I accept?

I feel you are a little young to be contemplating partnership, which is, after all, something meant to last a lifetime. There are bound to be clashes of interest and temperament (we are, don't forget, artists!) and only mutual understanding and sympathy can overcome such differences. The disparity in your ages would make the task much more difficult and the result could be disastrous. Why not wait a little longer, until you are absolutely sure in your own mind, one way or the other?

### Growing Problem

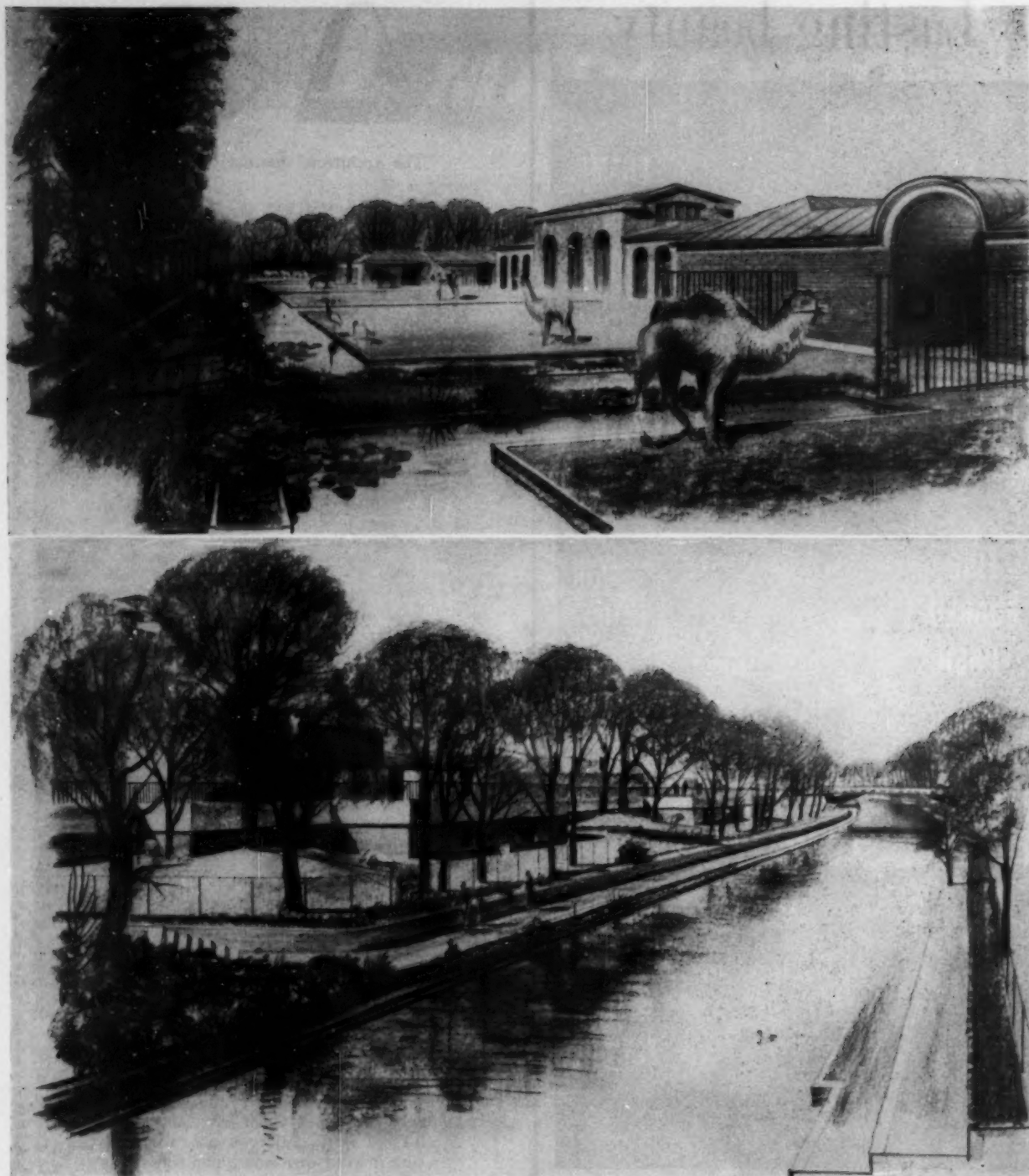
In our general office we have a space screen with a climbing plant which is very nice but it won't stop. We recently had to move into bigger premises. Now the office boy is missing. What do you advise?

Write a strong letter to H. . . and G. . . and sound Granada about the serial rights.

### Endless Search

Now that Aldermaston is almost popular, I





*My Goodness,  
My Burton!*

Too many of the modern buildings in the London Zoo were based more on an elaborate architectural conception than on a careful study of the requirements of the animals, the keepers, and the public. These sketches by Peter Shephard of his proposals for the new sheds for antelope, okapis, yaks, camels and bison suggest a welcome change in the architect's approach to the problem. The new quarters for yaks, bison and camels which flank Decimus Burton's Giraffe House, will be derided by sensation-seeking critics and unthinking architects as dull. But how right the architect is to avoid structural pyrotechnics, to conform with Burton's simple shedding and to let the animals themselves dominate. Welcome too is the use of water instead of bars to contain the animals. The lower illustration shows the proposed landscaping, and deer houses, also by Peter Shephard, along the south bank of the Regent's Canal. Here, unfortunately, fences have had to be used, but Mr. Shephard hopes to soften the effect of this with planting. See also page 566. Jack Cotton, the developer and head of the firm of architects, Cotton, Ballard & Blow, has given £250,000 for this scheme.

am trying to start a New Movement. Can you suggest anything? I can't join the anti-Uglies because my duffel-coat is at the cleaners. I feel Reaction is the Soul of Youth, don't you?

I have two suggestions to offer. First, a SIN movement (Subtopia is Nice) on the basis that by expressing themselves through visual ugliness, people relieve themselves of inhibitions which otherwise would cause grave psychological disorders leading, ultimately, to outbursts of violence and crime. Alternatively, you could start a campaign on behalf of Town Planning committees, setting out to prove that unqualified, inexperienced, disinterested laymen are the ideal people to judge the work of architects being, as they are, more detached and objective. I think you will find both of these are minority causes, which is presumably what you are seeking.

#### Odd Man Out

My professional friends sneer at me because I talk about the "modern style" and the "traditional style" and so on. Some of them have threatened to send me to Coventry, because they say such talk is dangerous. Please help me, in simple terms.

Architects are very sensitive about words these days, and with some justification. "Modern" is really a type of jazz, "Contemporary" a make of furniture, and "Style" is something you put on, to alleviate civic wrath. I suggest you avoid all these words. "In an idiom appropriate to the age" is fairly safe, and if you wish to be disparaging, "Fashionable" has quite a sharp edge. I would avoid using the name Coventry in the sense of the artisan; in your environment, the word has quite different implications.

#### The Unwanted

My designs are regularly turned down because they are "out of keeping with the amenity of the district." What is amenity? Can anything be done about it?

Yours is quite a common problem, but unfortunately you don't give enough information for me to help you very much. It would appear, however, that "amenity" in your case is what your designs are out of keeping with. You could try another district.

#### In Brief

A.J. (Salop): You have been very silly. I am sending you some Building Research Station pamphlets.

J. Barbican (Stoke): I see no reason why an architect should not be considered a bona fide art student. What did you say the address was?

Senior Partner (W.1): Yes, you did that rather well.

ALAN FLATER

## The Editors

### BUILDERS GET THE WIND UP

**L**AST week E. J. Cook, President of the LMBA, voiced the anxiety which builders feel for their future and, suggesting that architects and quantity surveyors were worried too, called for joint discussions by all three parties. A major cause of the builders' worry is the growth of the practice of building by direct labour. This same week the publishing house set up by the NFBTE has put out a booklet\* pointing out the rise of this practice and roundly condemning it.

There is much to be said for the closer association between builders, quantity surveyors and architects called for by Mr. Cook; but it must be pointed out that on this issue of direct labour the quantity surveyors and architects have a slightly different standpoint to the builders. Traditionally the builders' organizations are primarily concerned, not with technical advancement, but with economic protection. The architects and perhaps the quantity surveyors too, have been through much heart searching regarding the growth of the public employment and the corresponding decline of the independent practice of their members; but, arguing that their main business was to give society the best possible service, they were prepared to take a philosophical view of this great political issue: to grant, therefore, an equal standing to members in the public sector and to private practitioners and to await events. Impartiality does not mean a lack of concern, for the effort of a profession when faced with a problem of this kind must always be to ascertain and protect what is best in both systems of operating and to ensure that the issues which arise between the followers of each should be treated in an objective spirit and without bitterness. The builders are seeking professional status and they are surely right to do this; but the characteristic of a profession is that it puts the public interest first and that of its own members only a good second. The builders as a group are correct to call for an impartial ascertainment of the rights and wrongs of direct labour and they have every right to expect architects and quantity surveyors to help them in this; but, if they are out to scotch building by direct labour merely by exerting political pressure (as the tone of their booklet suggests), then they must go it alone.

\* See news note on page 563

### THREE CHEERS FOR THE PRODIGAL

Henry Brooke, the Minister of Housing and Local Government, is asking local authorities affected for their views on a proposal to build a New Town at Skelmersdale for 80,000 people. This is no new idea, it was put forward some years ago by Lancashire County Council. It would, however, be churlish to complain on this score. Here is most welcome evidence that at last the Government no longer looks on New Towns as a political matter, a piece of socialist planning, but, as an essential factor in the rehabilitation of our over-crowded

out-worn cities. The expanded town programme can hardly be called a great success. It is making its contribution in reducing population density but on far too small a scale, and too slowly, to be endured as the sole source of relief while housing conditions are so appalling.

We hope that Skelmersdale will be the start of a series of Mark III New Towns, incorporating the planning advances of Cumbernauld and Hook, and planned on a national scale so as to alleviate the overcrowding of the sordid industrial towns of the Midlands and the North, and to counteract the attraction of people and work to the south-east. Such a programme of New Towns, linked with a control of office building similar to that of factories, and co-ordinated with the road and rail policies of the Ministry of Transport, would be proof of the Government's determination to rebuild the out-worn towns of the industrial revolution in a manner worthy of the second half of the twentieth century.



#### WANTED MEN

Since 1958 Bristol's city architect, A. H. Clarke, has been having a lot of staff trouble in spite of the easing of restrictions on capital expenditure. During this time 47 people have left his department and at present he needs 21 architects, three quantity surveyors and five administrative employees. In his biennial report he says that the constant shortage and frequent changes of staff are hindering the work of the department.

There is a general shortage of architects today, but things are particularly bad in public offices because of low pay and local government bumbledom. (So much for the exhortations of the AJ's guest editors in 1952.) There's a lot to be said for the well-known CLASP organisation, in the Midlands, which makes sure that the maximum number of design chores are standardised and that the individual, however inexperienced, gets responsibility and a commensurate salary.

#### INFECTIOUS EFFICIENCY

Technical journalists often find they ought to be in two places at once—perhaps at a plumbers' ball and an RIBA meeting. The editors of building papers met members of the Institute of Public Relations last week to discuss ways of preventing clashes of events. It was suggested that a comprehensive diary should be prepared, so that anyone wishing to organise a meeting could be sure of avoiding days on which there would be counter-attractions. Another sensible suggestion was made—that a list of companies, products and PRO's should be compiled. Although this register would be principally for editors, it could result in a better information service for architects. (It sounds just the job for information man Dargan Bullivant). The enterprising editors behind these proposals are Norman Jenkins, of the *Master Builder*, and Arnold Whittick, of *Building Materials*.

#### IMAGINATIVE ARTISTS WANTED

When the JOURNAL published two advertisements depicting men ignoring safety regulations on building sites, an alert reader spotted the mistakes and encouraged us to get in touch with ROSPA. The association agreed that in these advertisements various sections and sub-sections were being contravened by men standing on corrugated asbestos sheet without crawling boards, or inspecting a job without toe-boards and handrails. Since then the deputy chief inspector of factories has consulted the NFBTE, whose press officer has asked the Institute of Practitioners in Advertising to keep an eye on this sort of thing.

That sounds fine. But let us hope the IPA won't ask its members to get their facts right by doing their drawings on the site. The regulations are, in fact, often ignored. Stanley Bonham, London organiser of the Plumbing Trades Union and author of the first building workers guide to the safety regulations, says that although the big contractors are very much interested in safety for business reasons, the small builder—even 15 miles out of London—frequently reveals an almost complete absence of safety standards.

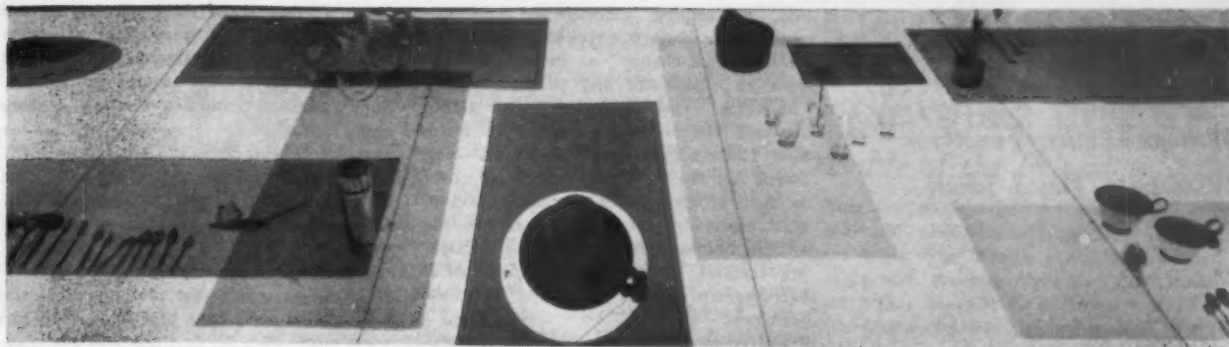
#### BETTER BUILDING FOR BOYS

If you look at this week's information centre (page 578) you will find details of an excellent handbook written by a layman for laymen on the building of boys' clubs. This modest publication, issued by the National Association of Boys' Clubs, is a lucidly-written guide to the procedures involved, including the architect's briefing. We could do with similar publications to help the layman know more about other types of building.

#### CERAMIC PROCLOVATIONS

Colin Rowe's writing is often (a) baffling and (b) worthwhile. It is much more (a) than (b) in the *Cambridge Review* piece about the Sidgwick Avenue scheme, by Sir Hugh Casson and Neville Conder. The article appears to say that this is the first modern building put up by the University, but that you can't see it because there's a high wall in front of it. Both statements are true. But was it necessary to introduce this coy note about modernity after nearly 3,000 words of preamble?





The Finmar show of hotel-ware at the Tea Centre (See "Winter Draws" below.)

The following is a good sample of what had gone before.

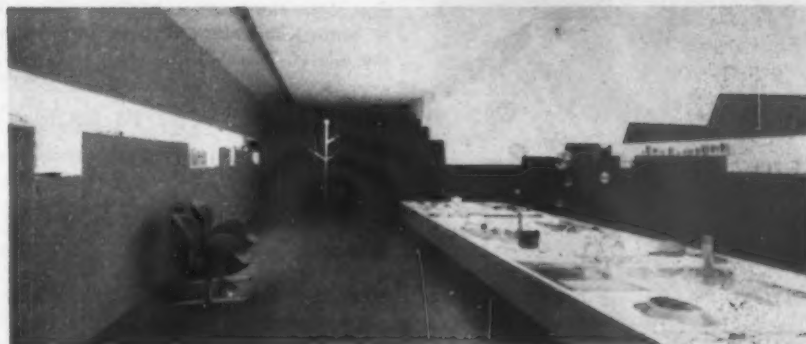
... whatever practical or aesthetic virtues we think we apprehend in the building which occupies our attention, our discernment is prone to be directed by considerations quite extraneous to its use or shape. A building insinuates a subliminal argument. We are always swayed—generally more than we know—by a connotational significance.\*

Yes, I can see what it means—though I'm not so sure about some other passages—but what a palaver! Was the whole thing an elaborate joke about University English? Was it, perhaps, written in Neo-Georgian so the initiated would know what the author *really* thought about the Casson-Conder architecture? Or did Mr. Rowe originally set out to write about something else? One thing *is* clear. This sort of writing won't help us in the fight for better architecture in the universities.

#### WINTER DRAWS

There are too many good exhibitions on in London at the moment, but the following are my private nap selection:

The Sir Charles Barry Centenary exhibition at the RIBA includes drawings of all sorts (from sketch to contract) by the most professional architect we produced in the last century. They show the enormous competence he had in organising complex plans and composing vast façades, and the pyrotechnical skill with which he manipulated stylistic detail from all periods. There is absolutely nothing to suggest what we would call an artistic personality these



days: everything looks like the work of a carefully hand-picked committee—except the early Travellers' Club.\*

At the Royal Academy is a massive, bludgeoning sort of exhibition of the work of our greatest painting francophile, Sir Matthew Smith—a man with a three-track mind; nudes, fruit and flowers. There are a few landscapes, but the whole thing was summed up by a leading art-journalist (I bet he never says this in print) as *The Gulley Jimson Show*. This is unfair to Smith as a person, but his pictures are much more the sort that would have been painted by the hero of *The Horse's Mouth* than those Brutal-Bratby's we saw in the film.\*

The Finmar display of hotel-ware at the Tea Centre includes the usual elegant products, brilliantly displayed by Stefan Busas. It is for the trade only, so use your headed paper and fiddle a ticket. That dull room at the back of the Tea Centre has never been better used.

#### NEW DEPUTY PLANNER

As we go to Press ASTRAGAL learns that Walter Bor has been appointed deputy planning officer under L. W. Lane at the LCC. Mr. Lane, a surveyor-planner, has, since he succeeded Arthur Ling in the post, done a tre-

mendous job in fighting for three-dimensional comprehensive planning. Doubts expressed at Queen Anne's Gate about his appointment have proved unjustified. Supported by an architect-planner in Walter Bor, Lane will be able to form the team he needs to solve the world's hardest planning problem.

#### UNCONSCIONABLE TIME A-HATCHING

The incubatory period of the school for the joint training of architects, surveyors, engineers and builders must be the longest since the last roc hatched. Engineer-builder E. J. Crouch, president of the London Master Builders' Association, paid the customary tribute to the idea in a speech to fellow builders last week. He then continued with a few words on leadership. "We cannot accept," he said, "that in these days of rapid progress there is any 'Divine right of kings' in our industry. Leadership must be by example, not by inheritance." It is now also customary it seems for builders to tell architects to pull their socks up or get out of the way, or be absorbed by the boys who know their stuff. RIBA research activities haven't come a moment too soon, if architecture isn't to revert to façade dressing or expensive monuments for the odd client indulging in an occasional folly.

ASTRAGAL

# LETTERS

W. J. Scott, A.R.I.B.A.

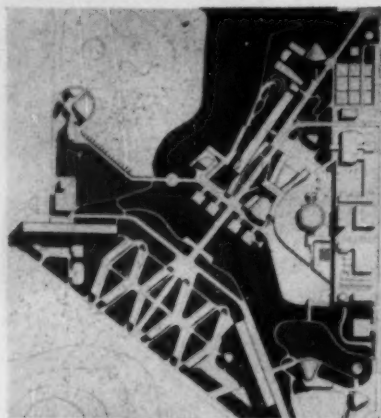
William Challis, Timothy

Widdowson, David Johns,

Beverley Howard

Paul Grotz

Peterlee



Lubetkin's plan for Peterlee Centre.

SIR: The progress report from Peterlee (AJ, 29.9.60) will arouse memories and interest for many architects previously employed by the Development Corporation. Lubetkin's "despair" was experienced by other architect-planners who followed him. Lubetkin's original plan in 1948 was similar in conception to the South West Area of Peterlee in 1960. Failure to produce such urbanity at the time was due to the inability of the architects to cope with local political influences and prejudices and the remote control of both the Central and Development Board administrations.

The National Coal Board permitted an area known as Thorntree-Gill to be developed free from complications in 1950: had Lubetkin illustrated his proposals by actual building there would have been no need for despair for the future of the town. It is amusing to recall that "the red brick semis' sprawl" which supplanted his idea, drawn by the Corporation architects in collaboration with Grenfell Baines, was awarded the Ministry of Housing and Local Government medal.

The outcome of the South West, Chapel Hill and Dene House areas of urbanity development when they are completed will be eagerly examined by local authorities and private development companies, though some private developers will recall similar urbanity schemes at Ham Court, Richmond, Surrey.

It is hoped that technical representatives will visit these sections of the new town as photographs, sometimes taken from impossible angles, may be misleading.

The forthcoming cost analysis of these subsidised schemes in the AJ will be of vital interest, for unless building construc-

tion, landscaping, maintenance and administration costs are proved reasonable, the "wind of change" at Peterlee will remain an experiment and perhaps later a "hurricane" embarrassment to the authority who will eventually control the town. New Town administration under the New Towns Act 1946 is in need of change: over the years progress in constructional development, especially housing, has been retarded with monotonous regularity by the changing central government administration. Development Board personnel and the bank rate.

It will be interesting too to follow the progress of a new town under the administration of the Northumberland County Council at North Killingworth. Perhaps it may earn the title of "Mark III."

W. J. SCOTT

South Shields, Co. Durham

## Craftsmen's Furniture



SIR: Whilst we are in full agreement with much of the criticism expressed by John and Sylvia Reid of the Craftsmen's furniture (AJ, October 6), we feel that in the penultimate sentence they are guilty of a fundamental mistake.

The education programme they advocate has the disadvantages, inherent in all corrective educational policies of this sort, of being able only to go skin deep. In this exhibition, for instance, there were examples of the misunderstanding which can arise from undigested knowledge of this sort.

The skill and sympathy of the Danish craftsmen is deep rooted in an uninterrupted tradition. Their ability stems from something which is unselfconscious, and to suggest that a course of design lectures from a well-meaning demagogue would have any effect but to add to the confusion is absurd. Whatever is to be the fate of British craftsmanship, it will be resolved by the craftsmen themselves. If they reach for better things, they will do so in spite of the chaos which surrounds them, in spite of opinions thrust upon them, and the din of mass pub-

licity. If they learn they will learn from example, and what they finally express should be what they sincerely believe and not what they are expected to believe. Surely any other situation would be a mere contrivance.

One encouraging thing did emerge from the exhibition. Whatever failings they may have in design ability, British craftsmen still possess great feeling for the material in which they work. This alone seemed to offer hope for the future.

It is sad to reflect that the writers of the article themselves have been as guilty if not more guilty than the craftsmen, of the practices they so heavily censure. The enclosed brochure (illustrated here) is eloquent of how deeply the ideals which they expressed are connected with their practice. The furniture depicted attributed to John and Sylvia Reid, is hardly indicative of the fundamental appreciation of design for which they call.

Their message to craftsmen is a pious one, but this is an age of pious messages, and craftsmen, like anyone else, look for more practical demonstrations of principle than empty phrases.

WILLIAM CHALLIS,  
TIMOTHY WIDDOWSON,  
DAVID JOHNS,  
BEVERLEY HOWARD

## F.L.W. Exhibition

SIR: The information on page 296 of the August 25 issue of THE ARCHITECTS' JOURNAL was incorrect. The Frank Lloyd Wright exhibition at the Milan Triennale was designed under contract to the United States Information Service by myself and Walter McQuade.

The room in which the exhibition was shown was adapted handsomely by Professor Scapa to contain this exhibition, with certain modifications and changes requested by Mr. McQuade and myself.

PAUL GROTZ

New York

## DIARY

*The Landscape of Industry: Power.* A paper by Sylvia Crowe at the ILA, 1 Park Crescent, W.1. 6.30 p.m.

OCTOBER 21

*Planning in Relation to Tall Buildings.* Discussion on tall buildings organised by the LCC at the Brixton School of Building, Ferndale Road, S.W.4. 6.45 p.m.

OCTOBER 26

*The Cage of Cacophony.* Talk by Edward Playne at the AA, 34/36, Bedford Square, W.C.1. 8 p.m.

OCTOBER 26

*The Architect and the Building Contract.* A course of five weekly lectures by Donald Keating at The Building Centre, Store Street, W.C.1. Fee for the course: £1. Applications for admission should be addressed to the Secretary, Brixton School of Building, Ferndale Road, S.W.4. First lecture 6 p.m.

NOVEMBER 1



## NEW TOWNS

### *Skelmersdale*

Local authorities in Lancashire have received a letter from the Minister of Housing, consulting them about the Government's proposal to establish a New Town at Skelmersdale, as he is bound to do under the New Towns Act.

The letter reviews the need for very large-scale development to meet Liverpool's problems, pointing out that the City of Liverpool alone contains over 80,000 slum and near slum houses, and densities are such that many thousands of people will have to be rehoused elsewhere. There is also an overspill problem in North Merseyside.

The Minister reminds the local authorities of the need to restrict development on the edge of the built-up area and says that the scale and urgency of the problem are such that he has decided to pursue the proposal for a New Town, originally put forward by Lancashire County Council.

A map is enclosed which shows an area around the present village of Skelmersdale in which, according to the Minister's calculations, room could be found for some 80,000 people, with industry, shopping, public services, recreational and other amenities. The local authorities have been asked to reply to the proposal within two months, when he will decide whether to go ahead with the scheme.

### *Scots press for New Town*

Renewed pressure for another New Town for Scotland is being put upon Lord Craigton, Minister of State for Scotland, by Glasgow Corporation, and by the Clyde Valley Regional Planning Committee. A deputation of Glasgow councillors met Lord Craigton in the summer but was unable to persuade him that Glasgow's overspill of between 200,000 and 300,000 urgently requires the establishment of another new town.

The Corporation is now seeking a further interview with Mr. Maclay, Secretary of State for Scotland.

### *Jobs near Glasgow*

The financial help available to industrialists wishing to set up or expand their business in Glasgow's overspill area is outlined in a leaflet entitled "Industry and Overspill" issued last week by the Department of Health for Scotland in conjunction with the Board of Trade.

As long as Glasgow remains a development district, firms which increase the number of jobs in overspill reception areas can apply for financial help under the 1960 Local Employment Act. The leaflet lists the towns and counties which have overspill agreements with Glasgow.

## NFTBE

### *Building in 1961*

The amount of building work in 1961 is expected to be about 2 to 3 per cent above the amount for 1960, according to estimates by the National Federation of Building Trades Employers, and as the industry is already enjoying full employment, they foresee this increase as being matched by a similar increase in output per man.

Since the increase is expected to come in "a few heavy-spending industries like iron and steel and motor vehicles," however, the report says that "if any one of these ran into difficulties the figure . . . might be reduced appreciably." In view of the present plight of the motor industry, this admission must cast doubt on the likelihood of any overall increase, since the increase in these industries is expected to be 12 per cent, more than cancelling out expected reductions in other sectors.

Of housing the NFTBE comments: "The decline in the local authority housing programme is expected to continue. This decline should . . . be offset by a corresponding increase in private housebuilding for sale.

In the public sector, other than housing, the report points out that the Government aims to hold expenditure at the 1960 level. "Thus it is fairly certain that educational and road building will increase, while work on such projects as power stations and civic buildings may decline," the total result being a small overall increase.

No change in the Government's credit policy now would seriously affect the amount of building work next year. It is interesting to note, however, that, despite the credit squeeze, bank advances to builders and contractors have increased by nearly 50 per cent in the last 12 months. Of materials requirements, the report forecasts heavier demand for cement for the road programme and a tendency to substitute concrete for clay tiles and aggregate for concreting sand.

But the only serious shortage is of bricks. Brick production this year has been lower than was hoped for, and the report quotes the Ministry of Works admission that brick stocks at the end of July had sunk to "about 3-4 days' supply," and that

there is acute labour shortage in the brick-yards.

## LANCASHIRE CPRE

### *Battle of the Pylons*

The disfigurement of stretches of wild and otherwise unspoiled country by pylons of the Super-Grid Scheme is the major issue, along with the preservation of green belts, on which the CPRE in Lancashire have fought a useful, but still losing battle in the past year.

Their Annual Report records as the most important single event the submission of Lancashire C.C.'s Green Belt proposals to the MOHLG, which will now be the subject of a public inquiry. It goes on to record a series of "major engagements" in the effort to prevent the countryside being dominated by the towers and heavy cables of the Super-Grid Scheme.

The Minister, they point out, only gave approval to this scheme "with considerable reluctance," and the Central Electricity Board has been very actively on the defensive.

The report comments, "The profits of the industry go up year by year and until those in charge accept their responsibility to devote a substantial sum from these to the avoidance of disfigurement, local councils and amenity societies should press for public inquiries where the industry is obliged to justify its proposals in relation to the diminishing assets of the nation in terms of natural beauty."

## BRICKS

### *Packaged and Perforated*

Packaged bricks and perforated bricks were warmly recommended to the interest of brick making firms by Lord John Hope, the Minister of Works, when he opened the new brickworks at Kibblesworth, Co. Durham, last Thursday (October 13).

He described the situation where perforated bricks are concerned as "a vicious circle. Brick makers are naturally reluctant to make perforated bricks which might require the installation of comparatively expensive machinery, until they can see a market for them.

"Architects on the other hand are reluctant to specify them, until they know they are available in sufficient quantities and of good quality."

He urged architects and brick makers to "find ways of co-operating with one another and with the builders to press forward this development" which would show great economies over traditional cavity walling. He also urged brick makers to take up the question of packaging bricks, and called their attention to the B.R.S. Digest (No. 121) on this subject.

The new brick works at Kibblesworth is expected to produce 450,000 bricks a week, with an output of 4,500 per operative compared with the national average of under 2,000.



## HURST PARK

### LCC Offer

The chairman of the L.C.C. Parks Committee told a questioner at the October meeting of the Council that Hurst Park race-course at Esher would be a valuable addition to the Green Belt, and that the L.C.C. had informed Surrey County Council that London would be prepared to contribute to the cost of acquiring the land for playing fields.

The decision of the Minister of Housing and Local Government on the recent public inquiry into the use of this stretch of riverside land is now awaited.

### LCC

#### Londoners in New Towns

The chairman of the L.C.C. housing committee gave these figures of the number of London families which have moved to New Towns and expanding towns:

New Towns: 3,116 families have been housed in new towns from the Council's industrial list, of which 1,744 were on the Council's waiting list and 1,372 were on borough council waiting lists or borough council tenants.

14,000 other families have moved out to New Towns.

Expanded towns: the L.C.C. expects to rehouse 28,000 families in the expanded towns under the Town Development Act 1952, and has so far rehoused 3,138 families.

The L.C.C. now owns 20,474 houses and 84,597 flats in the County, and 82,549 out-county houses and 11,930 flats.

### SOCIAL SURVEY

#### Students at Stevenage

Fifty students from Birmingham School of Architecture have just completed a social survey of Stevenage New Town in co-operation with the Institute of Community Studies.

First briefed by Peter Willmott, deputy director of the Institute, the students took a questionnaire to some 500 Stevenage residents, selected by a recognised sampling technique. The local Press had already given news of the proposed survey, and very few of the sample refused to be interviewed.

The questionnaire asked for information about family and friend relationships, neighbourliness, class and political relationships and the effect on all these of having moved to the new town.

It also sought to find out what the "neighbourhood unit" means to those who live in one, their shopping habits, attitude to neighbours, distance from the town centre; and further questions dealt with the individual house, and what the residents thought about density, privacy, size of garden, what they liked or disliked and what improvements they could suggest in arrangement or design. The results are now being analysed

by the Institute of Community Studies and will be published in the new year.

The exercise was devised by Anthony Goss and David Walters of Birmingham School of Architecture, to acquaint students with methods of social investigation and give them first hand experience of consumer reactions.

### TRAFFIC SEGREGATION

#### Exhibition in Amsterdam

Paul Ritter's international traffic segregation exhibition opened for a fortnight in Amsterdam on October 6, in the fine cloister of the Academie van Bouwkunst, and the Genootschap Architectura et Amicitia invited Mr. Ritter to lecture at the opening and introduce the exhibition.

The lecture was illustrated with slides dealing with the various sections of the exhibition, from entire new towns based on the principle of segregation, to housing estates and the centres of old towns, as well as Mr. Ritter's own proposals for introducing segregation in a typical inter-war estate. The schemes and reports, he pointed out, were the work of pioneers in the field, but most bore traces of committees restricting the scope of the architect. Mr. Sakema, whose Lijnbaan was a notable forerunner to most of the schemes shown, introduced Mr. Ritter, and after the opening of the exhibition, the meeting resumed for a lively session of questions and discussion.

### BRITISH SCHOOL AT ROME

#### No 1960 Scholarship in Architecture

The Faculty of Architecture of the British School at Rome has announced that none of the eight designs submitted in the competition to design a University library reached a standard which would justify the award of a Rome Scholarship.

The basic fault of all the designs lay in the lack of careful analysis of the subject set and of research into its requirements, the consequence of which was failure in logical and suitable planning.

Few of the designs showed appreciation of quality in presentation, nor in the main did they make the designer's intentions easily apparent.

### MOH

#### Development Group

Three members of the Ministry of Health Development Group are moving on to University and Regional Hospital Board appointments, which the MOH points out in a regretful news item "is healthy but will necessarily slow down the work of the Development Group." The Ministry is

now advertising for additional staff.

Mr. P. D. Cowan is to carry out research into the "Balanced Hospital Community" at University College, London, under Professor Llewelyn Davies; Mr. R. O. Moss has become Principal Assistant to the South East Metropolitan Regional Hospital Board, and Mr. V. H. Lee joins the North West Metropolitan Board shortly as Deputy Regional Architect.

Thirty-six new hospitals are now partially completed and in use, under construction or being planned.

### LOCAL GOVERNMENT ARCHITECTS

#### Pay Rise

Staff of Architects' departments in local government are among the 170,000 local government employees who get small increases of salary under a recent award agreed by the National Joint Council. Their salaries will now range from £840 p.a. to £1,145 p.a.

This places them in the salaries hierarchy just above Public Health Inspectors and just below Assistant Solicitors, along with engineers, surveyors and finance staff.

The increases are effective from September 1.

### REVIEW

#### Building by Direct Labour

The Federated Employers' Press Limited has put out a booklet by I. Ernest Jones entitled *Building by Direct Labour\** which sets out the case against this practice. The case is based partly on *a priori* considerations, partly on such cases as have been reported in the press (notably that of Manchester in 1958) where direct labour has come unstuck. Surprisingly, the practice of using direct labour is on the increase of late years. In 1951 the number of operatives so employed was 162,000 and by 1959 it had risen to 183,000; that is, to 12½ per cent, of the total building force in the country. Although the overwhelming majority of these men are employed on maintenance work, the trend is evidently causing anxiety to builders and the purpose of this booklet is to reverse it.

The real difficulty of this subject lies in the fact that there are few, if any, reliable records to show whether direct labour pays and, if so, in what circumstances. This booklet collates those cases where it did not pay and which have come to light, and the author suggests that there are a great many more failures which the public never hears about. Aneurin Bevan laid down in 1946 that direct labour work must be carried out in competition. A Ministry letter of 1959 suggested that "not less than every third contract" should be put out to tender. The author of the booklet points out that it is comparatively easy for a local authority works department to omit from its tender items (such as interest on

\* Available from The Federated Employers Press Limited, 82, New Cavendish Street, London, W.1. Price 6s.

loans, depreciation of equipment, etc.) which a contractor would have to include and that the absence of a contract makes it possible to conceal over-spending by transferring items of cost from one job to another. The booklet is a partisan document; but its demand that competition between public works departments and contractors must be demonstrably fair competition and that full, accurate and impartial accounts must be kept of all jobs of any size done by public works' departments will be welcomed by all who want to know the truth of this intricate matter.

## ROYAL SOCIETY OF HEALTH

### *Minimum Housing Standards*

A lively paper on the effect of present trends of populations and living standards on minimum housing standards was given by J. M. Austin-Smith at the R.S.H. last week. He began with a warning to the Central Housing Advisory Committee, which is collecting evidence on housing standards, of the danger of reviewing these too much in conformity with existing practice. The RIBA, he pointed out, in replying to the sub-committee's questionnaire, had expressed the opinion that many questions were phrased in terms which suggested that this danger was not recognised. Housing standards must be flexible enough to permit completely new design approaches.

The population was expected to increase from 52 to 54 million in the next ten years, Mr. Austin-Smith pointed out, with increases in the proportion of teenagers (to 20 per cent.)—relatively prosperous members of the community who will spend their money on record players, motor cycles, clothes and equipment all requiring extra storage space in the houses of the future: and an increase of 15 per cent. in the number over 65, who were likely to be better off with money for travel, gardening and other hobbies. All this would lead to increased demand for household goods as well as housing.

He considered the most important single sociological trend of the present time "the fragmentation of families." "This has already been found in slum clearance," said Mr. Austin-Smith, "where several generations of a family living together in a slum require two if not three new houses on rebuilding." He thought the demand for more and smaller houses would go on increasing.

The car had created a host of problems and its effect on the housing problem was enormous, increasing the problem of layout, quiet and privacy, and making improved landscape treatment essential.

"The popular idea of landscaping is based on trying to imitate the grand manner on a small scale," said Mr. Austin-Smith, whereas "what is required is the art of making very small enclosed spaces pleasant and inviting." He went on to consider density, "the factor which has the biggest influence on environment." High density did not mean over-

crowding, and the recent MOHLG circular No. 37/60 marked a significant change in official policy regarding density. While welcoming this, Mr. Austin-Smith pointed out that "there is clearly a great need for an overall national master plan."

Turning to other factors which would change the interior of the house in years to come, Mr. Austin-Smith put first whole-house heating. "The historic concept of a room with four walls, entered from a corridor . . . so essential when only specific rooms were warm, no longer applies," he said.

Specialised electric equipment would improve aesthetically and functionally, and the housewife would want to show off and open up the kitchen, not to enclose and hide it; drip-dry fabrics put washing machines with spin driers out of use, but required a large dripping space, and suggested that washing in future would be done in the bathroom, not the kitchen. Television too had brought problems in planning a home and highlighted the need for privacy.

"Multi-use of space" was Mr. Austin-Smith's answer, with whole house heating opening up the plan, and privacy imposing the need for some sub-division. "The important point is that the two types of division are completely different and what is now required must be capable of movement so as to give larger open spaces," he said. Standards would rise but areas and prices might come down.

In the discussion that followed, Kenneth Campbell, chief housing architect to the L.C.C. differed on this point, arguing that increase of gadgets and equipment would require more not less space. He questioned the desirability of multi-use of space on grounds of noise, and because most people can afford only to furnish one room decently and would not want to expose their whole interior when they opened the front door.

G. Graham Don, senior lecturer in public health at the London School of Hygiene and Tropical Medicine, then spoke on "Building Control" and was pessimistic about bye-law control, pointing out that even today there is no mandatory requirement that a new house should have a bath.

He was equally sceptical of improvement grants, saying "the British landlord simply does not want to improve his property." Why should he, Mr. E. Wakelin (chief public health inspector for Birmingham) pointed out, from the audience, when the demand for accommodation so much exceeds supply that a landlord can let sub-standard property at a good rent?

An interesting suggestion was put forward by Mr. Graham Don—that houses should be licensed, with a certificate of habitation for 70 years when built. "At the end of that time the onus would be on the house to prove its fitness and not on the local authority to prove it unfit," he said.

## RESEARCH

### *Information for the Architect*

In a lecture on "Information for the Architect," at Bristol Building Centre, Mr. Dargan Bullivant described the present

situation as "too much information of inferior quality and too little useful literature" and said that the building profession was very badly documented compared to agriculture, or even cookery.

After welcoming the fact that an increasing number of development groups are now engaged in research—there was one in 1947, now there are "at least nine"—and that post-graduate architectural departments have been set up at Edinburgh and London Universities—Mr. Bullivant went on to analyse the various requirements of an efficient information service, and placed standardisation, first of paper size, as being the first essential for filing efficiently.

On classification he welcomed the fact that an authoritative Building Filing Manual is expected to be published by the end of this year, but considered that rationalisation of the channels through which information flows to the user is also essential.

"Britain is particularly unfortunate in not having established an information service after the war," he said. Much smaller countries had such organisations, Finland, for example, with only 800 architects, has a very comprehensive information service.

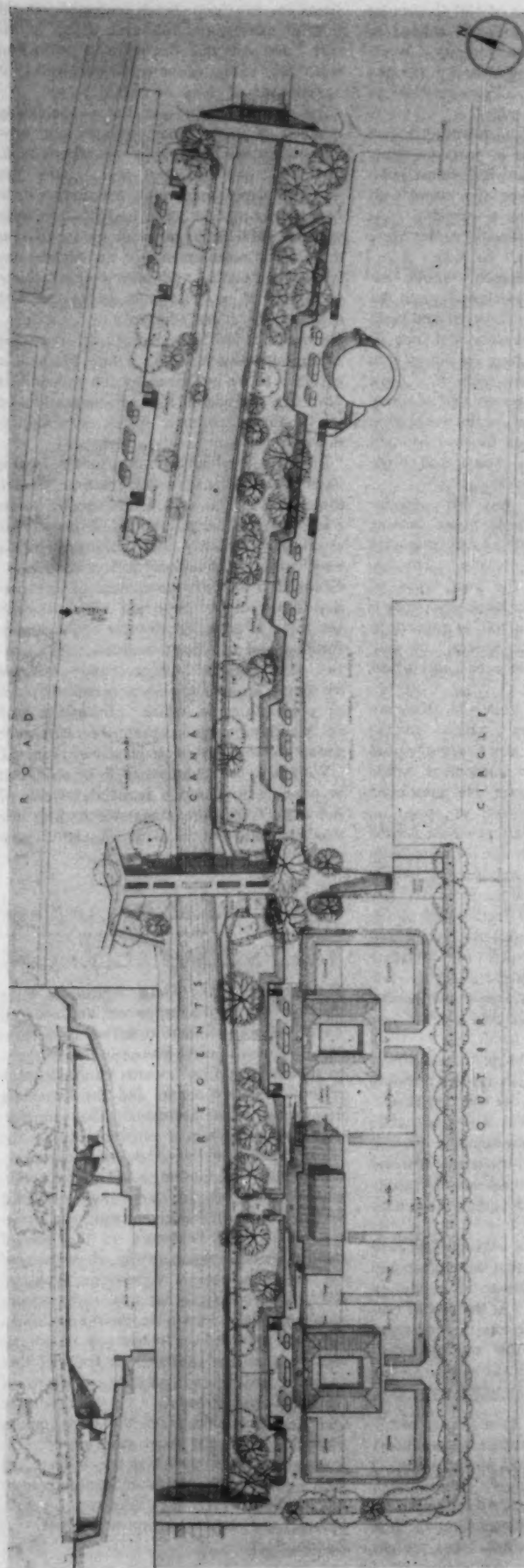
Going on to discuss the content of information supplied, Mr. Bullivant asked whether the same information services could supply the needs of architects, builders, and quantity surveyors, for instance, and answered his question by showing a series of slides of publications in which information was so clearly presented that the particular group could easily select what was required. "With such an arrangement," he said, "it is possible to compile from the stock of individual sheets, manuals which meet the needs of different users as closely as possible."

## SWITZERLAND

### *The First Step*

The Federation of Swiss Architects have decided, in the absence of any central organisation equivalent to BSI or the various Ministry development groups in this country, to take the initiative towards standardisation of building components and the launching of systems of prefabrication. This step follows a report from a study group, to the effect that whilst Swiss building achieves a high standard of quality, detailing and workmanship—the sort of things that make the visiting British architect envious—the country is relatively backward in the use of factory made components in all sectors of the industry, especially low-cost housing. The report stresses that any such reform would impose a discipline on the architect, but that provided he masters it, good design need not be inhibited. It foresees that practical results can only be achieved if there is close collaboration between industry and the profession, with the participation of both central and local government. Following the report the Federation have set up a Centre for the Study of Rationalisation in Building under the direction of J.-P. Vouga, and it has commenced work at Zurich, Tergasse 4.





## New Buildings in a New Landscape for Zoo

Above is the plan for the redevelopment of the Canal banks and the area between the Outer Circle and Albert Road known as Middle Gardens in the London Zoo. The Giraffe House by Decimus Burton is being modernised by F. A. Stengelhofen, the architect to the Zoological Society; Hugh Casson and Partners (Associate, Frank Shaw, engineer, Stephen Reeves) have designed a foot bridge (top left) of post-tensioned concrete to link the north entrance with the Middle Gardens; and Peter Shephard (assistant architect, Margaret Maxwell; engineers, F. J. Samuely and Partners) have designed sheds for the larger mammals (camels, bison, etc.) to flank Burton's Giraffe House. The animals will be separated from the public by a moat externally, and in the houses by a deep pit. The floor of the dens will be above the level of the public space and they will be dramatically lit from concealed windows above. The steep bank of the canal is unsuitable for animals, so a retaining wall is to be built parallel with the canal. On one side the earth will be built up to form a walk and the other side will be comparatively level. As many trees will be retained as possible. Under the walk, and projecting like bastions, are the dens for the animals (deer and antelope). The dens are top lit, left, from raised lights in the upper level. Stairs from this level lead down to passages behind the dens so that the animals can be seen during the winter. These dens and the landscape are by Peter Shephard.







This Dominican monastery outside the village of Eveux par l'Arbresle, about fifteen miles north-west of Lyons, is the most recent building in France to be completed by Le Corbusier.

In much of their design work architects find that they are grappling with two apparently incompatible forces which are tending to shape the building. In one direction a proper study of functional requirements can exert a strong pressure towards loose and free planning. Diametrically opposed to this, considerations of construction—such as the convenience of repetitive bays for the structural frame or similar plans for different floors, and beyond this perhaps a striving towards a formal or even monumental concept for the building—combine to create a tendency towards a design within a much more rigid envelope. In extreme cases, of course, one or the other of these forces tends to dominate. (A classic case is the two schools of Hunstanton and Wokingham: the one design completely formalised and axially planned, the other growing freely out of MOE researches into requirements for secondary schools. Although designed at much the same time, these two buildings could hardly provide two more different answers to the same requirement.)

One of the central themes of Le Corbusier's work has been to attempt in many ways to overcome this paradox. His rejection in the twenties of load-bearing brickwork in favour of the concrete frame, and the liberalisation that he explored as a result, can be regarded as a first step in this direction. Later on, in such buildings as the Villa Savoye, the idea is much more richly and completely developed. The first floor of this house is a formally conceived envelope inside which there is free play between



*The west side of the building, with three floors for communal activities below the double bank of cells*

interiors and outside terraces; on the roof are further free shapes which are nevertheless sufficiently controlled not to destroy the almost monumental concept of the whole design.

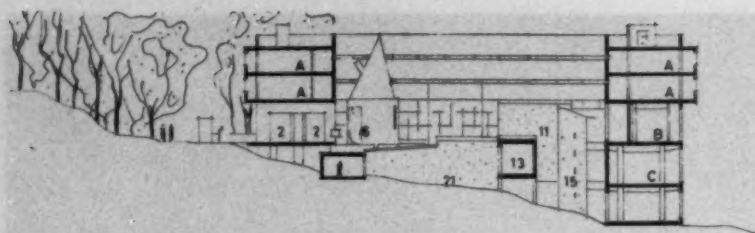
La Tourette can be regarded as an exercise upon this same theme, but basically in a new and quite different technique from Le Corbusier's houses of the twenties and thirties. The monastery was required to house one hundred monks in roughly two types of accommodation: individual cells for privacy and meditation, and spaces for communal living, such as lecture rooms, library, refectory and church. After a careful study of the daily life of the monks, Le Corbusier chose to position the building at the top edge of the most steeply sloping part of the site and to arrange the building in the form of a quadrangle, with the church on the north and the rest of the accommodation on the other three sides. The cells, each with its individual balcony, are on the top two floors—the best position for quiet and privacy. As a result, at this upper level the building is defined with a massing which is clear-cut and monumental: this is particularly evident from the approach road. Below this level, the building can best be visualised as a series of more freely planned spaces, either under the blocks of cells or projecting out from them. The slope of the site causes the number of floors for communal activities to vary from one on the east side to three on the west. As far as possible these spaces are hung on the structure supporting the cells, so that the ground runs freely through underneath—a point of vital importance to the clarity of the whole concept. Otherwise, as Le Corbusier says, he would have been stuck with a building looking rather like an Assyrian fortress.



*The north side of the church, with the side altars projecting at lower level*

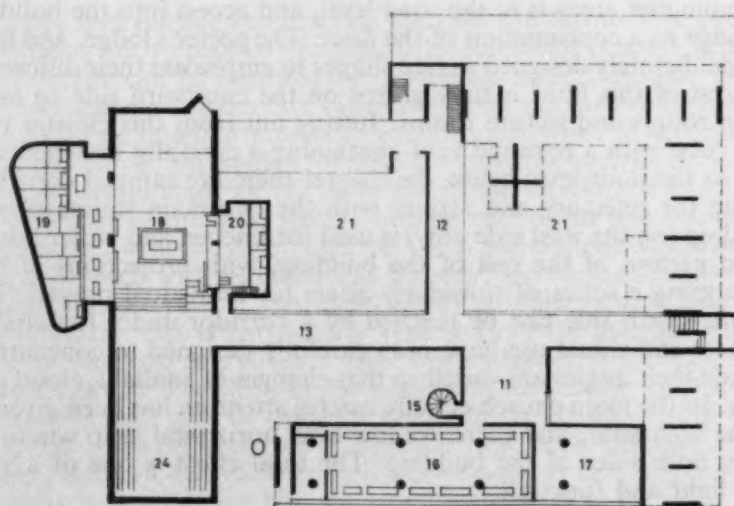
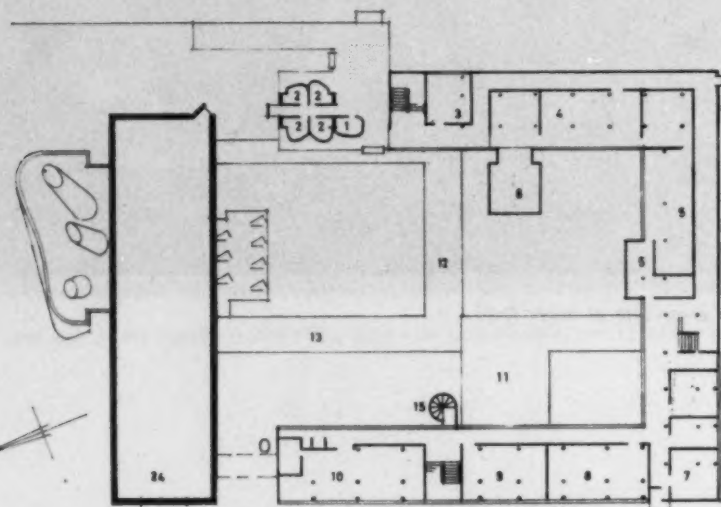
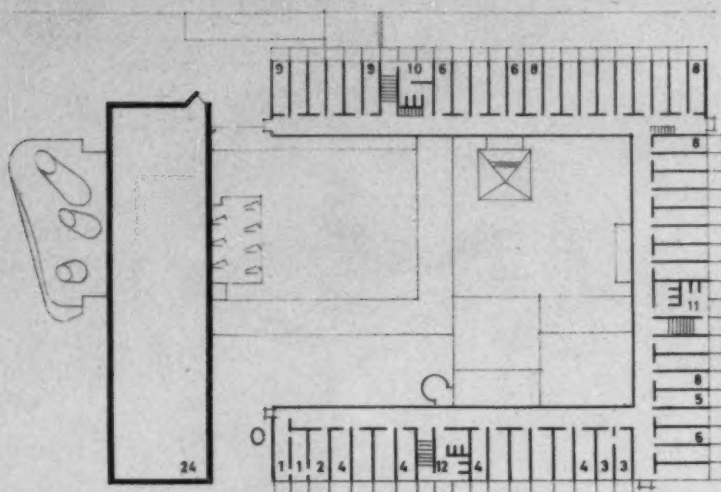
On the east side the top floor of the communal areas is at the road level, and access into the building past the porter's lodge is by a short bridge as a continuation of the floor. The porter's lodge, and four interview rooms associated with it, are deliberately designed as free shapes to emphasise their difference in purpose from the cells above. The rest of this floor is fully glazed on the courtyard side so as to form a cloister serving library, common rooms and lecture rooms. Jutting out from this cloister into the courtyard is the novices' chapel, a cube with a pyramid roof containing a carefully designed slot to direct daylight onto the altar wall. At the floor level below the cloister there are ramped corridors crossing the quadrangle and connecting the refectory and atrium with the two main staircases and the church. The lowest floor of the building (on the west side only) is used for kitchen and boiler house. The massing of the chapel follows the pattern of the rest of the building, with projections at low level on both north and south sides forming a series of subsidiary altars for individual prayer. The levels are arranged so that altars on the north side can be reached by a corridor under the church floor. The rooflights over these altars for individual use have been carefully designed to concentrate light in the right places; on the north side their angles are varied so that changes of sunlight, cloud and shadow are expressed inside the church. In the main church equally careful attention has been given to the lighting; a rooflight illuminates the high altar, and there are low-level horizontal strip windows, carefully screened, behind the pews on both sides of the building. The total effect is one of a very highly developed integration of form, light and function.





Left top to bottom:  
 Section looking south  
 Plan of cell floors  
 Plan at entrance level  
 Plan at lower level of refectory and church

[Scale: 1:800]



Section  
 A. Cells  
 B. Lecture rooms  
 C. Refectory  
 2. Interview rooms  
 6. Chapel  
 11. Atrium  
 13. Corridor, church/atrium  
 15. Stairs  
 21. Courtyard  
 Cell floors  
 1-9. Cells  
 10, 11, 12. W.c.  
 24. Church  
 Lower floors  
 1. Porter  
 2. Interview rooms

3. Lay brothers' common-room  
 4. Novices' library and common-room  
 5. Library and reading-room  
 6. Novices' chapel  
 7-10. Lecture rooms  
 11. Atrium  
 12, 13. Corridors  
 15. Stairs to atrium  
 16. Refectory  
 17. Treasury  
 18. High altar  
 19. Side altar, north  
 20. Side altar, south  
 21. Courtyard

Windows in the building are generally fixed, adjustable shutters providing ventilation. For windows lighting communal spaces, other than those at cloister level facing into the courtyard, Le Corbusier has used for the concrete mullions the wave-motion pattern first developed at Chandigarh, this being, of course, set out on the Modulor scale. This dimensioning system has also been used throughout the building except for the church, where there is a complete change of scale to a 50 ft. ceiling height, and where in any case Le Corbusier felt that the Modulor, once away from the living-quarters, was no longer appropriate.

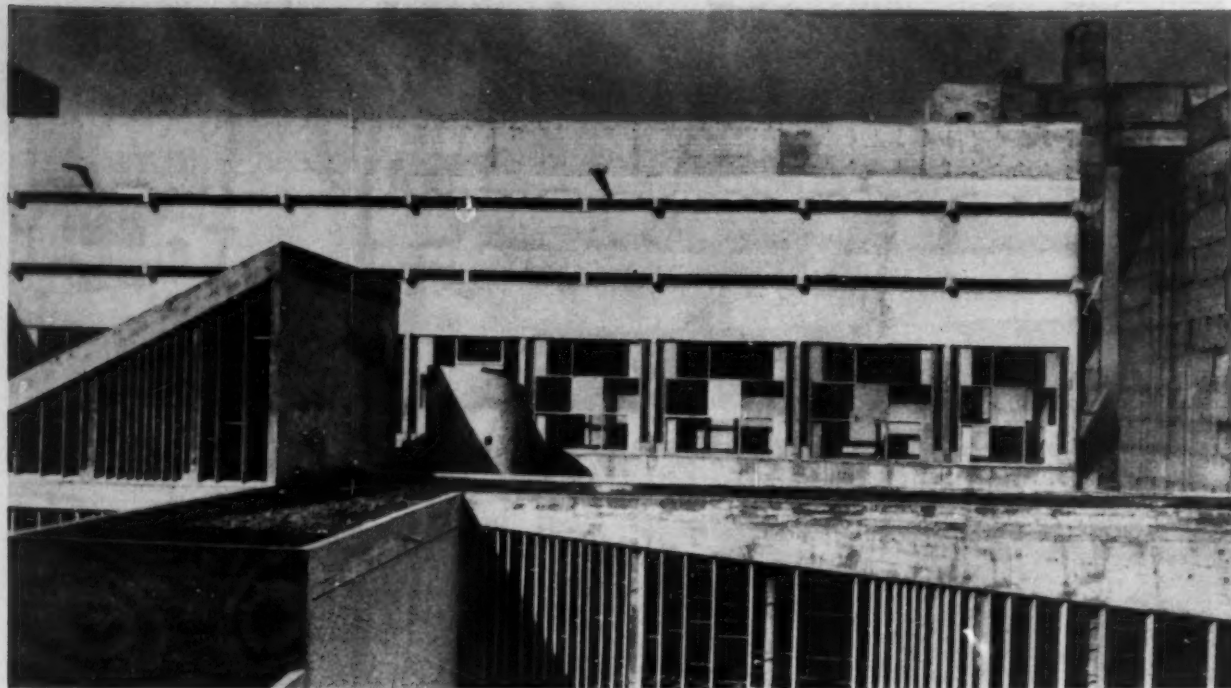
Naturally, the building had to be constructed within relatively low cost limits, and it has been carried out at a price per square foot in line with that for low-cost housing in France. It is almost certainly wrong to attribute to this factor the building's relatively low standard of finish, because the latter is such a common feature of Le Corbusier's more recent work. One fact that must be borne in mind is that, owing to there being no French equivalent of the William Morris group and the art and crafts movement, most French architects seem not to be particularly interested in texture as a medium of design. Certainly such things as expensive hand-made bricks, so frequently used in this country, strike them as quaint. Therefore, the context in France of this rough finish is quite different from what it would be here. In



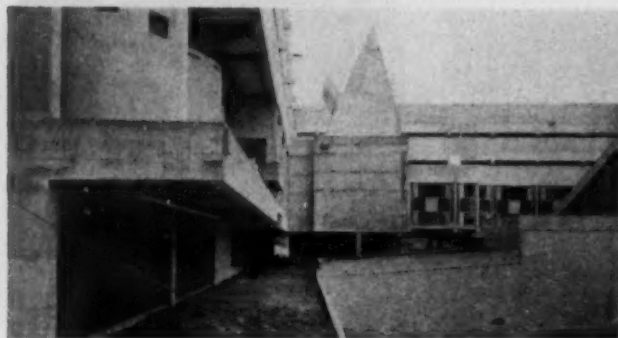
*The approach to the monastery along the road from the south*



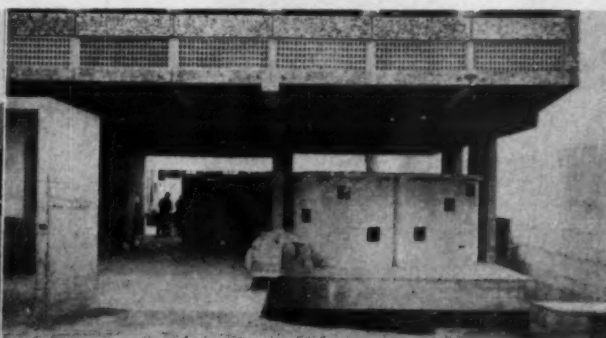
*Looking into the courtyard with the church on the right. Baffles on end windows screen off low-level daylight*



*Courtyard looking west, showing storey-height windows of the cloister and steeply pitched roof of the atrium*



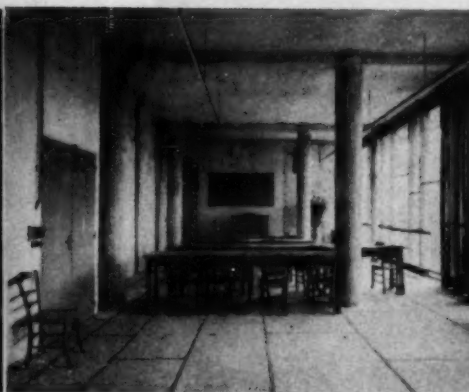
*Pointed roof of the novices chapel*



*Entrance, with interview rooms on the right*



*Refectory*



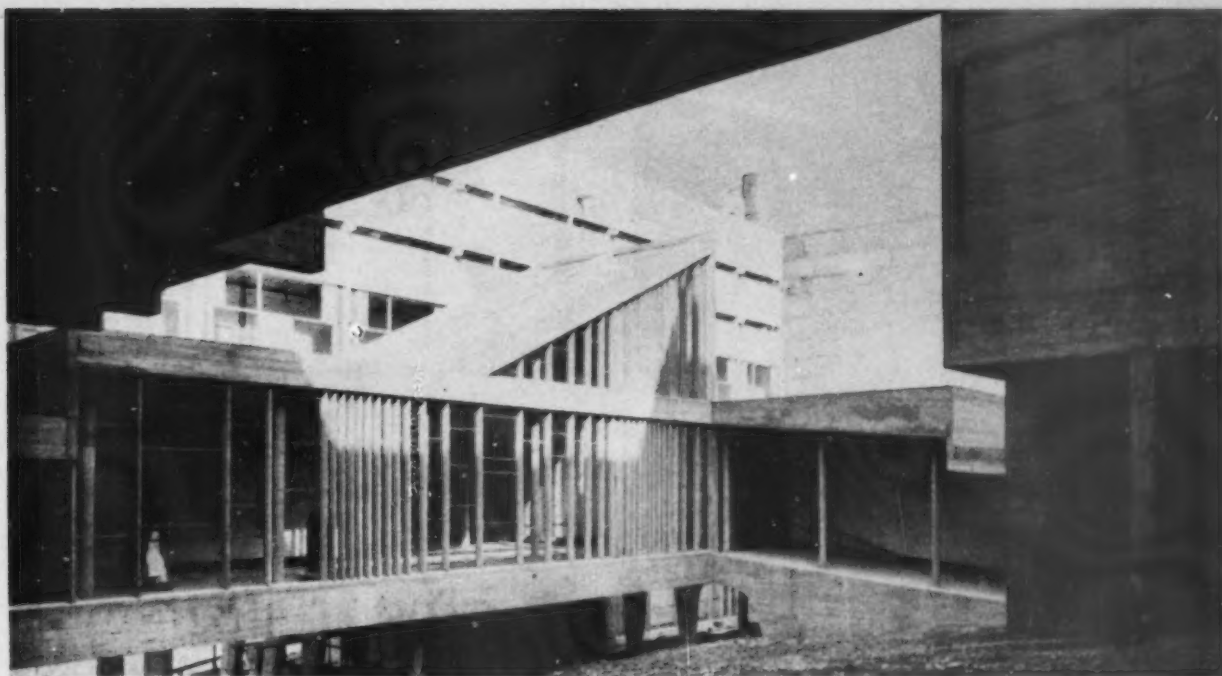
*A lecture room*



*A typical cell*

any case, it seems clear that Le Corbusier welcomes the rough board marks on his concrete rather as a painter enjoys seeing his brush strokes on canvas, and believes that for this particular

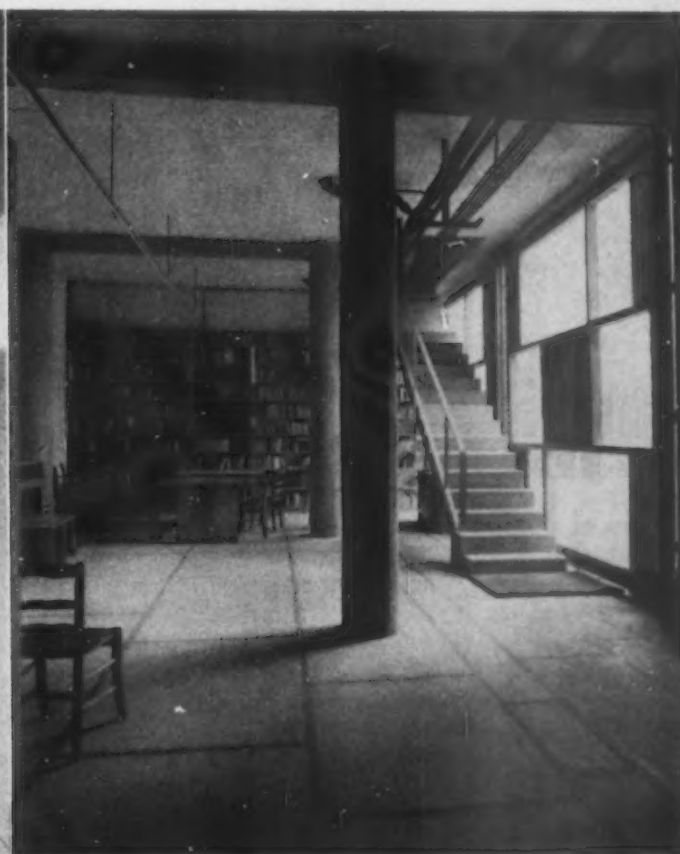




*Courtyard looking north-east, with the ground sloping away under the building*

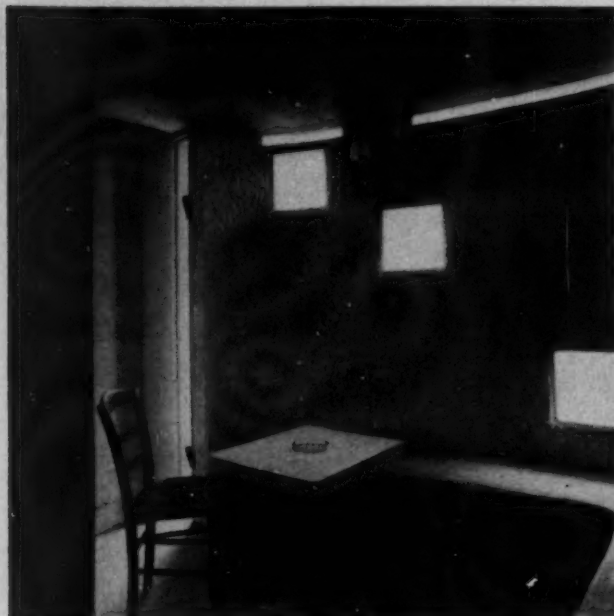
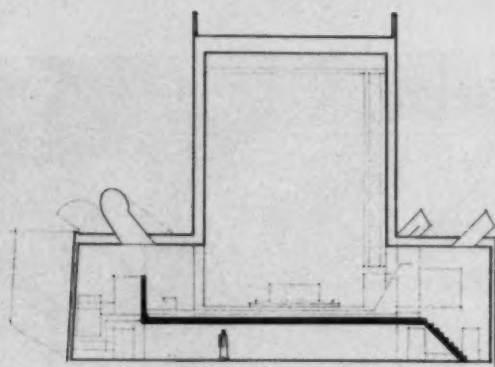
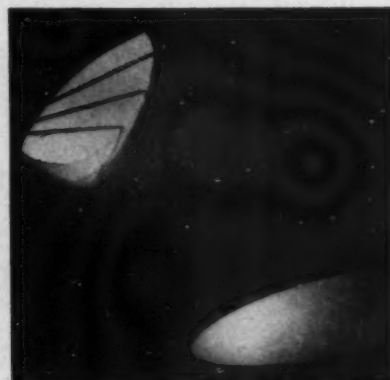


*A typical corridor*

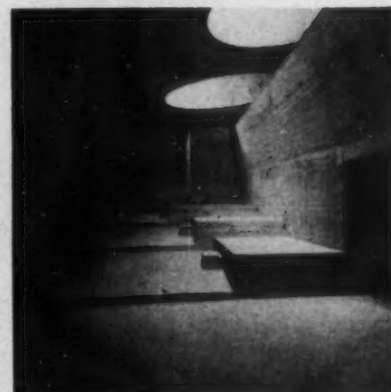


*Library*

building such treatment is in character with the directness and simplicity of monastic life. This also explains why all services round the inside of the building are left exposed.

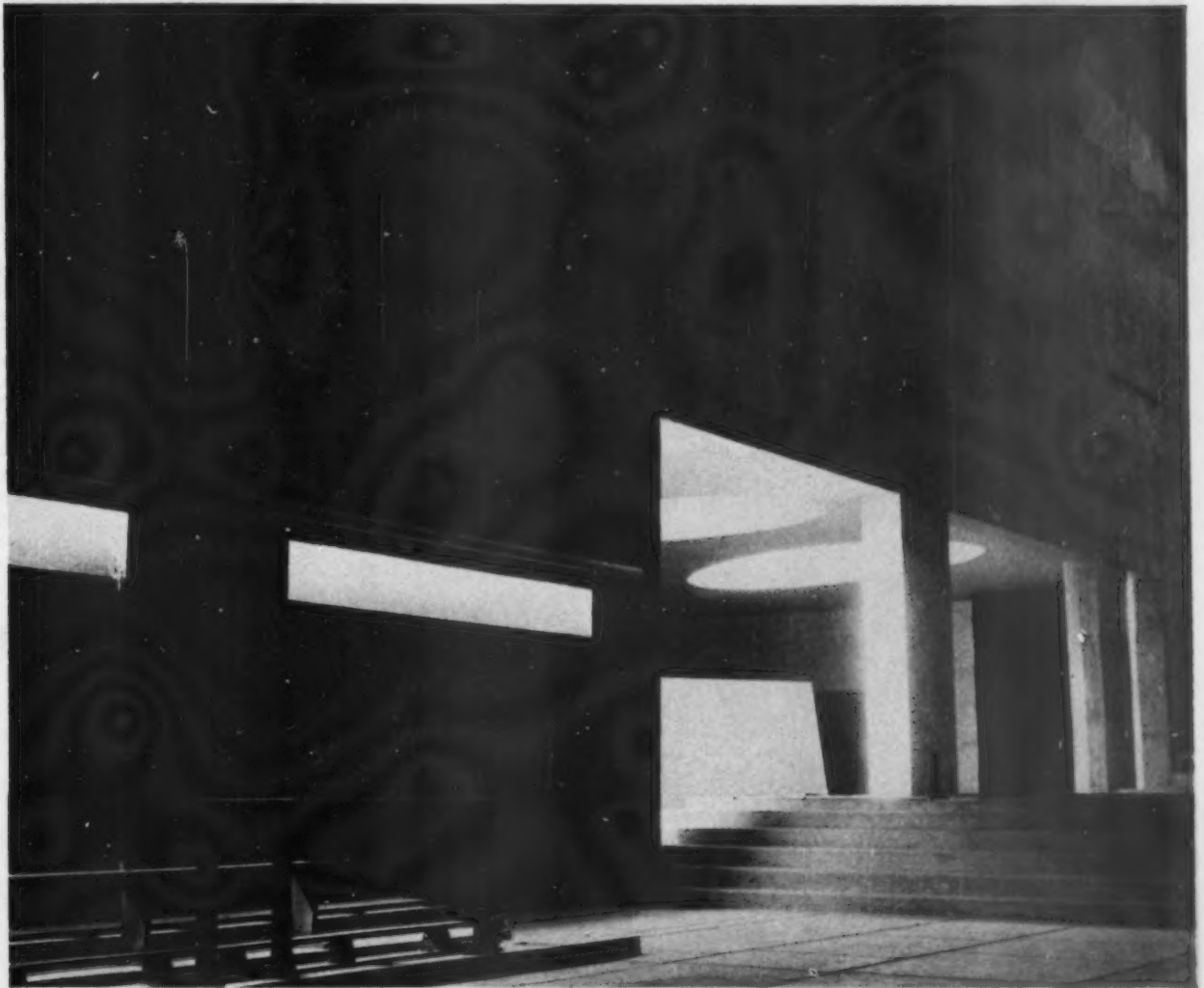
*Inside an interview room**Glazing to the refectory**Section through the church looking east showing access to the north side altar*  
[Scale: 1:400]*Rooflights to north side-altars*

It has always been a tragedy that Le Corbusier's buildings are so often looked at superficially, then copied equally superficially. The trouble started a long time ago, when architects took the horizontal windows of such early houses as Maison Cook, or the villa at Garches, and applied them to the traditional English brick-box house. To make the effect more convincing, they sometimes covered the brick with white rendering to make it look like Le Corbusier's concrete. More recently the pop windows of Ronchamp and its water spouts have been stuck on buildings which are otherwise conventional. There is now even a Ronchamp-type shop-front on a furniture store in Paris—a thick, roughly rendered wall with holes in various places through which the display inside can be seen. One would have thought that critics would know better, but there was the celebrated occasion when one of them visited both Maison Cook and Maison Jaoul, soon after the latter was finished, in order to compare the two. He came back in great distress because Maison Jaoul was on such a tight and overgrown site that he found it quite impossible to see some of the elevations—even from the neighbours' gardens—while the older house, Maison Cook, had been ruined in his view because a tree had been allowed to grow in front of the street facade.

*Tiers for the north side-altars*



*Interior of church looking towards the high altar which is raised above the main floor level*



*North side-altars as seen from the church*



The greatest difficulty is that, in general, architects see buildings, especially those abroad, only in photographs with little or no explanatory text, which tends to foster this purely superficial view. Another factor, which is all too easily forgotten, is that the particular social environment in which the architect is working may be totally different from that in this country. In France, the whole focus of activity is development to the highest possible pitch of the individual in both philosophical and creative terms. This is the perfect setting for the very few individual masters that any particular generation can produce, with everyone else working at a much lower standard. La Tourette stands as a superb exercise within this context; the paradox of formalism and functional planning has been resolved, and there is a perfect integration between space, structure and natural lighting, carefully developed from a close study of the pattern of monastic life.

At La Tourette, Le Corbusier is thus working in the best traditions of French architecture. But one is left with grave doubts as to whether this method of design by a single omnipotent architect, which after all is an essentially Renaissance concept, can survive much longer in the face of the increasingly complex problems of present-day building design. Such doubts apply less, perhaps, to Le Corbusier himself than to those who will follow on and try to keep this tradition alive. Even at La Tourette it is evident that certain technical aspects of the design have been more or less left to look after themselves, such as heating and ventilation, noise control and artificial lighting.

*The rooflights over the side-altars are angled so that changes of sun and cloud are expressed inside*

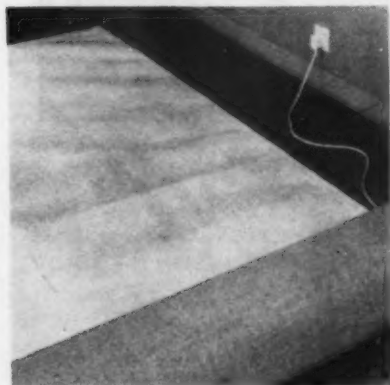


## THE INDUSTRY

*This week Brian Grant describes an electrically heated underlay, an emergency lighting system, a bonding agent for screeds, data sheets on slate, and a range of oil-fired boilers.*

**Floor Heating**

Martindill are now producing an electrically heated underlay for use with carpets or linoleum. The units are made up with two layers of fibre-glass cloth with the heating element between them. Standard sizes vary from 9 by 6 to 12 by 12 feet and loadings from 1 to 3 kilowatts, prices from £14 to £37 retail. The heaters are guaranteed for 3 years and also carry an indemnity policy up to £10,000 against damage to people or property due to faulty workmanship. (Martindill Ltd., 3/5 Commercial Road, Paddock Wood, Kent.)



Martindill underlay

**Emergency Lighting**

There are many types of building in which some form of stand-by lighting is either essential or desirable, but the usual accumulator system needs a fair amount of wiring, and can be quite expensive to install. A possible alternative is the Moflash unit, which has a 6-volt Varley accumulator and a 36-watt lamp. It can be connected to the mains supply wherever emergency light is needed and a relay switches it on automatically if the mains supply should fail. The unit also incorporates a charger so that there is no trouble with keeping spare accumulators charged. (The Silvaflame Co. Ltd., 218a, Monument Road, Birmingham 16.)

**Bonding screeds**

A reliable method of bonding cement/sand screeds without the need to provide a mechanical form of key is obviously most desirable, and Cement Weld is claimed to provide an excellent bond with any clean sound surface, such as smooth concrete, fair faced brickwork or glazed tiles, though distemper, emulsion paint or limewash must be cleaned off first. The bonding agent is a liquid which is applied by brush or spray and left for a minimum of four hours. It can also be used for bonding old to new concrete, and in ordinary Portland cement mixes to improve bond strength and plasticity. (J. Manger & Son Ltd., Kingsland, London, E.8.)

**Photomurals**

From a leaflet just issued by Autotype I am surprised to discover that photomurals are less expensive than I had imagined, an area 15 ft. by 7 ft. 6 in. costing about £35, this amount being made up of £10 copyright fee and the preparation of an intermediate size negative, and £25 for the mural itself. The standard method of printing is on lightweight white base paper for ease of hanging, and the murals are made up in 36-in. wide strips ready trimmed for use by the paperhanger. Autotype hold a large library of photographs, but can produce murals from any good quality negative or print. Hand-coloured photomurals are also produced, but are considerably more expensive. (The Autotype Co., Ltd., Brownlow Road, West Ealing, London, W.13.)

**Information on Slate**

Kirkstone Quarries have issued a folder of data sheets with fixing details for slate cladding, window surrounds, cills and copings and floors and paving. The details are clearly set out and the information is clear and to the point. There are also some good photographs showing the various finishes available, and samples are available if required. Visitors are welcomed at works or quarry, so anyone going through the Lakes on a holiday might do worse than stop to have a look. (Kirkstone Green Slate Quarries Ltd., Skelwith Bridge Sawmills, Ambleside, Westmorland.)

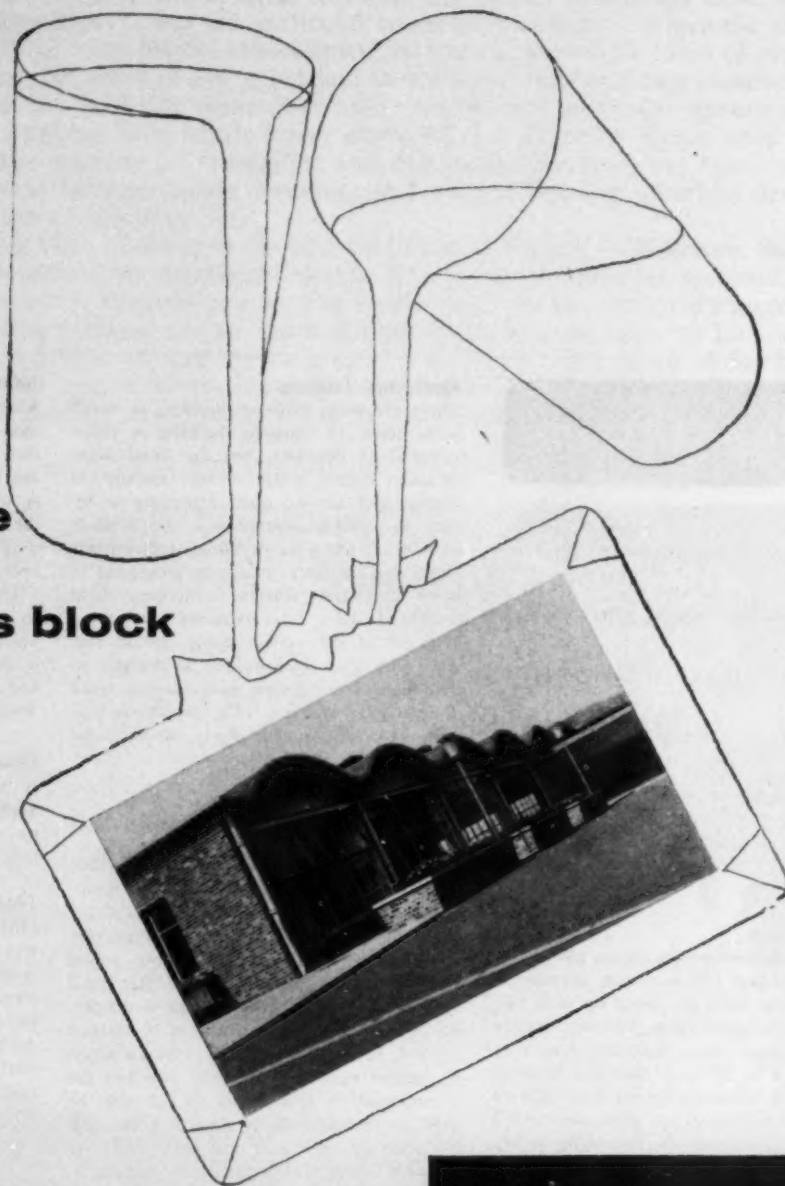
**Oil-fired Boilers**

A new range of Swedish made Lombard oil-fired boilers is now being marketed in this country. They are intended for central heating and hot water supply and are made in three sizes, 80,000, 115,000 and 140,000 B.t.h.u. per hour, selling at £165, £185 and £205. From the output figures it will be seen that they are intended for fairly large houses, but they have thermal efficiencies in excess of 80 per cent and can be used with the output cut to about half the maximum rating. Construction is welded steel and plan dimensions are a little less than 15½ in. square. (Lombard Engineering Enterprises Ltd., 39/40 Albemarle Street, London, W.1.)



Lombard oil-fired boiler

**MONK**  
pour their  
quality  
& experience  
into this  
Cadbury's block



Part of the vast, new factory development at Moreton, Wirral, for Cadbury Brothers Ltd.

Chief Architect:

C. J. Wilkinson, L.R.I.B.A.  
Messrs. Cadbury Brothers Ltd.



A. MONK & COMPANY LIMITED  
Warrington & London

Offices at: Hull, Middlesbrough,  
Stamford & Worcester

BUILDING, CIVIL ENGINEERING AND  
REINFORCED CONCRETE CONTRACTORS





## technical section

INFORMATION  
CENTRE

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

(93)

725-4

18.216 construction: theory  
FOUNDATIONS FOR FACTORIES

*Factory Building Study No. 5  
Sites and Foundations. A. D. M. Penman  
(HMSO, 1960 3/0)*

This booklet provides some 20 pages of general advice on foundations problems. The pamphlet is divided into five sections. The first deals with movements not caused by structural loads, i.e., mining subsidence, swallow holes, consolidation and expansion of fill, shrinkage of clay, frost heave and chemical attack on buried concrete. The second section deals with movements caused by imposed structural loads such as loads on fill, consolidation of clay, plastic flow and shear failure in the soil. Section 3 is a brief dissertation on site investigation and section 4 deals with the bearing capacity of the soil. The last section covers construction of foundations and permissible settlements. Two tables are provided, one giving extracts from six different countries' Building Codes, the other giving permissible total settlements as allowed in the building code of the U.S.S.R. 1955.

Generally this pamphlet provides a summary of information which has been published elsewhere by B.R.S. and others over the last 10 years. Unlike other pamphlets of this series it does not specifically apply to factory buildings and in this respect is a little disappointing. Machine bases, press shop equipment, etc., require something more than a description of soil mechanics to aid in their design and illustrations of foundation types and anti-vibration mountings would surely come under the heading of foundation design.

SID File No.

(21)G

UDC No.

69 002 325

## 17 CONSTRUCTION: GENERAL

## light cladding, 13: Survey, 2

In this, the final article\* of this series, R. Michael Rostron completes his presentation of a survey of 67 curtain wall structures in this country.

## Owners' Experience and Opinion (Tables 21 to 24):

Many of the results of the owners' questionnaire must be judged in the light of their limited experience of many of the buildings. Table 22 shows that 30 per cent of the owners had occupied the buildings for less than two years. The reasons for this have already been given, but it should not be forgotten that two years (or even eight years) is not very long in the life of a building. It may, however, safely be assumed that a large proportion of defects would be apparent after two years.

Table 23 indicates a generally favourable opinion of the appearance of the cladding, the opinions being fairly uniformly distributed between building owner (or occupier), employees and public. The large number of "good" opinions (rather than "excellent" or "poor") is, perhaps, as much a confirmation of the characteristic British like of compromise as a considered opinion. (In America, the BRAB Survey showed a marked preponderance of "strong approval"). The distribution of "poor" opinions has been analysed in Table 24, but to give a fair result a correction was made as follows. The ten "poor" opinions in Table 23 were first divided into cladding types. Since cladding types were in unequal numbers, the number of "poor" opinions of each type was then divided by the number of examples of each type and tabulated as relative percentages. It should also be explained that "Sheath Wall: 24 per cent," for example, does not mean that 24 per cent of sheath walls were considered poor, but that 24 per cent of the "poor" opinions in Table 23 refer (subject to the corrections noted) to sheath walls. Because of the comparatively small number (10) of "poor" opinions, Table 24 should be regarded with some caution. It does, however, suggest that the least disliked types of cladding from the point of view of appearance are the "traditional" types: grid panel and sheeted. This should cause no surprise!

\* Previous articles in the series were as follows: Heat Transmission, February 25, 1960; Stability, March 3; Condensation, March 10; Fire Resistance, March 17; Sound Insulation, March 31; The Joint, April 28; Materials and Finishes, Metals, May 12; Materials and Finishes, Timber and Glass, May 19; Materials and Finishes, concluded, June 23; Erection, July 21; Durability and Maintenance, September 22; Survey, 1, October 13.

# EASTWOODS

# CEMENT

for 'on site' delivery  
in bulk .....

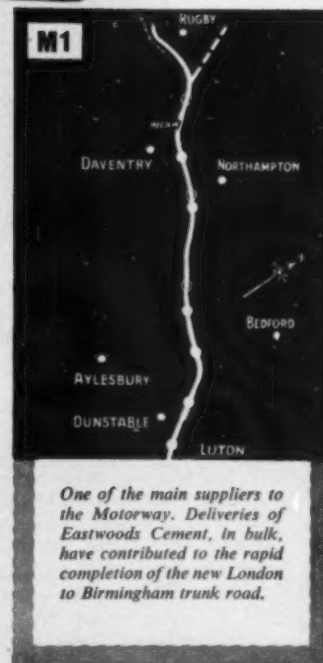


or bags



For faster construction on modern roads and buildings so much depends on reliable deliveries of cement—when you want them—where you want them—how you want them. The Eastwoods Service gives prompt attention to your requirements. On time, scheduled deliveries of finest grade Portland or "Durocrete" Rapid Hardening Cement—either bagged, bulk

—tipped or pressurised—can be made to your site from three cement works at Barrington (Cambs), South Ferriby (Lincs), and Lewes (Sussex).



## EASTWOODS SALES LIMITED

Head Office: Eastwood House, 158-160 City Road, London, E.C.1. Telephone: CLerkenwell 2040 (30 lines)

Northern Area Sales Office: 39 Thorne Road, Doncaster  
Telephone: Doncaster 49256/7

Lewes Cement Sales Office: Southerham, Lewes, Sussex  
Telephone: Lewes 500/1

Depots at: CAMBRIDGE, 117 East Road, Tel: Cambridge 55514/52087; COVENTRY, Sandy Lane, Tel: Coventry 28701/2/3; DONCASTER, Crompton Road, Tel: Doncaster 61442/49256; EASTLEIGH, Allbrook, Eastleigh, Hants. Tel: Eastleigh 2621/2; GILLINGHAM, Trafalgar Street, Tel: Gillingham 51088/9; GREENWICH, Norman Road, S.E.10, Tel: GREENWICH 1172/3; HILLINGDON, Uxbridge Road, Tel: Uxbridge 37391/2/3; IPSWICH, Cumberland Street, Tel: Ipswich 53794/5; ISLEWORTH, 11 The Square, Tel: Isleworth 2271/2; KINGSLAND, 4 Orsman Road, N.1. Tel: SHoreditch 4133/4; KING'S LYNN, South Everard Street, Tel: King's Lynn 3718; LEEDS, 7, 320 Meanwood Road, Tel: Leeds 43401/2; LETCHWORTH, Birds Hill, Tel: Letchworth 1700; MORTLAKE, High Street, S.W.14, Tel: PROspect 7231/2/3; NORWICH, Rosary Road (NOR 225) Tel: Norwich 21498; SOUTHBEND-ON-SEA, Fairfax Drive, Southend, Essex, Tel: Southend 48171/2; SUDBURY (Suffolk), North Street, Tel: Sudbury 2895/6; WEMBLEY, 133A Wembley Park Drive, Tel: WEMbley 5404/5; WEYBRIDGE, Bridge Wharf, Tel: Weybridge 3963

## technical section

YEAR	No.	%	
1931	1	2	■
1936	1	2	■
1951	1	2	■
1952	1	2	■
1953	2	4	■
1954	7	13	■
1955	15	28	■
1956	19	36	■
1957	6	11	■
	53	100	

TABLE 21 Date of erection

OCCUPANCY	No.	%	
less than 1 year	6	11	■
1 to 2 years	10	19	■
2 to 3 years	16	30	■
3 to 4 years	12	22	■
4 to 5 years	3	6	■
5 to 6 years	2	4	■
6 to 7 years	1	2	■
7 to 8 years	1	2	■
over 8 years	2	4	■
	53	100	

TABLE 22 Occupiers' years of experience of building

	OWNER	EMPLOYEES	PUBLIC	total	%	
Excellent	16	17	16	49	30	■
Good	31	29	18	78	49	■
POOR	5	6	5	16	10	■
No answer	2	2	13	17	11	■
				160	100	

TABLE 23 Opinions on the appearance of the cladding


## Performance: (Tables 25 to 34)

The information on performance confirms many suspicions about light cladding. It also reveals where further manufacturing research is necessary as well as offering a pointer to future developments. In both, the architect has a useful and necessary part to play. The most frequently raised objection to the sheath wall in particular and to light cladding in general is confirmed in Tables 26 and 27. Table 26 gives the disturbing information that 42 per cent of the buildings examined leak. This, it should be pointed out, is continued leakage. Leakage occurring during the defects liability period and since remedied is omitted. Table 27 is built up and corrected in a similar manner to Table 24. It shows that 84 per cent of the buildings which leaked were either sheath walls or vertical panel walls (which may be regarded as a series of narrow sheath walls interrupted by continuous mullions). No leakage was reported through sheeted walls (which have

few joints) or through grid panel walls and only comparatively slight leakage through horizontal panel walls. This suggests that horizontal projections (such as occur on horizontal and grid panel walls) give substantial protection against water penetration. This supposition is to some extent confirmed by Table 28. Horizontal projections protect horizontal joints and it is these joints which Table 28 shows to be weakest. Leakage through (or, more correctly, around) glazing occurs equally around opening windows and fixed panes.

Badly fitting windows, especially metal windows, were the most significant cause of draughts (Table 29). Noticeable draughts occurred in 15 per cent of the buildings examined. In a similar number some dust penetration was reported (Table 25), although in few cases were they the same building. Internal surface condensation on walls (Table 32)





For design,

finish ...

choice of sizes

and colours,

Architects need

look no further

than Bilston, the

Bath Specialists

ATLANTA

MAGNA

CRESTA

MARINA

HERMAFD

BERMUDA

PRINCESS

# BILSTON

Illustrated literature sent on request · Bilston Foundries Ltd, Bilston, Staffs

## technical section




TYPE OF CLADDING	%	
Sheath wall	24	
Grid panel wall	0	
Horizontal panel wall	42	
Vertical panel wall	34	
Sheeted wall	0	
	100	

TABLE 24

Distribution of "appearance poor" in TABLE 23  
(corrected for number of examples of each type)



	No.	%	
No infiltration of dust	39	85	
Some infiltration of dust	7	15	
	46	100	

TABLE 25

Infiltration of dust



	No.	%	
No infiltration of water	31	58	
Some infiltration of water	22	42	
	53	100	

TABLE 26

Infiltration of water




TYPE OF CLADDING	%	
Sheath wall	45	
Grid panel wall	0	
Horizontal panel wall	16	
Vertical panel wall	39	
Sheeted wall	0	
	100	

TABLE 27

Distribution of leakage noted in TABLE 26  
(corrected for number of examples of each type)

and windows (Table 33) was fairly infrequent, due to the low thermal transmittance of most panels and to the common practice of positioning radiators in front of panels (Table 31). No opportunity was available to investigate the occurrence of interstitial condensation, but it was felt that any severe condensation within the panel would have made itself apparent.

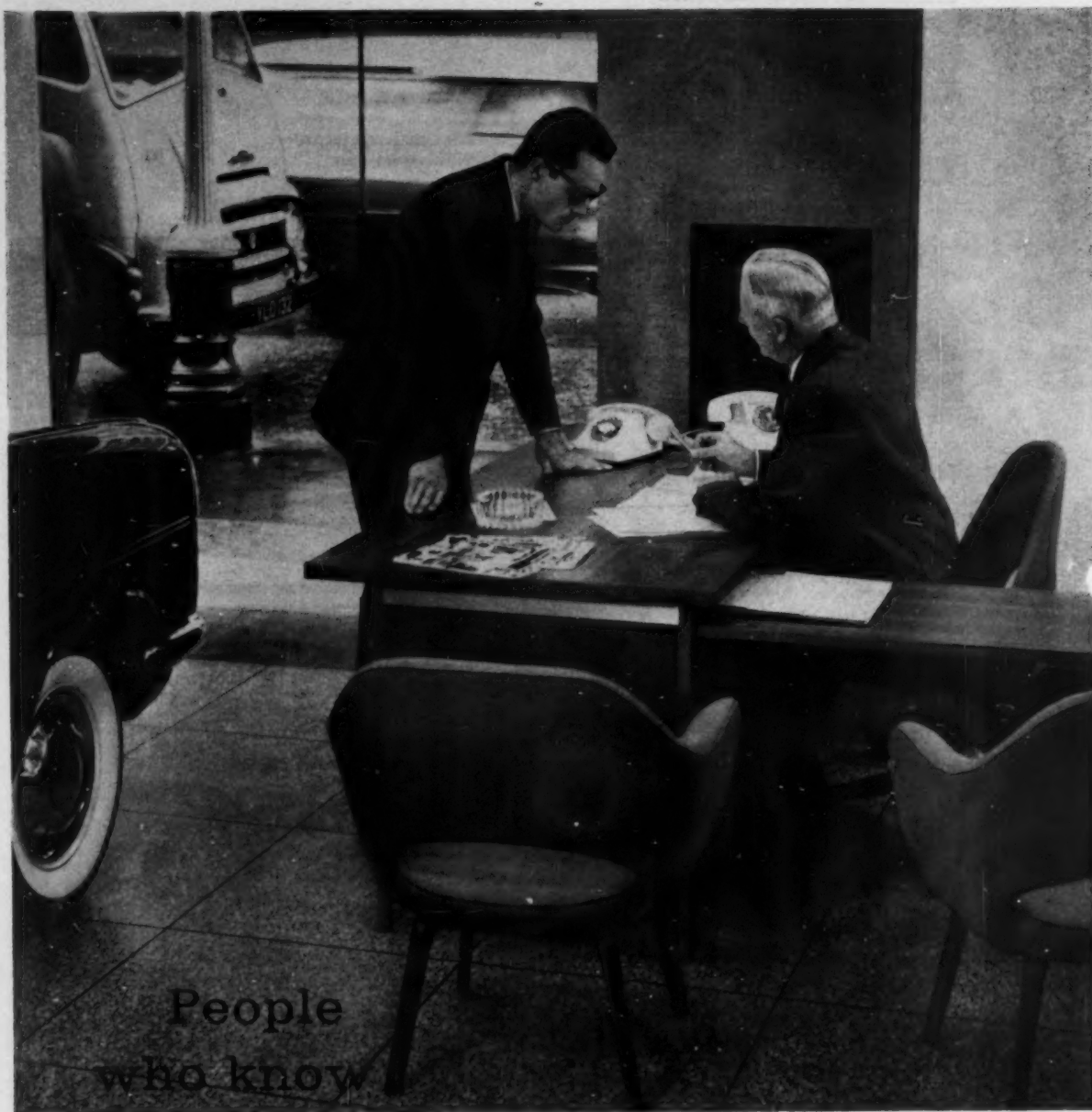
Table 34 reveals a common defect which has not yet received nearly enough attention in this country: solar heat gain. Despite the infrequent appearance of the sun in England, over one third of occupiers interviewed reported uncomfortable solar heat gain and a large proportion of these claimed it the most serious defect in the building. It is obvious that increased areas of glazing present a very real problem in this respect. It is certainly not a problem confined solely to tropical and semi-tropical areas.

**Maintenance:** (Tables 35 to 41)

Very few maintenance problems were raised, a fact which seems to reinforce the opinions given in Table 5, where the most frequent reason for the choice of a particular cladding material was easy maintenance. The change of method of maintenance (Table 38) from ladders to cradle occurs somewhere between three and four storeys—a limitation imposed generally by the maximum length of ladder available.

**Conclusions:** (Tables 42 and 43)

Architects' and occupiers' conclusions are based on their actual experience of buildings in the survey and are generally favourable, perhaps more so on the part of occupiers than architects. Architects' reservations mostly concern panel finish and material and windows with complaints about sealants closely following.



Architects: Howard, Fairbairn & Partners

## are talking about

...the brisk, functional look of Vauxhall Overseas new London showroom...the advanced design of Martins Bank at Shirley, Birmingham...the modern efficiency of the Queen Magazine's editorial offices...the World Headquarters of Castrol Oil Group...and other large interior schemes too numerous to mention. For a fully illustrated brochure, write for "More Interiors" by

**HEAL'S**  
CONTRACTS LIMITED

196 Tottenham Court Road, London W1 Museum 1666



## technical section





LOCATION OF LEAKAGE	No.	%	
At vertical joints	2	7	
At horizontal joints	11	35	
Around opening windows	9	29	
Around fixed panes	9	29	
	31	100	

TABLE 28 Location of leakage



	No.	%	
Draughts have been noticeable near walls	8	15	
No complaints about draughts near walls	45	85	
	53	100	

TABLE 29 Winter comfort conditions: draughts



	No.	%	
Surface of wall comfortable to the touch	15	83	
Surface of wall cold to the touch	3	17	
	18	100	

TABLE 30 Winter comfort conditions: wall surface  
(where accessible and not heated by adjacent radiators)








METHOD OF HEATING	No.	%	
Radiators in front of panels	33	58	
Radiators elsewhere	3	5	
Warm air	16	28	
Floor panel	1	2	
Ceiling panel	1	2	
Air conditioning	1	2	
None	1	2	
	57	100	

TABLE 31 Method of heating



PANELS	No.	%	
No noticeable condensation	50	94	
Some condensation observed	3	6	
	53	100	

TABLE 32 Apparent surface condensation: PANELS



GLAZING	No.	%	
No noticeable condensation	41	77	
Some condensation observed	12	23	
	53	100	

TABLE 33 Apparent surface condensation: GLAZING



SOLAR HEAT GAIN	No.	%	
Not disturbing	33	62	
Uncomfortable	20	38	
	53	100	

TABLE 34 Solar heat gain

# Information for Architects

**Truscon REFERENCE SHEET**  
**PRECAST CONCRETE STRUCTURAL FLOORS**

**Truscon REFERENCE SHEET**  
**PRECAST CONCRETE STRUCTURAL FLOORS**

**Truscon REFERENCE SHEET**  
**PRECAST CONCRETE STRUCTURAL FLOORS**

## Truscon Type 1 Floor Unit

Purpose made precast concrete units of channel section. In-situ end filling is retained by metal end caps supplied with the units (Fig. 1).

Detailed working drawings, showing the placing of the units and ancillary fittings (Fig. 6) are supplied for each job.

Estimates are given for supply and fixing and for supply only.

### LOADING

The Truscon Type 1 unit is designed to carry superimposed loads on floors and flat roofs in accordance with chapter V, CP.3 (1952). Additional loads such as equipment, walls, and loads in excess of chapter V, CP.3 (1952) may be carried by means of  $\frac{1}{2}$  width units, additional in-situ reinforced concrete between spaced units, or by the addition of a structural topping. Superimposed loads of over 3 cwt. per sq. ft. have been carried in this way.

### WEIGHT

The absence of a bottom slab gives the Type 1 unit exceptional lightness—compared with a solid slab a saving of weight as great as 60%—enabling reductions to be made in the size of the supporting structure and foundations.

### SERVICES

The open soffit of Type 1 units allow the installation and servicing of plumbing, electrical conduits, drainage, lighting, etc., within the thickness of the structural floor, achieving the least possible depth from floor finish to ceiling (Fig. 5). Holes for services can be provided in the top slabs of units—openings up to 10" square being blocked out at works; holes, up to 3" diameter can be cut on site.

### FINISH

The tops of the units are roughened to receive a screed. The soffits, being cast on steel moulds, have a smooth surface, and require little further treatment when no ceiling is required.

### QUALITY

The concrete, reinforcing steel and workmanship comply with the requirements of CP.114 (1957).

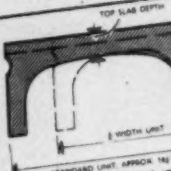


Figure 1: Sections of Type 1 units.

Figure 2: Maximum spans for various superimposed loads and unit depths.

Unit depth	1 1/2" top slab		2" top slab	
	Unit depth	Unit depth	Unit depth	Unit depth
5"	11' 0"	10' 10"	11' 2"	10' 7"
6"	13' 0"	13' 0"	12' 10"	12' 7"
7"	15' 0"	14' 6"	13' 11"	13' 4"
8"	16' 0"	16' 4"	14' 10"	13' 6"
9"	18' 0"	17' 4"	15' 8"	14' 2"

Table 1: Loading table for full width units.

Unit depth	Wt./sq. ft. with grouting	Wt./sq. ft. run unit only
5"	30 lb.	36 lb.
6"	33 lb.	40 lb.
7"	37 lb.	43 lb.
8"	40 lb.	46 lb.
9"	44 lb.	50 lb.
10"	47 lb.	52 lb.
11"	49 lb.	54 lb.
12"	51 lb.	56 lb.
13"	53 lb.	57 lb.
14"	55 lb.	59 lb.

Table 2: Dead weights.

Fire Resist. in hours	Top slab thickness of precast unit	Top treatment	Ceiling construction	Fire test Report No.
4	1 1/2"	1" sand/cement screed	1" Gypsum plaster on HY-RIB Lathing	FR.061 483
2	1 1/2"	1 1/2" sand/cement screed	1" Gypsum plaster on metal lathing	estimate
2	2"	2" sand/cement screed	none	estimate
2	2"	1 1/2" sand/cement screed on 1" board, 1" screed	1" Gypsum plaster on 1" plaster board on timber battens	estimate

Table 3: Fire resistance.

Table 4: Fire resistance.

# Truscon

Henceforth Truscon will present technical information concerning their products and services in the form of reference sheets to British Standard A4 size. The first three sheets, dealing with Truscon precast floor units, are now available on request from Truscon Limited, 35/41 Lower Marsh, London S.E.1. WAT 6922

## technical section

	No.	%	
No effect	35	66	
Corrosion of framing	4	7	
Fading or colour change of panel	6	11	
Surface deterioration of panel	3	6	
Failure of panel	5	10	
	53	100	

TABLE 35 Effect of weather on appearance

FRAMING	No.	%	
Framing remains clean	44	83	
Framing unduly grimed on horizontal surfaces	9	17	
	53	100	

TABLE 36 Effect of airborne dirt on framing

PANELS	No.	%	
Rain keeps panels clean	39	73	
Dirt forms vertical streaks on panel	10	19	
Panels permanently darkened	4	8	
	53	100	

TABLE 37 Effect of airborne dirt on panels

NO. OF STOREYS	1	2	3	4	5	6	7	8	9	Total	%	
Ladders	3	14	13	2						32	59	
Cradle			3	3	3	3		1	1	14	26	
From inside			2	1	2	1				6	11	
Platform lorry				1						1	2	
Projecting nib				1						1	2	
										54	100	

TABLE 38 Method of maintenance

PANELS CLEANED	No.	%	
Every 1 month	3	6	
Every 2 months	1	2	
Every 3 months	7	13	
Every 4 months	6	12	
Every 5 months	1	2	
Every 1 year	2	4	
Every 2 years	2	4	
Never	29	57	
	51	100	

TABLE 39 Cleaning of panels





**One floor of 13,500 sq. ft.  
per seven days —**

**OMNIA Concrete Floors  
contributed to remarkable  
construction speed in this  
major London office building**

Friars House, Blackfriars, London,  
occupied by Central Electricity Generating Board.  
Architect: Robin Selfert, F.R.I.B.A.  
Quantity Surveyor: Thompson & Alexander.  
Consulting Structural Engineers: Reinforced Concrete  
Steel Co. Ltd.  
Contractor: George Wimpy & Co. Limited.

Friars House, London, has a total of 90,000 sq. ft. of OMNIA Floors on eight floors, using 29 ft. spans with a live load of 120 lb./sq. ft. Spine beams are contained within the depth of the floor, giving clear soffits without any projecting beams. Erection was completed at the rate of one floor per seven days — a typical OMNIA success story.

The OMNIA Floor combines precast and in-situ methods of construction and appeals particularly to the Architect because it spans economically to over 30 feet and gives a level and unbroken soffit without camber or bowing.



**Light in weight, yet monolithic  
Uninterrupted floors and soffits  
Needs no shuttering  
Easy to transport and handle  
Quick and simple to erect  
Spans up to 49ft. Adaptable in design  
Economical in manufacture and installation**

**OMNIA CONSTRUCTIONS LIMITED, 121 London Wall, London E.C.2.**











**Monarch 2272/6**

The OMNIA Concrete Floor is available in all parts of the country from fifteen OMNIA Licensees:

THE ATLAS STONE CO. LTD., LONDON  
THE BLOKCRETE CO. LTD., SOUTHAMPTON  
F. BRADFORD & CO. LTD., EDMONTON  
BRADLEYS (CONCRETE) LTD., DARLASTON  
G. W. BRUCE LTD., ABERDEEN  
T. C. CAMPBELL LTD., NOTTINGHAM

COWLEY CONCRETE CO. LTD., ABINGDON  
DERWENT CAST STONE CO. LTD., MALTON  
DUNBRIK (YORKS.) LTD., LEEDS  
EDENHALL CONCRETE PRODUCTS LTD., PENRITH  
HYDRAULIC PRECASTS LTD., NORWICH  
JAMES K. MILLAR LTD., FALKIRK  
PRESTATYN PRECAST CONCRETE CO. LTD., PRESTATYN  
ST. IVES SAND & GRAVEL CO. LTD., HUNTS.  
SAMUEL TYZACK & CO. LTD., SUNDERLAND

## technical section

WINDOWS CLEANED	No.	%	
Every 1 week	2	4	
Every 2 weeks	3	6	
Every 3 weeks	3	6	
Every 1 month	11	22	
Every 2 months	3	6	
Every 3 months	9	18	
Every 4 months	15	30	
Every 5 months	1	2	
Every 6 months	1	2	
Never	2	4	
	50	100	

**TABLE 40**      *Cleaning of windows externally*

ACCIDENTAL DAMAGE	No.	%	
None	18	35	
Some, easily repaired	31	59	
Some, difficult to repair	3	6	
	52	100	

TABLE 41 Occurrence of accidental damage

WOULD USE AGAIN	No.	%
Yes	43	81
No	7	13
No answer	3	6
	53	100

**TABLE 42** Owners' answers to question: "Would you use this type of construction again?"

ANSWERS	No.	%
No	34	49
Different panel material	7	10
Different panel finish	7	10
Different opening windows (type, size or number)	6	9
Different sealant	4	6
Different framing system	3	4
Allow more tolerances	2	3
Allow for greater thermal movement	1	1½
Provide cleaning cradle	1	1½
Allow for all window cleaning from inside	1	1½
Different method of attachment	1	1½
Easier internal access to panels	1	1½
Provide more external sun control	1	1½
	69	100

**TABLE 43** Architects' answers to question: "If repeating the same contract, are there any points you would wish to change?"

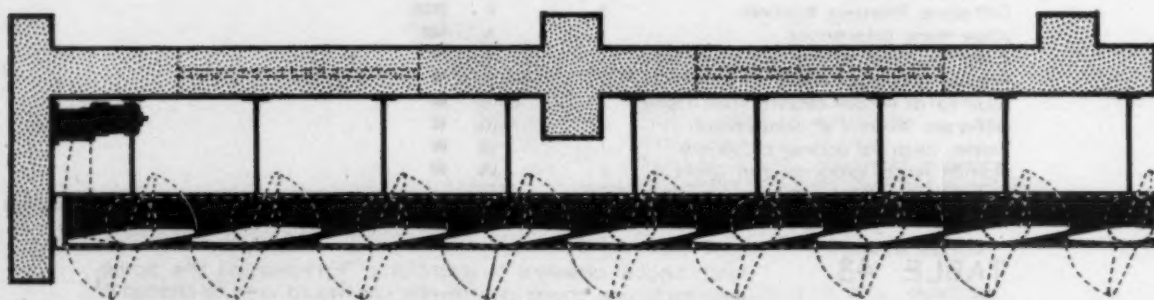
# HOPE'S aluminium sunbreakers



GORDON GRANT BANK, TRINIDAD *Mence & Moore, A.A./L.R.I.B.A., Chartered Architects*

Anodised aluminium sunbreakers in aerofoil profile, 30 ft. high, rotating in unison within a galvanized pressed steel frame, and operated by electrical gearing.

We manufacture a wide range of sunbreakers in a variety of profiles, both single and doubled skinned, fixed and movable.



**HOPE'S WINDOWS**  
*The Name Guarantees*



HENRY HOPE & SONS LTD  
SMETHWICK, BIRMINGHAM  
LONDON: 17 BERNERS ST., W.1



**HIDE PLACE DEVELOPMENT**

The third of a series of progress reports.  
The first two appeared in the AJ for  
June 23 and August 18.

**3**

director of Westminster housing  
architects

associate  
assistant

structural engineers

quantity surveyors

E. J. EDWARDS  
STILLMAN AND  
EASTWICK-FIELD

R. SMORCZEWSKI  
D. STOLLAR

CHARLES WEISS AND  
PARTNERS

HARRY TRINICK AND  
PARTNERS

SFB No.

(98)

UDC No.

728-2

*General view showing extent of work completed at the beginning of October*

**Concrete Cladding**

Since brick and stone ceased to be inevitable choices for facing materials, experiments have been made to find substitutes which would be pleasing in appearance and would weather well. Regarding such substitutes, new factors must now be borne in mind, such as the extent to which the facing may be regularly cleaned (as is necessary in glass-clad buildings) or adaptability of the material to current techniques in building—notably prefabrication and all that this entails.

Recently, most tall office buildings have been clad in some form of curtain walling, but this did not seem altogether appropriate for a building devoted to dwellings, although of course there are examples on which curtain walling has been used. Alternatives for a framed building could be infilling panels, of brick or of rendered blocks, but these methods have their attendant difficulties such as preventing rain penetration at floor levels.

The nature of the frame at Hide Place, combined with the feeling that exposed aggregate concrete in one form or another was worth serious consideration, led to the possibility of wholly clothing the building outside the framework in large-scale panels, thus making best use of the crane required for the rest of the precast work.

Such large-scale panels enabled all vertical joints to occur against columns, and also eliminated the need for scaffolding since they could be hoisted into position by the crane and fixed from inside the building. The object of restricting the vertical joints to the line of the columns was to simplify weather-proofing. Vertical joints could thereby be "open" and there would be no need for exposed mastics which would require periodic renewal.

The sketches show typical details of the external walling, also how it is intended to dispose of any condensation or dampness which might occur on the inside of the slabs.

The storey-height panels hang on the beams, and are fixed by bronze bolts

## progress report



*Lifting a cladding slab into position*

threaded into cemented-in sockets, and by bronze straps, as shown in sketch A. Smaller panels rest on a nib at the foot which is bolted down to the beam. Theoretically this is an adequate fixing, but positive fixing at both ends at sill level has been included to assist in retaining the slab against the columns and the diameter and number of the bolts at the foot accordingly reduced. In position on the building the slabs look essentially simple, and have a broadness of scale which it was in fact hoped to achieve, but this apparent simplicity conceals some complexity in manufacture and erection. In any future scheme the aim would be further simplification and even more repetition. The notes which follow list some points that need study in designing cladding slabs. The comments relate

to the methods used at Hide Place—they are not intended to be taken beyond this particular context.

#### **Manufacture**

*Repetition:* number of slabs 639; number of types 44.

*Accuracy:* the tolerances specified are:  $\pm 1/16$  in. in 20 ft. 0 in. of length;  $\pm 1/16$  in. in 12 in. in cross section;  $\pm 1/32$  in. in height of length in twist or bowing.

*Treatment of corners:* the exposed aggregate is continued round the corner as shown in sketch C.

*Exposure of the aggregate:* slabs are cast face up and the aggregate exposed by spraying.

The manufacturer of the slabs has expressed the view that there is no great difficulty in production (out of

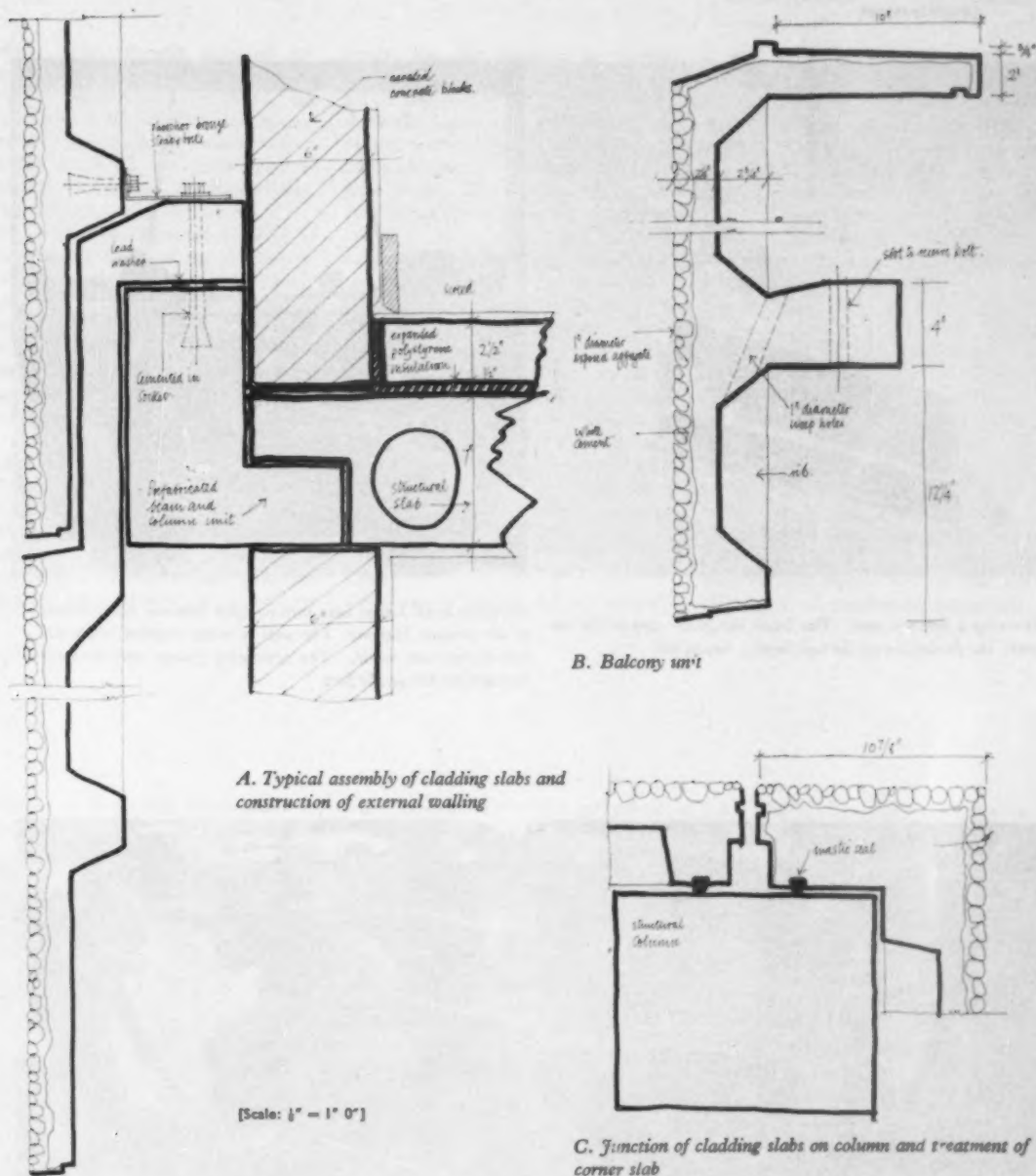
250 panels already made only two have to date been rejected by the makers). It has not been found difficult to obtain uniform exposure of the aggregate even in the largest slab. The moulds are of painted softwood with hardwood bearers; in any future scheme it would possibly be worth making a part of the moulds in concrete to increase stability.

#### **Handling**

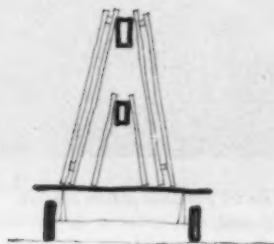
*Size:* the largest slab is overall 12 ft. 0 in.  $\times$  10 ft. 3 in. (exposed face 12 ft. 0 in.  $\times$  8 ft. 10 in.).

*Weight:* 1.75 tons (of 12 ft. 0 in.  $\times$  10 ft. 3 in. panel).

*Strength:* the slabs, which contain a nominal mesh reinforcement, are stiffened by reinforced ribs. The reinforcement is designed to give the required strength against windloads and this



provides also for the temporary stresses set up in lifting the slabs from the horizontal beds on which they are cast. **Transport:** Each typical floor has 30 panels requiring 5 loads made up as shown in the sketch below.



**Lifting:** The slabs are hoisted by two leads from the crane attached to eyes temporarily bolted through the slabs, as shown in the photographs. Care was taken to ensure that these eyes were placed in each slab so that it hung vertically.

**Damage:** Some damage occurs to arrises.

The contractor has agreed to make good any damage to the arrises.

#### Fixing

**Tolerance:** The amount of adjustment permissible is governed by the accuracy required to maintain a uniform  $\frac{1}{4}$ -in. gap between two adjacent panels, at the same time maintaining a level horizontal joint. Some degree of lateral tolerance is given by slotting the holes in the slabs through which the fixing bolts pass,

whilst vertical adjustment is secured by lead washers inserted between the slab and the beam.

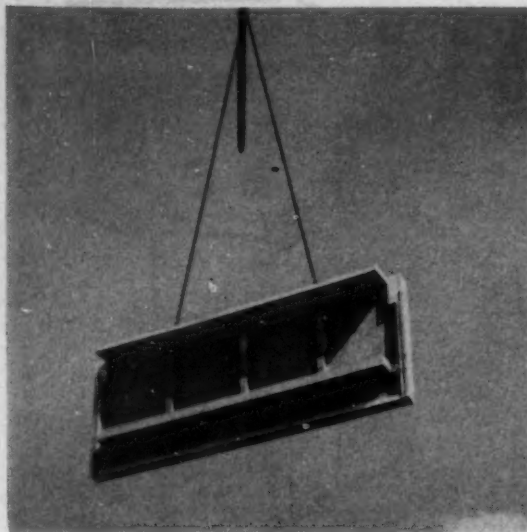
Experience has shown that the procedure adopted at Hide Place achieves the desired results, provided that the degree of accuracy appropriate to the whole conception of the structure is maintained in the manufacture and erection of the framework. In any future scheme, however, erection and alignment of slabs of the size involved could be made easier and quicker if there were an easier means of adjusting them and if the tolerances were increased.

#### Function

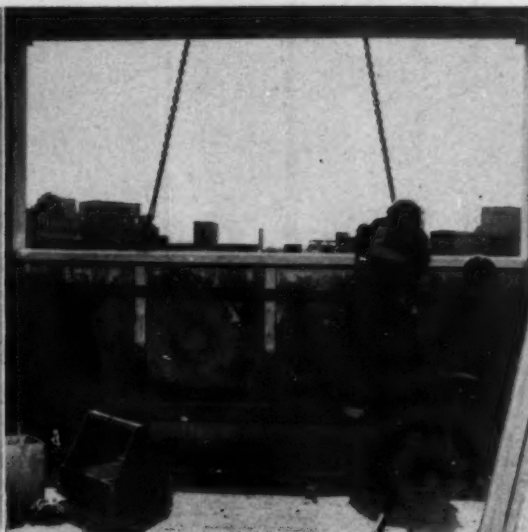
**Strength:** The slabs are designed with the minimum cross section to withstand windloads and to support their own



progress report



*Hoisting a balcony unit. The lower nib gives support for the unit: the projection at the top forms a broad sill*



*Bringing a sill-height unit into position between two columns of the precast framing. The unit is being steadied while side bolt fixings are made. The remaining fixings will be made through the nib at the foot*



*Preparing reinforcements in moulds. The steel is galvanised to minimise risk of staining from rust*



*Laying in and vibrating the ordinary Portland cement concrete which forms ribs and backing to slabs*

weight. The strength required for handling is mentioned above.

**Weather protection:** The slabs are considered to be relatively impervious and any moisture or condensation which should occur on the inside face is drained out at each horizontal joint. The aggregate is not absorbent.

**Insulation:** The calculated U-value of the wall consisting of the slab/cavity/6-in. aerated concrete block/plaster (allowing for the fact that the cavity is not sealed) is  $U = 0.148 \text{ BThU}$ .

It should be mentioned here that the construction described above is not in accordance with the London Building Act by-laws but a waiver was granted.

#### Appearance

**Staining:** The pattern of weathering is difficult to forecast, but certain principles have been followed. The reinforcement has been galvanised to avoid risk of stains from rust. There are no drips from window sills on balcony

fronts, but the concrete is steeply weathered at these joints and it is hoped that water will disperse evenly along the length of the slab and that defined paths of water will be broken up by the exposed aggregate.

**Joint design:** The system of jointing emphasises the scale of the units and makes a sufficient pattern to give interest. If larger tolerance were planned (see above) and the joints were wider, the effect would, of course, be more pronounced.

**Aggregate:** The aggregate is Norwegian crystal quartz, chosen because it is hard and impervious, light in colour and has a certain sparkle. This, in a white cement matrix will, it is anticipated, produce a wall surface which will weather evenly and maintain a relatively bright appearance even in London.

#### Costs

Total costs of largest slab (12 ft. 0 in.

$\times 10 \text{ ft. } 3 \text{ in.}$ ) supplied to site—£38.

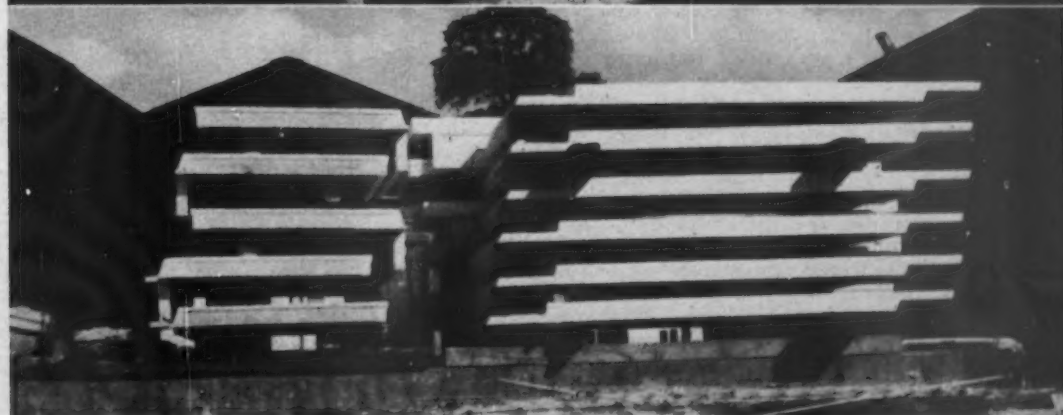
Hoisted and fixed complete—£43.

**Relationship of the cost of exposed aggregate to total cost:** The unit cost of Norwegian crystal quartz aggregate is £14 6s. per ton. This is a relatively expensive stone and it is therefore of interest to know that the cost of this part of the aggregate in the slab represents approximately 22 per cent of the total cost of the slab.

**Proportion of cost of slab (fixed) to cost of superstructure:** 7.9 per cent.

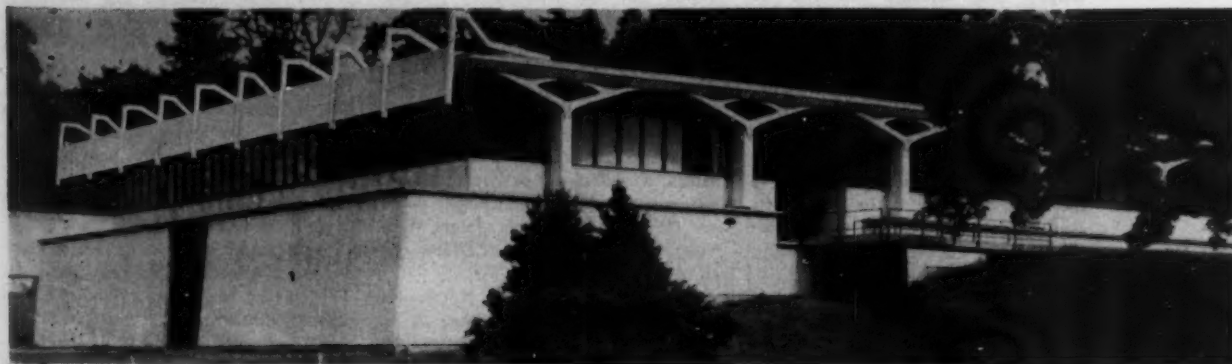
The cost of the slabs should not be judged without reference to the total prescribed cost for the building and to the Contract Sum (figures were given in the first report in *AJ*, June 23, 1960). Fortunately, it is still the architect's prerogative to decide within limits of total cost which elements of a building merit greater or less expenditure, and in a building such as Hide Place it need hardly be said that the cladding is of paramount importance.

*Placing the Norwegian crystal quartz aggregate in white cement to form exposed face of slab. The slabs are sprayed to expose the aggregate*



*Complete slabs awaiting transport from works to site*

## Laboratories for Yale University by Paul Rudolph

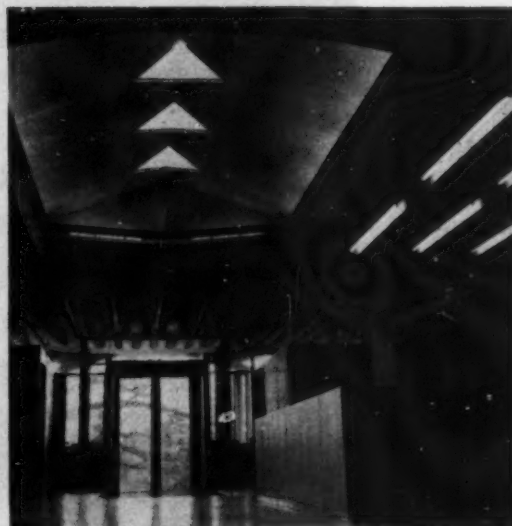


*General view of the block*



*Main entrance*

This building, housing laboratories, lecture rooms and offices for the School of Forestry, is the first to be designed for Yale University by Paul Rudolph since he was appointed head of its Department of Architecture. The structure is in precast concrete units for both columns and roof beams, the form following the stresses in a Nervi-like way, in situ work being restricted to the main beams. Internal partitions are of prefabricated timber panels faced with plywood, and where these are in line with the structure, interstices in the heads of columns are filled with glass. In the entrance hall there is a large raised lantern pierced by three small rooflights; general lighting in the rest of the block is provided by fluorescent tubes recessed into slots in the roof beams. Obviously the structural form has been developed with care, and there is a sense of crispness and quality in the precast work. The form chosen causes no problems in the external walling, since the glazing has been set back from the line of the structure. This is not the case internally, so slightly awkward collisions are inevitable. It seems a pity, too, that the architect has been so mesmerised by the structure that he has thought it necessary to leave it completely showing throughout; for this reason no sound absorbents have been provided at ceiling level, nor for that matter anywhere else.



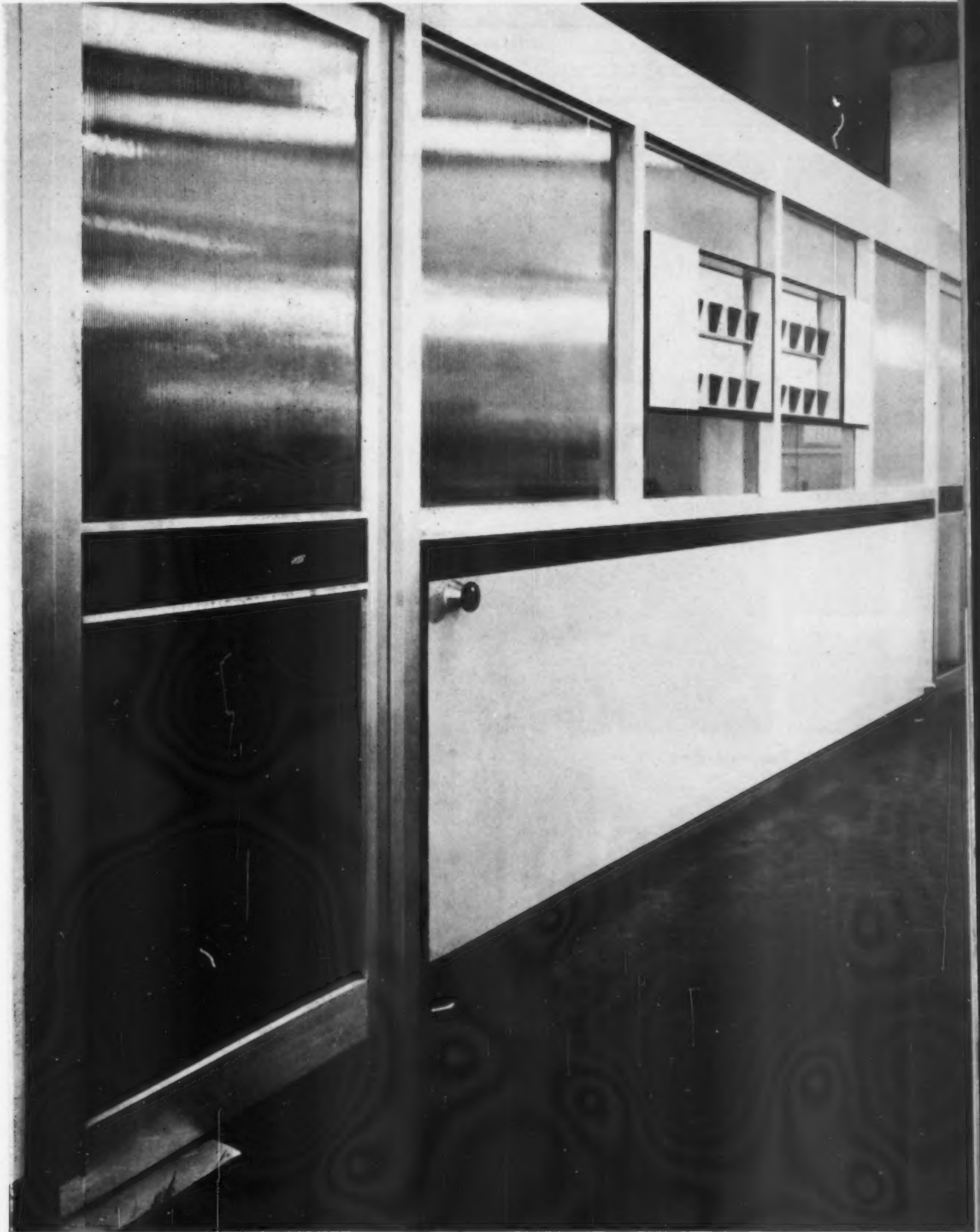
*Entrance hall*



working detail

PARTITION WITH HEATER: POST OFFICE IN LONDON, W.1.

*Design Research Unit and Sir Hugh Casson, architects.*



*This detail shows the incorporation of a proprietary heating panel in a storage partition. Note also the use of a piano hinge and fore-edge opening to simplify the detailing of the cupboard doors on the advice note fitting.*

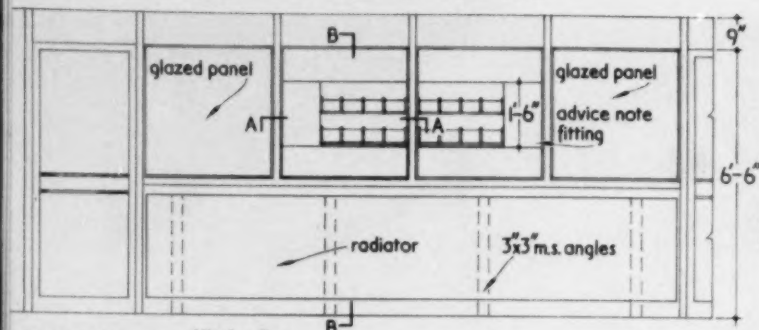
working detail

(56)

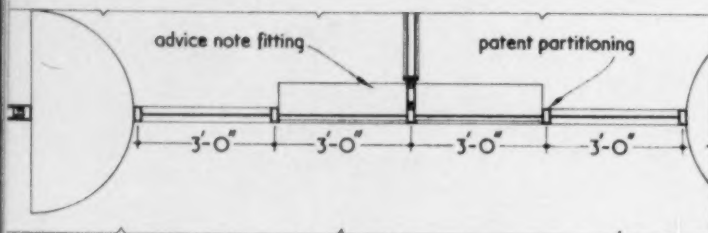
HEATING : 26

PARTITION WITH HEATER: POST OFFICE IN LONDON, W.1.

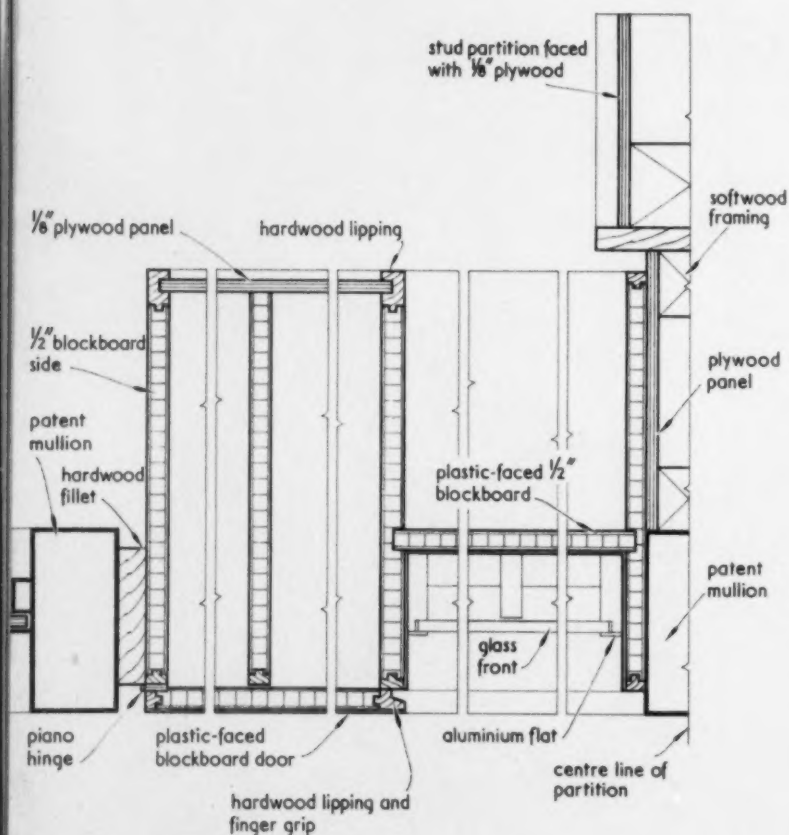
Design Research Unit and Sir Hugh Casson, architects.



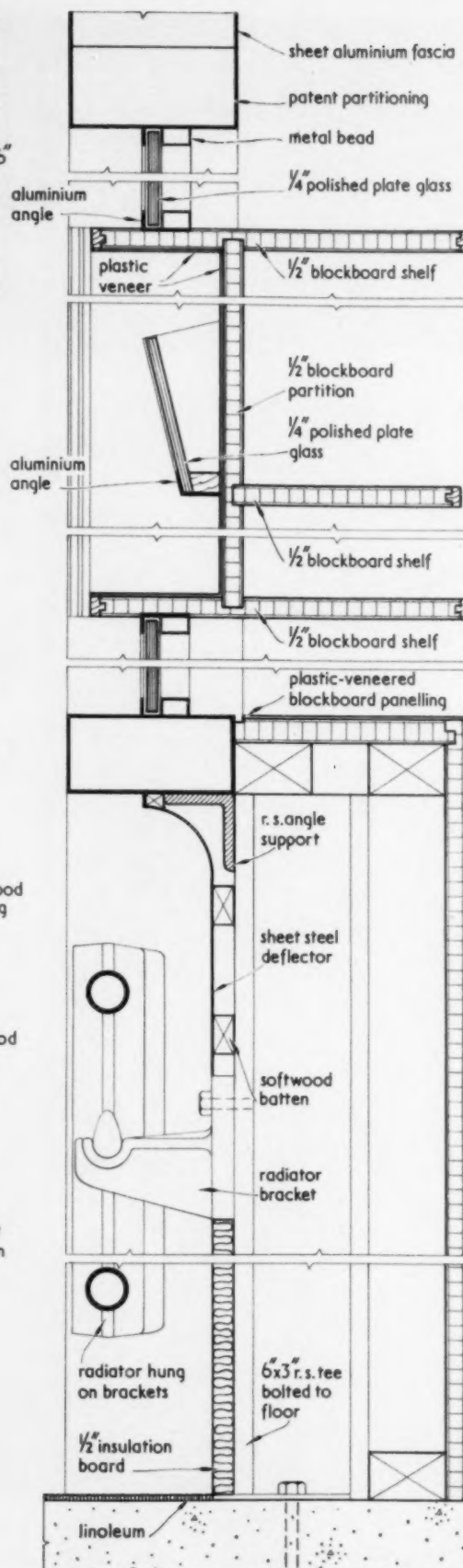
ELEVATION. scale  $\frac{1}{4}'' = 1'-0''$



PLAN. scale  $\frac{1}{4}'' = 1'-0''$



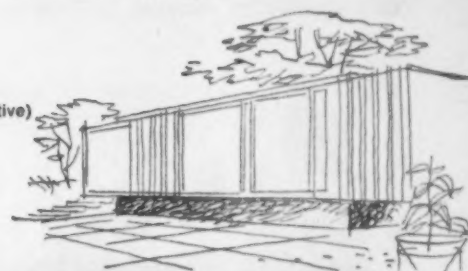
PLAN AT A-A. scale  $\frac{1}{4}$  full size



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

**HOUSE AT BRANCH LANE, ALMONDBURY, YORKS,**  
featuring Nairn Vinyl tiles. Photo: Mann Bros. (Courtesy Peter Stead of Design Collaborative)

'... the first of a series of projects in which the designers are attempting to create living environments using colour-space considerations. The spaces, inside and outside, are determined by planes of colour... These coloured planes interact, giving continuous visual rhythms... creating a system of chromoplastic relationships and spaces that is clear-cut, yet tranquil.'  
ARCHITECTURAL DESIGN, July 1959



# Vinyl tiles

**give you 19 planned colours to simplify colour-matched design**

Using Nairn Vinyl tiles, you can choose from *planned* colours. Virtually all correspond closely with B.S.2660, making it easy to design a floor that will fit in with the overall colour plan of your project. A marbled finish helps to maintain their appearance in heavy traffic areas. To satisfy a particularly big demand, plain black and plain white are available for use in the 2.0 mm range. The colour range shown here is based on the experience of our French factory, whose range has proved most popular with Continental designers. All 19 colours are available in the 2.0 mm domestic tiles (9" x 9"). In the heavy-duty 3.2 mm tiles (9" x 9" and 12" x 12"), there are 5 colours in the Contractors' Basic 'A' Range and a further 6 in the Architectural Design 'B' Range. Within each range, every tile is the same price: you can quickly and accurately cost up any installation.

**NAIRN TECHNICAL ADVISORY SERVICE**

Technical representatives are based at our area offices to advise and give information on all matters concerning floorcovering materials. If you wish to consult one of these representatives, just write or 'phone any of these offices:

**MICHAEL NAIRN & CO. LTD., P.O. BOX 1**  
Kirkcaldy, Scotland. Kirkcaldy 2011 (10 lines)  
**LONDON EC1:** 131 Aldersgate Street.  
Monarch 3211 (8 lines).  
**BIRMINGHAM 2:** 65 Temple Row.  
Midland 5989 (2 lines).  
**BRISTOL 4:** 349 Bath Road, Bristol 77840.  
**MANCHESTER 1:** 4 Canal Street.  
Minshull Street. Central 1417 (3 lines).  
**GLASGOW CS:** 113 Centre Street.  
South 1011 (3 lines).  
**NEWCASTLE-ON-TYNE:** 41 Grainger Street.  
Newcastle 22807.

A complete range  
of 19 attractive  
colours for  
commercial and  
domestic use







## Space saving insulation with

# THERMALITE

### Loadbearing insulating building blocks

In these single storey homes at Crowthorne in Berkshire, designed and built by Renway Construction Company Limited, 3" Thermalite Blocks are being used for the loadbearing inner leaf of external cavity walls. They will provide a high degree of extra insulation *plus* an overall saving of internal floor space.



#### Properties of Thermalite.

1. Dry density 50 lb./ft.<sup>3</sup>
2. Compressive strength to BS:2028 type A.
3. Moisture movement/drying shrinkage to BS:2028 type B.
4. Thermal conductivity (k) 1.4 B.T.U.'s, etc.
5. Nominal face size 18" x 9" or 9½", actual sizes 17½" x 8½" or 9½" x 2½", 3", 4", 5", 6" and 8½" (tolerance to BS:2028).
6. Fire resistance 4" loadbearing plastered hot face—2 hour grade. Fire resistance 4" non-loadbearing unplastered—4 hour grade.

The photograph shows the neat returns to the reveals, typical of Thermalite construction. No special Corners or Closers are necessary; Thermalite Blocks are readily and accurately sawn. The 3" thickness of the inner leaf can clearly be seen.

Thermalite is particularly suited to dry construction. Direct reliable fixing without need for plugs further reduces the cost of this economic construction method. Note, too, that the cable channelling is spiked directly to the Thermalite wall for speed and simplicity.

For further information and samples apply to:

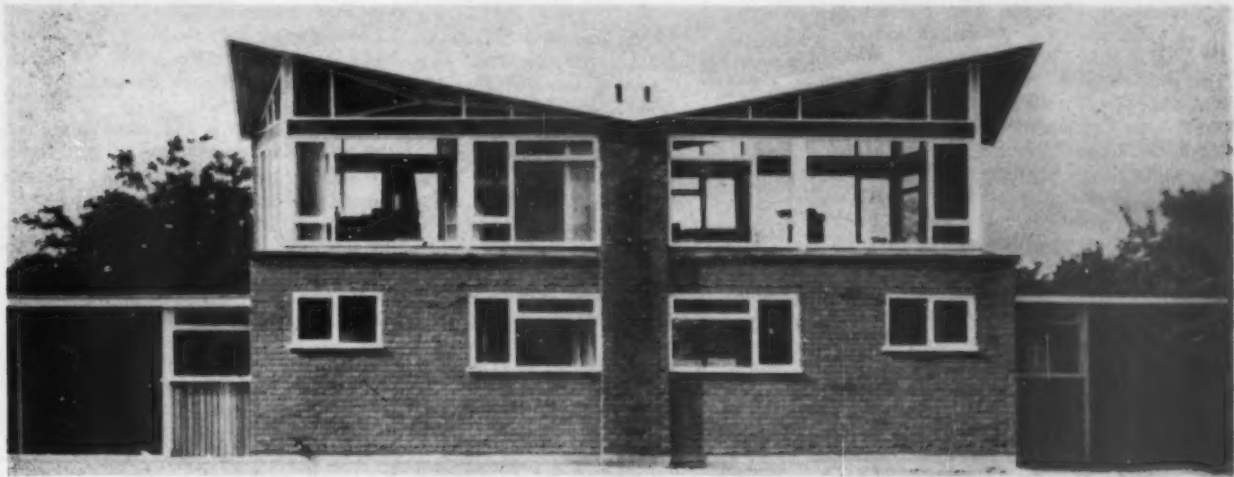
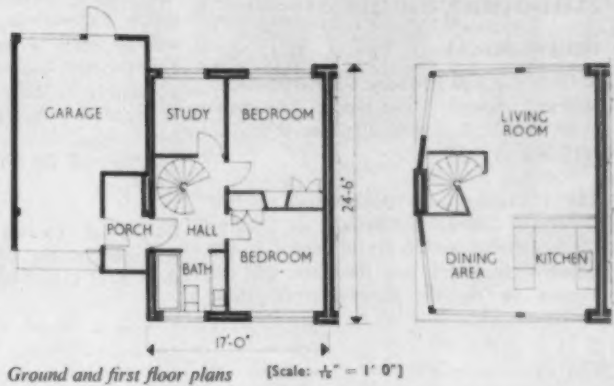
### THERMALITE YTONG LIMITED

Hams Hall, Lea Marston, Sutton Coldfield, Warwickshire.  
Telephone: Coleshill 2081.

A LAING COMPANY

## Low-Cost Speculative Housing

These houses are one of three types, designed by Favel, Bell and Associates for the firm of Jonmil, aimed at providing dwellings for sale at lower prices whilst keeping to a high standard of fittings and equipment. The figure quoted for the type shown is £2,300 including garage, but site extra. This is achieved by tight planning, including a spiral staircase, and by a lightweight roof over the fully glazed first floor living area, so that load-bearing construction is kept to the ground floor except for the party wall. Encouraged by this success we hope that Jonmil will turn from conventional house types towards designs leading to tighter, more urban development.



THE "AVERY" VENETIAN BLIND is expertly made by British labour from British materials and beautifully finished. It is designed to give long, trouble-free service. A wide choice of attractive pastel shades in both tapes and slats permits matching or contrasting colours to suit any decor. Tapes are available in Carr's Super Terylene as well as French's woven Fleur-de-lis or washable plastic.

The Avery Venetian Blind

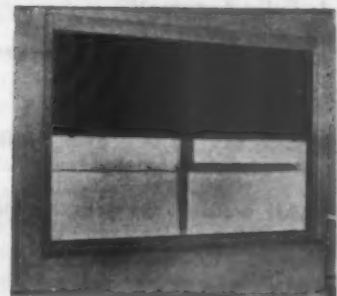
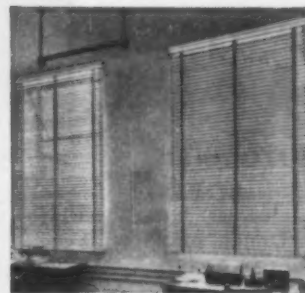
**Avery** The Sundark

The Eden Door

THE SUNDARK is something new and eminently useful—a venetian sunblind giving all the advantages of the ordinary venetian blind which also gives an amazing degree of blackout when required. It is ideal for hospitals, lecture rooms, etc.

THE EDEN DOOR is the modern style door for private homes, hotels, restaurants, Board Rooms, hair-dressing saloons, etc. Folds back neatly and easily into the minimum space. Covered in attractive leather cloth, available in a wide range of patterns, grains and colours.

Fully descriptive leaflets on all the above are available on request.



**J. Avery & Co. Ltd.**  
81 GREAT PORTLAND ST., LONDON, W.1.  
and at BOURNEMOUTH

Agents in  
MANCHESTER, BIRMINGHAM, GLASGOW and ABERDEEN

## Announcements

### PROFESSIONAL

William Clark & Partners, Chartered Architects and Surveyors, have moved their offices to 50, Pall Mall, S.W.1 (telephone Whitehall 8818/9).

The Department of Architecture at the College of Technology, Belfast, are forming a new information library of materials and technical literature and therefore will be pleased to receive manufacturers' trade catalogues, etc.

The Community Planning Association of Canada is organising a National Planning Conference in Hamilton from October 23 to 26. Subjects for discussion include: drafting a master plan; cities in the motor age; children in our cities; land use control, and the keynote address of "Planning for the Smaller Communities" will be given by James W. Wilson, Executive Director of the Lower Mainland Regional Planning Board, British Columbia. Requests for registration and accommodation should be sent to CPAC, 425, Gloucester Street, Ottawa 4.

An exhibition of drawings submitted for the Design, Measured Drawings and Sketching prizes offered annually by the South Eastern Society of Architects will be held on 10th November 1960 in the Croydon Technical College and College of Art, Park Lane, Croydon, at 4.30 p.m.

The Timber Development Association Research Laboratories, near High Wycombe, will be open to the public on Thursday, 13th October from 9.30 a.m. to 5 p.m. The address is St. John's Road, Tylers Green, Penn, Bucks. Anyone wishing to visit the laboratories should get in touch with the Secretary of the TDA at 21 College Hill, E.C.4.

D. Foster, A.R.I.B.A., has been appointed Manager of the Clay Products Technical Bureau of Great Britain Limited.

The Hon. Roger Cunliffe, M.A., A.A.Dipl., A.R.I.B.A., is going abroad and therefore asks that his name be taken off all mailing lists.

Montagu Evans & Son have taken into partnership John Lelyveld, A.R.I.C.S., A.A.I., and Robert H. Stanley, A.R.I.C.S., A.A.I. The firm will be moving to new offices at Awdry House, 11, Kingsway, London, W.C.2. (Tel.: TEMple Bar 6361). The Head Office, Architectural Department, Valuation and Town Planning Department will be at this address. The Rating Department remains temporarily at 44, Bloomsbury Square, W.C.1 (Tel.: CHAncery 5427), and the Branch Office will continue at 7A, London Road, Redhill, Surrey (Tel.: REDhill 4029).

Godsmark & Miller-Williams of Darlington and Richmond have incorporated with Chippindale & Edmondson of Bradford and London.

Robin D. Butterell, B.Arch., A.R.I.B.A., has commenced private practice at 42, Charlotte Street, London, W.1. (Telephone LANGham 6432). Representatives will only be seen when an appointment has been made in writing.

Kenneth Twist, A.R.I.B.A., has started his own practice at 23, Green Street, Cambridge. Telephone—52189.

### TRADE

The Northern Aluminium Co. Ltd. has changed its name to Alcan Industries Ltd.

Dr. Richard V. Waterhouse has been appointed managing director of Acoustical Investigation and Research Organisation Ltd., 118 Cromwell Road, S.W.7, a member of the Hall-Thermotank Group.

Charles Winn & Co. Ltd., have moved their North Western area office to 202, Cavendish Street, Ashton-under-Lyne. The telephone number remains the same.

Neil Wates has been appointed to the Board of Wates Ltd.

R. F. Adamson, who has represented Horsley, Smith & Co. (Hayes) Ltd., has retired on pension at the age of 65 on completion of 29 years' service. Mr. Adamson's connections in London are being taken over by D. W. Wilcox and F. H. J. Magenis.

## The SUPAPAK

### FULLY AUTOMATIC PACKAGE BOILER

- ★ Treblepass Danks patented "Interflo" design boiler
  - ★ Fully Automatic
  - ★ Accessibility top and bottom
  - ★ Over 80% efficiency
  - ★ CO<sub>2</sub> 13% to 14% over entire modulating range
  - ★ All welded construction up to 250 p.s.i.
- Patent No. 736020

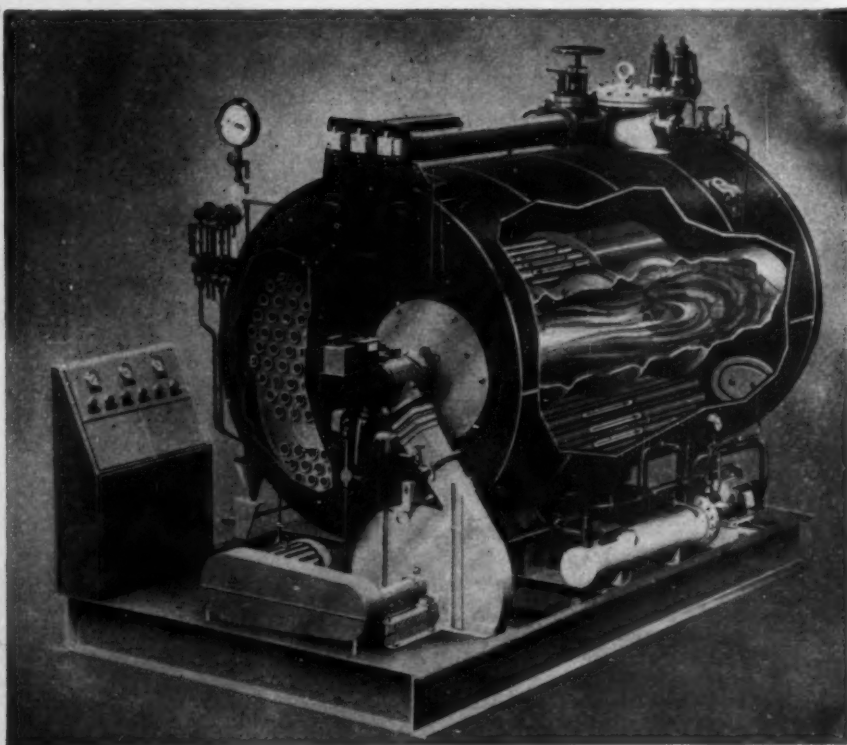
For full details contact :

**DANKS**

**OF NETHERTON LIMITED**

NETHERTON, Nr. Dudley, Worcs. Tel. Cradley Heath 66417

London Office : Bank Chambers, 329 High Holborn, W.C.1. Tel. HOLborn 2065



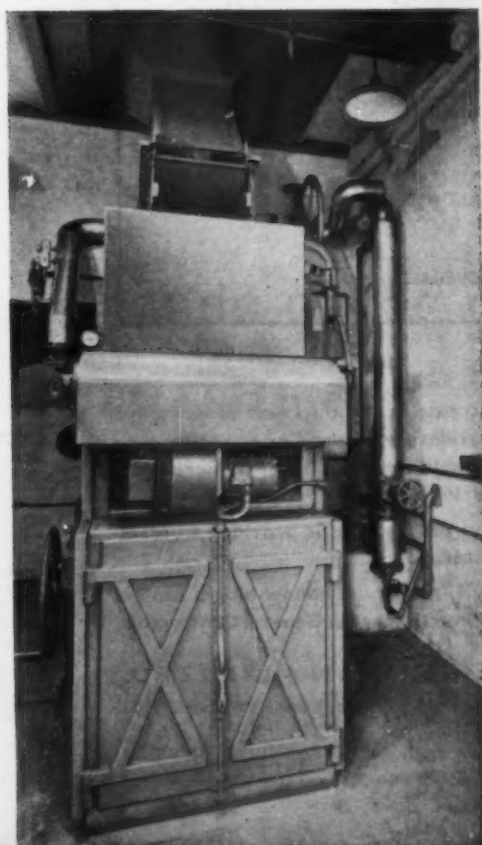




**This large warehouse perfectly heated  
by one compact**

## **REDFYRE EMMA**

**the world's most efficient coke-fired boiler**



It hardly seems possible — until you know what the Redfyre Emma Boiler can do! This particular installation for the East Midland Gas Board Stores Depot, Sheffield produces 1,800,000 B.T.U./hr. And really slashes fuel costs. Redfyre's heating engineers will gladly show how the Redfyre Emma Boiler can revolutionize your heating arrangements. Or they'll plan and install complete layouts for you. Why not write for full technical details and proved performance figures.

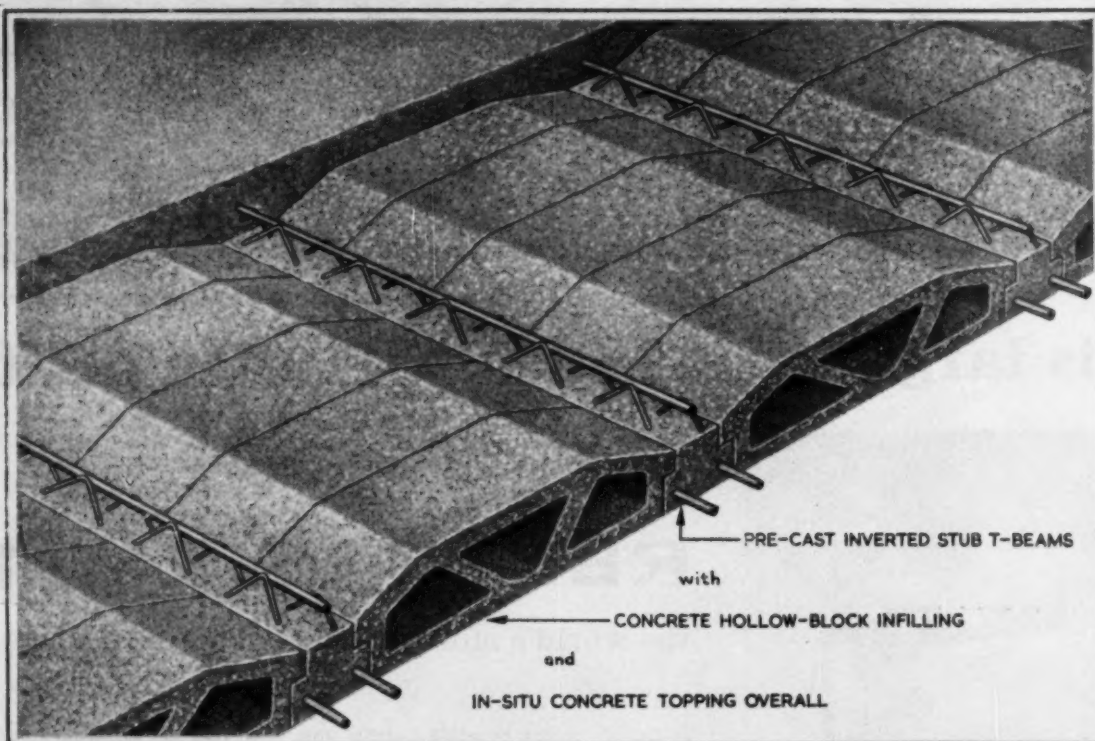
- *Very high efficiency — fully 85%*
- *Burns any kind of coke up to 6"*
- *Gravity feed*
- *Automatic temperature control*
- *Requires only a few minutes attention daily*
- *Available in single or multiple units and from 1/2M to 8M B.T.U./hr.*
- *Conforms to the requirements of The Clean Air Act and burns home produced fuels*

**NEWTON CHAMBERS · ENGINEERS OF PROGRESS**

ENGINEERING DIVISION: NEWTON CHAMBERS AND CO. LTD., THORNCLIFFE, SHEFFIELD

# THE TRIAD FLOOR

of light weight, simply and quickly erected,  
and combining the best features of  
in-situ and pre-cast concrete construction



#### ADVANTAGES:

1. No shuttering; minimum of temporary propping; ample room below for following trades.
2. The in-situ concrete topping ensures a more homogeneous slab than one composed solely of pre-cast units, better able to distribute imposed loading, and so avoiding the possibility of cracking in floor and ceiling finishes due to differential deflection in individual units.
3. A slight increase in the thickness of concrete topping provides for embedding conduits, etc., without the addition of a separate screeding for that specific purpose.
4. The uniform concrete soffit provides an ideal key for plaster.
5. If required, T-beams and hollow-blocks can be supplied for erection by the General Contractor.

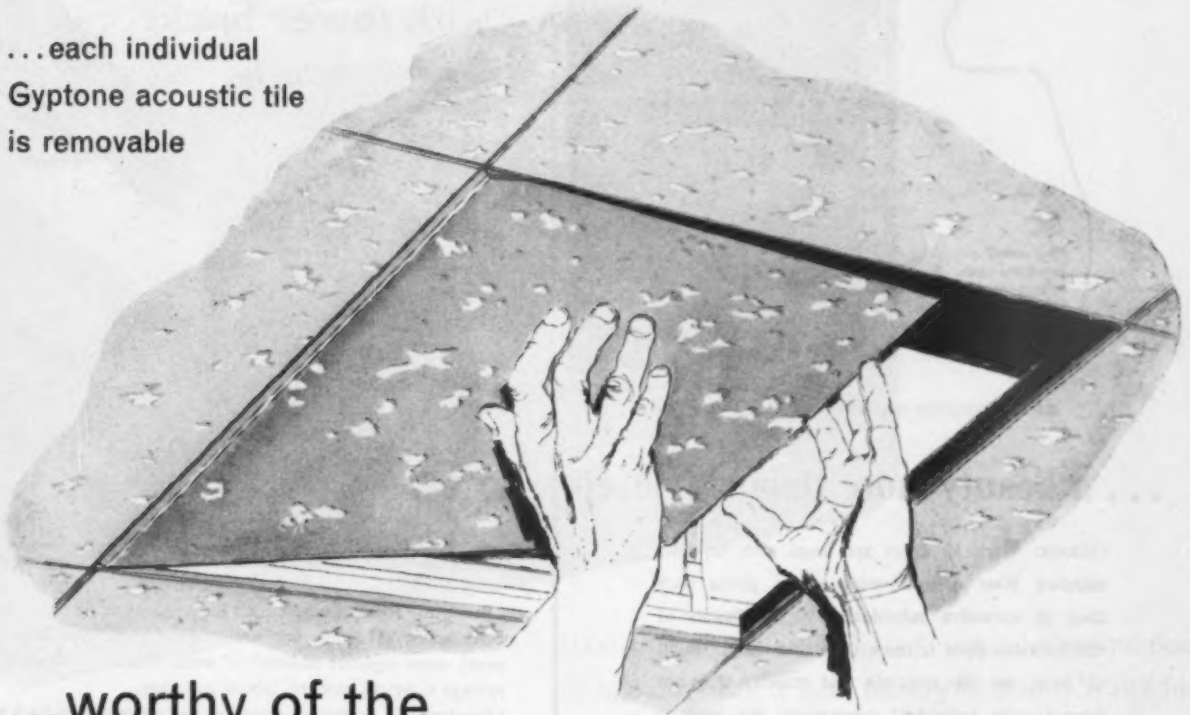
Fully detailed literature forwarded on request: **THE KLEINE COMPANY LIMITED,**  
9-13 GEORGE STREET, MANCHESTER SQUARE, LONDON, W.1 :: Telephone: Welbeck 9131

# With the Gyptone **ACCESSO** System

*full patents pending*

services concealed above the suspended  
acoustic ceiling are easily maintained...

...each individual  
Gyptone acoustic tile  
is removable



...worthy of the  
hands of the craftsman

## **GYPROC**

products include:

- GYPROC WALLBOARD—LATH—PLANK
- GYPROC PLASTERS
- GYPSTELE ROOF AND WALL LININGS—SUSPENDED CEILINGS
- PLAXSTELE SUSPENDED CEILINGS
- GYPUNIT PANELS
- GYPTONE ACOUSTIC TILES
- GYPLITE READY-MIXED LIGHTWEIGHT AGGREGATE PLASTERS
- GYPELITH WOOD WOOL SLABS

*Free technical literature will be sent on request*

### GYPROC PRODUCTS LIMITED

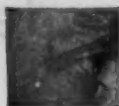
Head Office: Singlewell Road, Gravesend, Kent. Gravesend 4251/4 · Glasgow: Gyproc Wharf, Shieldhall, Glasgow, S.W.1. Govan 2141/3

Midlands: 11 Musters Road, West Bridgford, Nottingham. Nottingham 82101 · London: Ferguson House, 15/17 Marylebone Road, N.W.1. Hunter 4031/4

GAI



## The attributes of beauty\*



\*

"properties gracefully  
combined in an object  
so as to please or attract  
the senses, especially  
the eye..."

a true description of a Gliksten door.

## ... a beauty more than skin deep

Gliksten Mark 12 doors are faced with superbly matched West African cedar veneer giving each door an attractive individuality. The beauty of this Gliksten door is more than skin deep. Built, as it is, on the principle that stability does not depend upon individual components but upon a choice of reasonably inert materials perfectly bonded together, the resulting interior ensures beauty of construction as well. Glikstens are the foremost suppliers of flush doors to local authorities, builders and contractors.

Guaranteed for 3 years.

Write for full details and prices

### GLIKSTEN DOORS

*Cheapest in  
the long run—  
the best*

One of the Gliksten Group of Companies

Gliksten Doors Ltd., Carpenters Road, Stratford, London, E.15  
Tel: AMHerst 3300. Liverpool Office: 87 Lord St. Tel: CENTral 3441  
Hull Office: 112 Londesborough St. Tel: Hull 16071

strength with economy

## 'BONDENN'

### BRICKWORK REINFORCEMENT

— makes strong walls  
with fewer bricks



'Bondenn' Reinforcement ends the need for thick, expensive brick walls. 4½" brickwork strengthened with 'Bondenn' in many cases replaces ordinary 9" walls. Result — substantial savings in bricks, cement, labour and time.

'Bondenn' in brickwork increases the resistance to load by 68% — an invaluable advantage when foundations stand in made-up ground or doubtful subsoil and in structures where heavy and intermittent loads are applied.

'Bondenn' consists of rolls of straight longitudinal steel wires of 25/30 tons tensile secured with mild steel spacing wires. Hot spelter galvanising after fabrication ensures high resistance to deterioration.

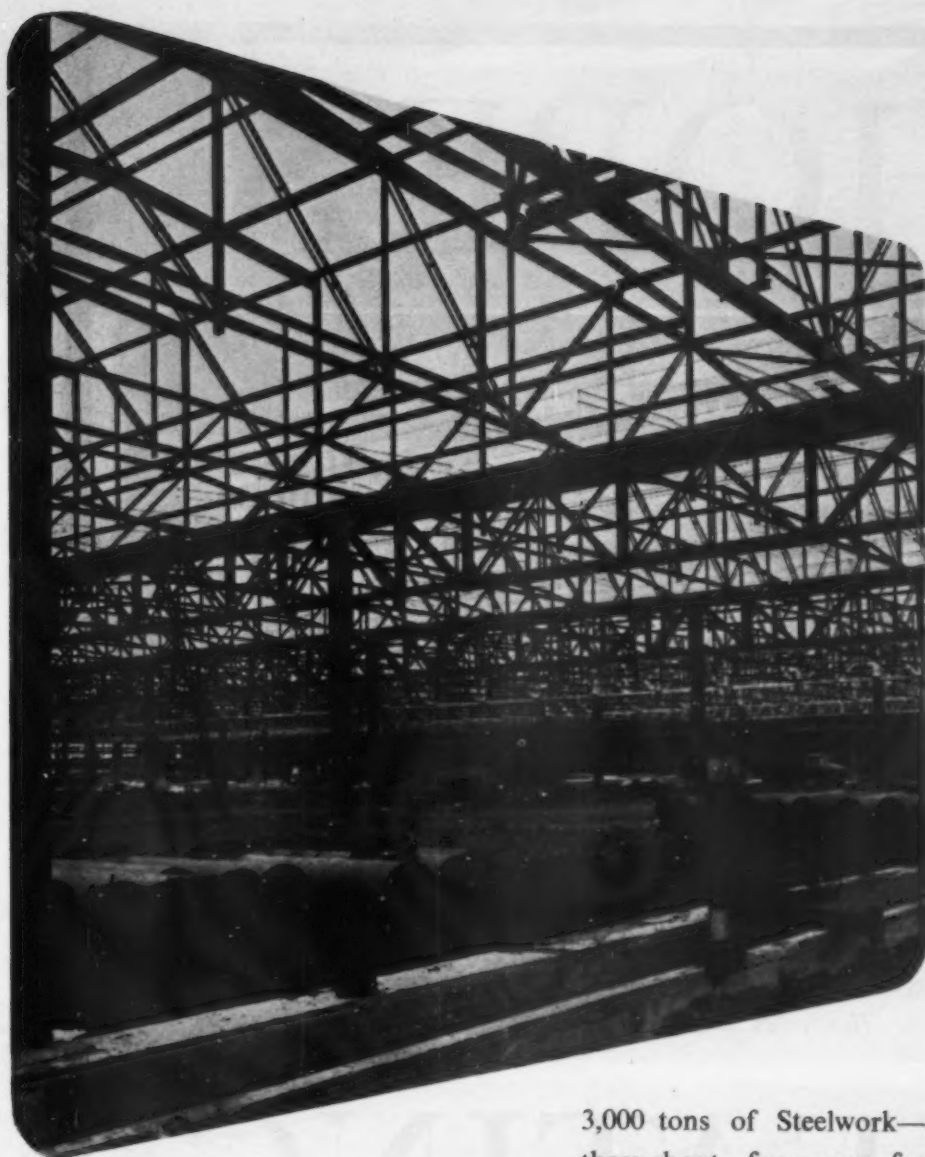
**BOULTON  
AND PAUL**

Write now for full technical  
information to

**Boulton & Paul Ltd.**

**NORWICH** P.O. Box 5, Riverside Works, Norwich. NOR 72A  
Telephone: Norwich 25251. Telegrams: Boulpaul, Norwich  
**LONDON** 84-86 Baker Street, London, W.1. Telephone: HUNter 3281  
Telegrams: Boulpaul, Wesdo, London  
**TIPTON** P.O. 11, Midland Works, Tipton, Staffs  
Telephone: Tipton 1191/2 Telegrams: Boulpaul, Tipton

B.20



3,000 tons of Steelwork—of welded construction throughout—for a new factory in South Wales for the Prestcold Division of the Pressed Steel Co., Ltd. The whole framework was erected within six months!

***Another fine achievement***

**by T.C. JONES**  
AND COMPANY LIMITED

**STRUCTURAL ENGINEERS**



**WOOD LANE, LONDON, W.12.**

**South Wales Office : BUTE STREET, CARDIFF**

**Works : SHEPHERDS BUSH, LONDON.**

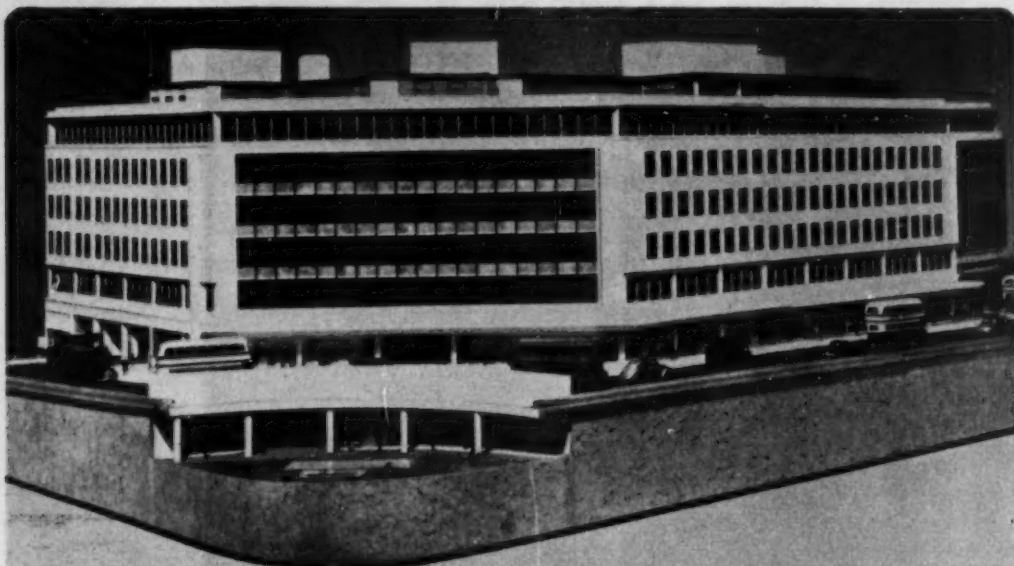
**Telephone : Shepherds Bush 2020**

**Telephone : Cardiff 28786**

**NEASDEN, MIDDX.**

**TREORCHY, GLAM**

# HOPE'S



PRIORY PROPERTIES (BIRMINGHAM) LTD.  
*for Messrs Richard Lunt & Co. Ltd. and Bell & Nicolson Ltd.*  
*Essex, Goodman & Suggitt, F.R.I.B.A., Chartered Architects & Surveyors*  
*Hoare, Lea & Partners, Consulting Engineers*

# HEATING

*and allied services*

*will be installed by*

HOPE'S HEATING & ENGINEERING LTD.

*Smethwick, Birmingham & 16 Berners St., London, W.1*

*Branch Offices at Leeds, Cardiff & Hull*





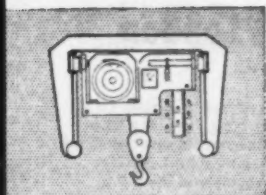
Manufactured under licence from Ferrand & Frantz Ing. Villeurbanne. British Patent No. 705, 148

**MODERN FACTORIES NEED**

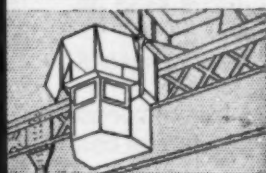
# R  EL ABOVE ALL ELSE

**TO SAVE SPACE AND GIVE  
INCREASED HEIGHT OF LIFT**

*-with reduced building costs!*



The underslung crab unit allows a highest hook position approaching close to the building height.



The driver's cage, glazed or open, is arranged to give maximum possible visibility in all directions.

R  el is the only modern overhead crane specially created to meet modern industrial demands for higher mobility and efficiency. The unique R  el design carries the crane to within inches of the roof, giving maximum height for lifting. Enclosed girder construction combines lightness with great strength, allowing more economical running and maintenance. There are capacities to suit all requirements. Handling of goods is faster, safer and more economical with R  el—why not contact us now for full information.

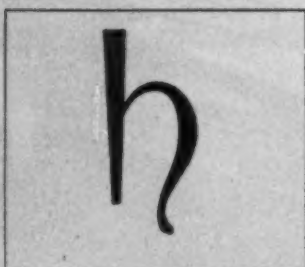
THE BRITISH  
**"R  EL"**

**overhead  
travelling  
crane**

**BRITISH INDUSTRIAL**  
ENGINEERING COMPANY (STAFFS) LIMITED

CORONATION WORKS · HAINGE ROAD · TIVIDALE · TIPTON · STAFFS

Telephone : TIPTON 1212/3, 4

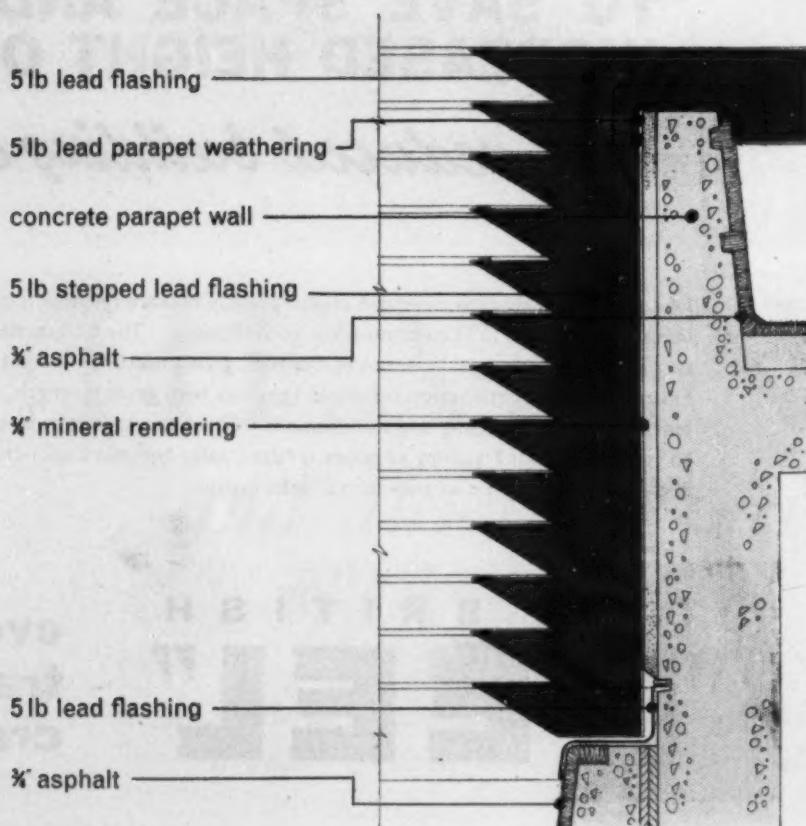


## ***The Best Buildings***

TODAY AS YESTERDAY: TOMORROW AS TODAY—

# **LEAD flashings protect** **for the centuries to come**

Whenever detailing problems arise in applications of lead, such as those illustrated here, the Lead Sheet & Pipe Technical Information Bureau is available to give individual assistance. A series of Information Sheets which deal with most uses of lead sheet and pipe in building work is available for inclusion in office information files.



**Some leadwork  
details in the new  
B.B.C. Television  
Centre, London**

*Architect:*  
Graham Dawbarn C.B.E., M.A., F.R.I.B.A.  
of Norman and Dawbarn, in association with  
M. T. Tudebery C.B.E., F.C.O.I., M.I.C.E.  
consulting civil engineer to the B.B.C.

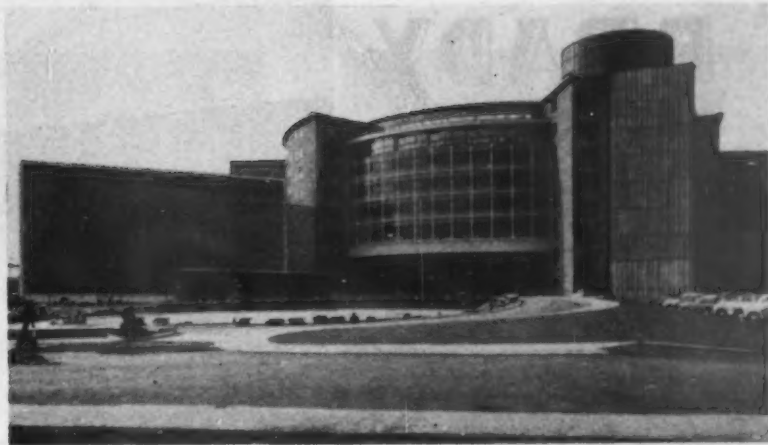
*Main Contractors:*  
Higgs and Hill Limited.

**FLASHINGS TO PARAPET  
WALL ABUTMENT**

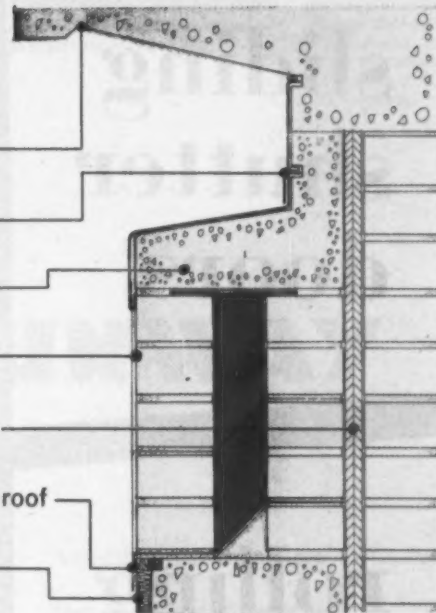
**LEAD DEVELOPMENT ASSOCIATION**

**18 ADAM STREET**

THE ARCHITECTS' JOURNAL for October 20, 1960

**use LEAD****STEPPED D.P.C. AT  
ROOF ABUTMENT**

base to concrete parapet wall  
5 lb lead weatherings  
pre-cast concrete coping  
12" cavity wall  
2 layers mastic expansion joint  
5 lb lead d.p.c. stepped to slope of roof  
 $\frac{3}{4}$ " asphalt to roof

**FLASHINGS TO  
PARAPET WALL**

5 lb lead weathering fixed  
with copper clips

4½" brick facing

$\frac{3}{4}$ " asphalt

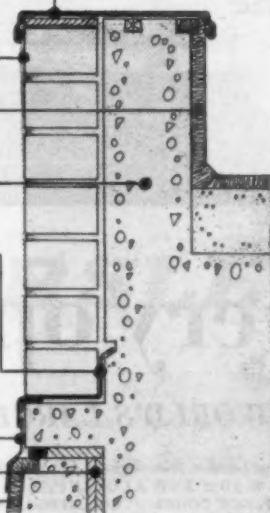
concrete roof slab  
and upstand

5 lb lead d.p.c.

5 lb lead flashing

2 layers mastic  
expansion joint

$\frac{3}{4}$ " asphalt

**FLASHING TO  
STRING COURSE**

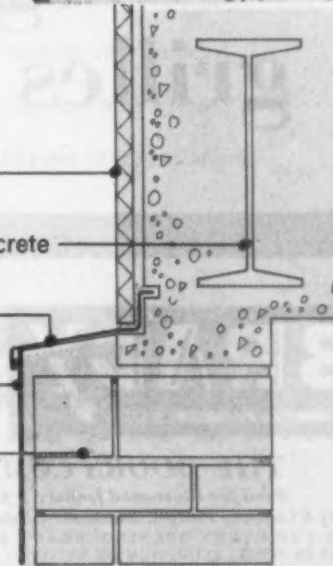
1" faience facing

beam cased in concrete

5 lb lead flashing

mosaic facing

13½" brickwork



LONDON WC2

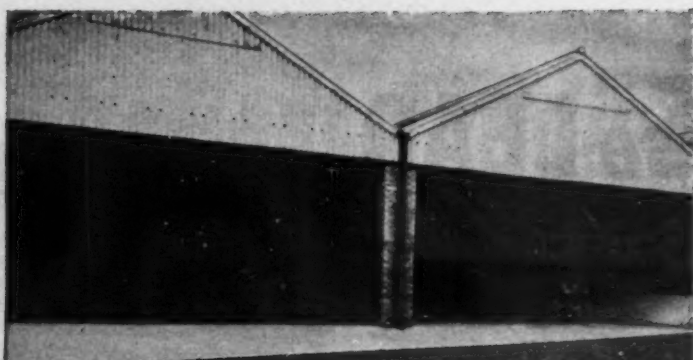
Telegrams: Leadevop, Rand, London

Telephone: WHIttehall 4175



**BRADY**  
REGD.

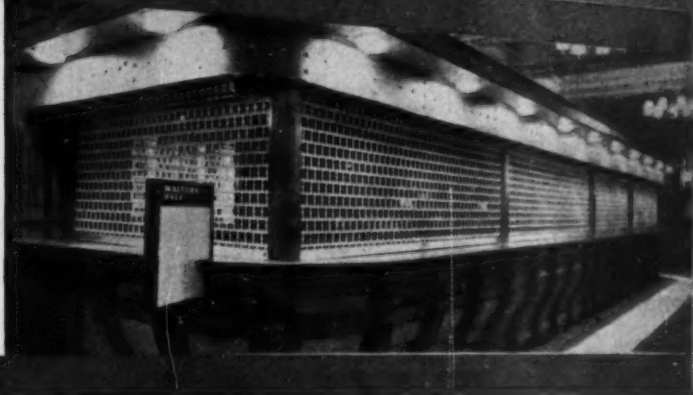
**roller  
shutters**



**sliding  
shutter  
doors**



**rolling  
grilles**



**BRADY**  
REGD.

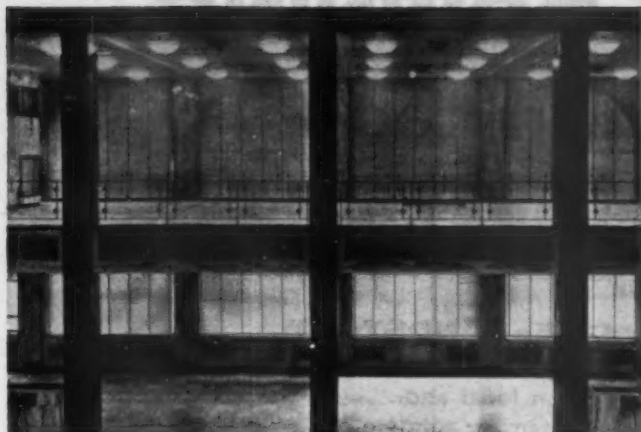
**for every opening**

**THE DOORS COMMANDING THE WORLD'S LARGEST SALE**

*Send for illustrated leaflets 3/S.D.G.*

C. Brady & Company Limited, Manchester 4. Telephone COLlyhurst 2797/8/9 and at London, Birmingham, Glasgow, Montreal, Port Credit, Hong Kong.  
BRADY FOR EVERY OPENING: BRADY ROLLING DOORS IN STEEL, WOOD AND ALUMINIUM • SLIDING SHUTTER DOORS  
GRILLES IN STEEL, ALUMINIUM OR NYLON • UP AND OVER DOORS • FIREPROOF DOORS • COLLAPSIBLE GATES • SLIDING DOOR GEAR  
RUBBER DOORS • ORNAMENTAL IRONWORK • ALSO MANUFACTURERS OF BRADY LIFTS.

*Stones & Doodles*



*Sunway Blinds are Al at Lloyds.*



*Sunway Skylight Blinds fitted to glass roof of office.*



*Sunway Standard Blind fitted with invisible Terylene Tapes (offices for Moons Motors Ltd. designed by J. M. Austin-Smith and Partners).*

IN ANY SITUATION —

## **SUNWAY** VENETIAN BLINDS

If you have a  
Venetian Blind problem—  
here is a specialist service.  
We will be very pleased  
to discuss and advise  
on all types of installation.

*Main Distributors and Fixers*

# **HORSLEY, SMITH HEWETSONS**



HORSLEY SMITH & CO. (Hayes) LTD. Hayes, Middlesex  
Telephone HAYES 2931

J. A. HEWETSON & CO. LTD. Marfleet, Hull  
Telephone 1388C

# **G. H. DOWNING & Co. Limited**

---

## **PRODUCERS OF**

### **ACME and ACME-SANDSTORM ROOFING TILES**

10½ in. x 6½ in. as used on local and countrywide housing schemes, schools, churches and other buildings.

### **ACME INTERLOCKING TILES**

11½ in. x 8½ in.—Smoothfaced and Sandfaced.

### **ACME RED FLOOR QUARRIES**

6 in. x 6 in. x 1½ in.

Heavy duty floor tiles for industrial use—

Smoothfaced or with non-slip surface—

8 in. x 4 in. x 1½ in. or 6 in. x 6 in. x 1½ in.

### **FACING BRICKS**

Smooth Red and Sandfaced Red Multi,

Antique and Straw Thatch.

Specialities—Madeley Mixture, Ridgehill Mixture

and Brompton, Apedale Rustics.

### **ENGINEERING BRICKS**

to British Standard Specification—Blue,

Blue Brindled and Brown Brindled.

### **HOLLOW FLOOR AND PARTITION BLOCKS**

Clay, standard sizes to

British Standard Specification.

OUR PRODUCTS COMBINE THE TRADITIONS  
AND EXPERIENCE OF CENTURIES WITH  
MODERN MANUFACTURE AND SERVICE

---

## **WORKS**

NORTH STAFFORDSHIRE & GLOUCESTERSHIRE

## **G. H. DOWNING & CO. LIMITED**

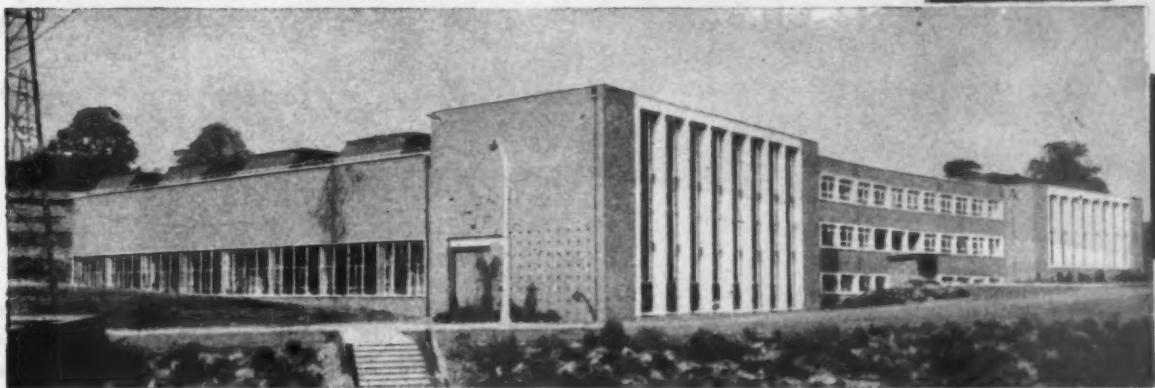
Brompton Hill, Newcastle, Staffs.

Telephone: Newcastle, Staffs. 65381 (5 lines)



## BOOTH Steelwork

now does the same  
job better and costs less \*



Over 700 tons of BOOTH Steelwork were used in the new TECHNICAL DIVISION for Messrs. FERODO Ltd. at Chapel-en-le-Frith, Derbyshire. In addition a further 200 tons of steelwork have since been used in extensions on the same site. Architects: Ashworth & Fletcher, A/L.R.I.B.A.



by taking advantage of the new provisions of BS-449 (1959), worthwhile economies can be effected.

Better build with

## BOOTH Steelwork

and cut the cost of your structure

JOHN BOOTH & SONS (BOLTON) LTD., HULTON STEELWORKS, BOLTON.  
Tel: BOLTON 1195. LONDON: 26 VICTORIA STREET, WESTMINSTER, S.W.1.  
Tel: ABBEY 7162.

# Have you discovered the excellence of



Stramit slabs in timber framing at the offices of Midland Electricity Board, Kingswinford, Worcs.



These attractive rooms are partitioned with Stramit slabs, decorated with wallpaper. They are part of the offices of Nussound Recording Studios, Thornton Heath.

## STRAMIT

TWO-INCH THICK  
STRUCTURAL  
INSULATING SLABS

*for solid or semi-glazed  
dry-construction  
partitioning?*

They are truly economical, strong and durable. They provide excellent thermal and sound insulation. They accept paint and decoration direct. They resist fire. They are quickly and easily erected in timber framing or in aluminium extrusions. They can be tailored to suit the contours of the ceiling.

★

STOCK SIZES: 4ft. wide by 6, 8, 9, 10 and 12ft. long.

Special sizes made to order.

★

**Send for details of this unique  
dry-construction material NOW**

Please send full details of Stramit slabs

AJ.10

COMPANY .....

ADDRESS .....

For the attention of .....

**STRAMIT BOARDS LTD., COWLEY PEACHEY,  
UXBRIDGE, MIDDXX** : Phone: West Drayton 3751 (10 lines)

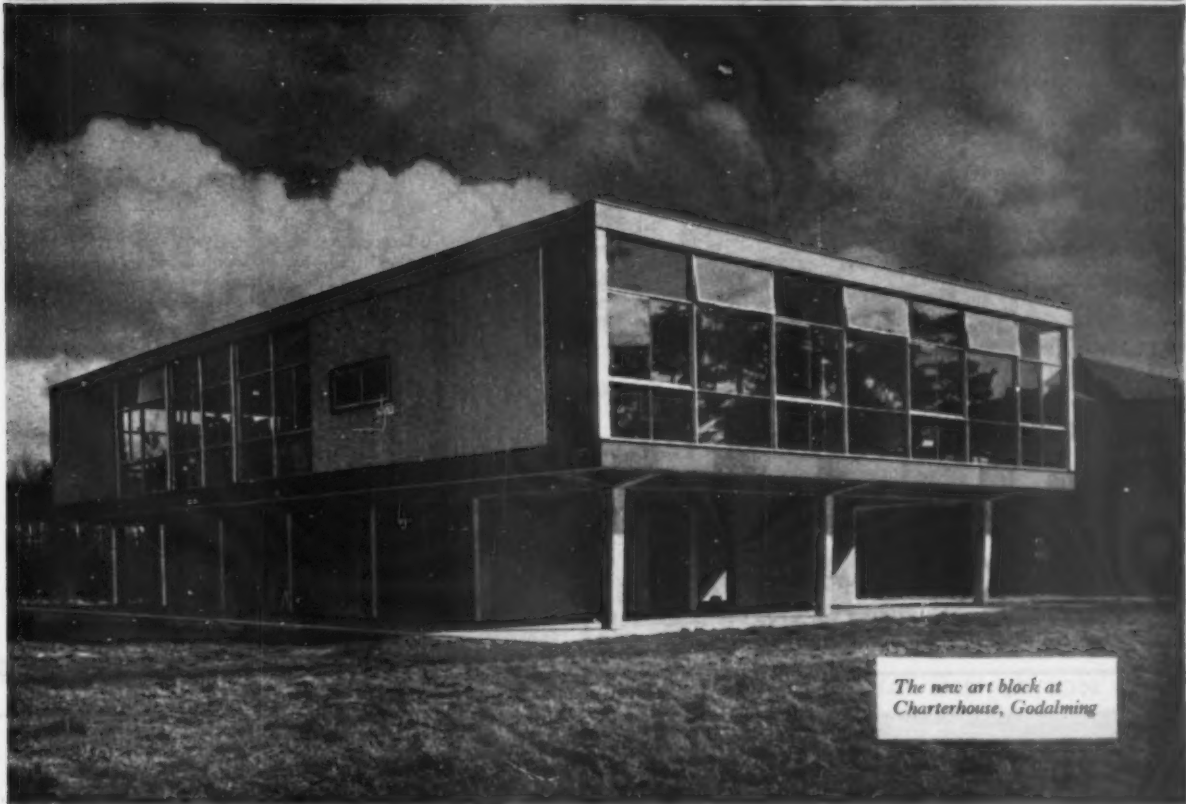
### ● STRAMIT 'MOVAFLUSH' PARTITIONS

Stramit Movaflush partitions, hardboard faced with a solid Stramit core. Attractive flush finish. Easily de-mountable. All the Stramit dry construction advantages including low price.

## ELECTRIC FLOOR WARMING

INFORMATION SHEET

# 4



*The new art block at  
Charterhouse, Godalming*

Architect: James Dartford H.R.I.B.A.

**Electric  
floor warming  
is cheap to install,  
trouble free  
and highly efficient**

**Planned for comfort** A system of electric floor warming for the new art building at Charterhouse is designed to provide a constant, even temperature of 60°F. (with a minimum outside temperature of 30°F.). Off-peak block storage heaters provide additional heat as required.

The building has a high proportion of glazing from floor to ceiling, and special methods of insulation were devised for its cantilever floor. The area is 4,200 sq. ft. total and the consumption, allowing for school holidays, is 62,000 units per year.

**Simple to install and clean** No fireplaces, flues, chimney breasts, pipes or radiators are required. The need for outside boiler-houses, chimneys, fuel stores and pipe trenches is completely eliminated. And the absence of dirt and staining from pipes and radiators means a considerable saving on redecoration costs. Electric floor warming provides the complete answer to the Clean Air Act.

**Economical and labour saving** Electric floor warming is exceptionally cheap to run because it stores up heat for the day by using off-peak electricity at night. The system virtually looks after itself; therefore all chores associated with solid fuel are ended, and boiler-room staff are no longer necessary.

**If you are thinking of installing electric floor warming, ask your Electricity Board for details.**

*Issued by the Electrical Development Association, 2 Savoy Hill, London W.C.2*



# for to-day's planned kitchens...

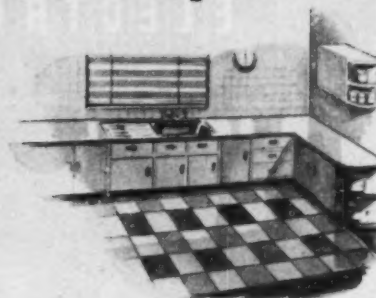
THESE ARE THE 'tops'

## REVERSIBLE MODEL

42in. by 18in. without overflow, can be used with drainer on left or right. Bowl size 20in. by 15in. by 8in. deep. Actual overall size 42in. by 18in.

## FOR PILLAR TAPS

42in. by 21in. model, with tap holes, with or without overflow. With left or right-hand drainer. Bowl size 20in. by 15in. by 8in. deep.



Designed to meet varying kitchen specifications, and colour preferences, whether in multi-storey luxury flats or local authority housing schemes. The "Luxury" range . . . vitreous enamel tops available in 18in. or 21in. widths, in white, ivory, pale green, pale blue. All with sensibly-sized bowl - 20in. by 15in. by 8in.

Fully descriptive literature available from Builders Merchants or direct from the manufacturers.

## SINK UNITS AT THE RIGHT PRICES

THE WELSH TINPLATE & METAL STAMPING CO. LTD., LLANELLY, CARMS.  
Members of the Vitreous Enamel Development Council

# LUXURY

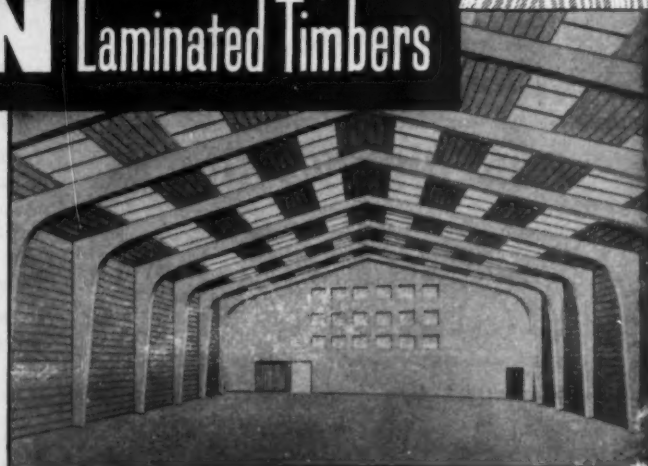


Pochin laminated timbers offer an economical system of construction, more attractive in appearance than steel. It is almost entirely maintenance free, and has a high strength to weight ratio, comparable with any other constructional material.

# POCHIN Laminated Timbers

We offer a complete service for architects. Have a fully qualified design staff available to design, advise, supply and fix.

**POCHIN (MANCHESTER) LTD.**  
KING STREET WORKS  
MIDDLEWICH, CHESHIRE  
Telephone: Middlewich 3221



## JAMES make good METAL WINDOWS

W. JAMES & CO. LTD.  
Hythe Rd. Willesden Junction  
LADBroke 6471 (6 lines) N.W.10

## Watco that concrete floor and complete the job

Watco Concrete Hardener is a unique non-chemical  
penetrative treatment for new and old concrete floors. Its safe  
and sure sealing effect is 100% and permanent.



Further information from  
WATCO (SALES) LTD (Dept. 12 )  
Floor Treatment Specialists  
56 BUCKINGHAM GATE, LONDON, SW1 • VICTORIA 0623

The word 'Watco' is a regd. trade mark

## 6 IMPROVEMENTS *in* PLASTER

The introduction of ready-mixed plasters, incorporating Vermiculite or Perlite as an aggregate, has brought Plaster into the front rank of modern building materials.

### 'SIRAPITE' (Regd.) LIGHTWEIGHT PLASTERS

Offer the following important advantages:—

- 1: REDUCTION OF DEAD LOAD**  
Compared with sanded plasters, the weight on a structure may be reduced by as much as two-thirds.
- 2: IMPROVED THERMAL INSULATION**  
Heat loss through walls and ceilings is reduced; condensation and pattern staining minimised.
- 3: GREATER FIRE RESISTANCE**  
The special aggregate enhances the natural fire-resisting property of gypsum plaster.
- 4: CRACKING MINIMISED**  
Shrinkage is eliminated, and the aggregates tend to absorb movement stresses.
- 5: UNIFORMITY OF MIX**  
The ingredients are accurately proportioned, preventing variation between one batch and another.
- 6: SITE WORK FACILITATED**  
The material only needs the addition of clean water. Mixing can be done inside a building, without interruption by bad weather.

**SIX GOOD REASONS for specifying  
'Sirapite' Lightweight Plasters.**

Please ask for literature.

### THE GYPSUM MINES LTD.

Kingston-on-Soar,  
Nottingham.

Mountfield, Robertsbridge,  
Sussex.

Telephone: Gotham 364/5.

Telephone: Robertsbridge 234.

## "SHEBA" COMPLETE BUILDINGS

### THE STANDARD BUILDING TO MEET YOUR EXACT REQUIREMENTS

SHEBA complete buildings can be supplied and erected anywhere in the United Kingdom. Foundations and builders work may be executed by your Contractor or, alternatively, we will undertake full responsibility.

Advantages of Sheba Buildings which incorporate solid joist "Burton-Span" Portal Frames, are any height to eaves and any span from 20ft. to 120ft. Single Valley Stanchions. Suitable for crane gantries.

**YOUR SPACE IS VALUABLE-  
WE MAKE THE MOST OF IT.**



*Shepley Booth & Associates Ltd.*

Head Office: GRANVILLE HOUSE, 2 TETTENHALL RD., WOLVERHAMPTON  
Telephone: WOLVERHAMPTON 27246  
Cables: SHEBA, WOLVERHAMPTON.

## It's best to specify adaptable Remploy Lundia shelving

For storage and display in BOARDROOMS, OFFICES, LIBRARIES, SCHOOLS,  
WAREHOUSES, FACTORIES and SHOPS



### PREFABRICATED SHELVING

The only system of its kind in the country  
obtainable in wood or steel

Easy to assemble and dismantle.  
Shelves secured without nuts and bolts.  
Fits any wall space to within six inches.  
Easily adapted to other positions  
and shelf spaces.  
No protrusions to damage goods.  
Firm and rigid, and  
capable of carrying heavy loads.

### TECHNICAL DATA

Write for Library Information Sheets Nos. 596 and 597  
and for full sales information on this unique system.



**REMPLY LTD., 415, EDGWARE ROAD, LONDON, N.W.2. GLA 8020**

BRANCHES AT CARDIFF, BRISTOL, BIRMINGHAM, OLDHAM, NEWCASTLE-UPON-TYNE, GLASGOW.





## EDGE BIND with ADMEL TESA TAPES



Successful edge binding depends as much on the quality of the tape as on the efficiency of the machine. Admel Tesa Tapes are specially produced with an adhesive formula designed to give strength and long life and to eliminate excessive 'back pull' to ensure efficient and trouble-free running in photo printing machines. Admel Tesa Tapes used in an Admel 'Universal' edge binding machine are a guarantee for the best in edge reinforcement. Admel Tesa Tapes are always supplied in rolls  $\frac{1}{2}$ " wide and 36 yards long.

**Admel TESASTRIP** Non-spread Edge Paper Binding Tapes have adhesive in two strips leaving centres and edges dry. Heavily embossed paper; Buff colour only,  $\frac{3}{4}$ d. including P.T.

**Admel TESABORDE No. 3** Non-spread Edge Paper Binding Tapes are reinforced with a 'Perlon' thread running through the centre of the tape giving the advantages of a paper tape with the strength of cloth. Available in White  $\frac{3}{4}$ d., and Red, Blue and Green  $\frac{3}{6}$ d. including P.T.

**Admel TESACLEAR** Non-spread Edge Binding Tapes are untearable P.V.C. tapes in Transparent, Red, Blue and Green. They make an attractive binding which is thinner than paper or cloth. The adhesive is spread in two strips leaving centres and edges dry. Transparent  $\frac{4}{6}$ d., colours  $\frac{4}{9}$ d. no P.T.

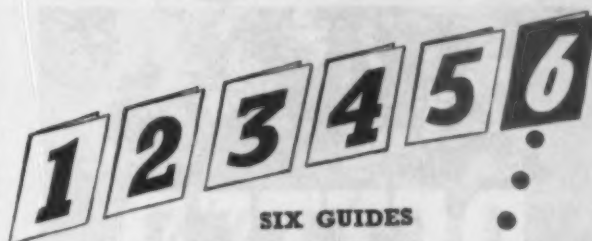
Ask at your local drawing office supplier for



EDGE BINDING TAPES

for reinforcing drawings and tracings against tears

'TESA' Regd. Trade Mark of P. Beiersdorf & Co., A. G. HAMBURG



## SIX GUIDES TO THE USE OF DIAMOND BETONAC



## Economical Specification

Diamond Betonac surfacing specifications are calculated to withstand the variable abrasion given to industrial floors.

The effects of differing abrasive conditions can be overcome by using a combination of two or more specifications—even within the same area of floor.

While retaining all the advantages of the Diamond Betonac surface, this adaptability of use enables the architect to specify the best type of industrial flooring surface—on the most economic basis.

Diamond Betonac is one of the most widely applicable floor surfacing materials used in the building and structural engineering fields today.

## DIAMOND BETONAC DEFIES ABRASION



Full particulars obtainable from

**QUICKSET WATER SEALERS LTD.**

MANUFACTURING AND SALES DIVISION

20 Albert Embankment, London S.E.11

Telephone: Reliance 6731-2-3

A MEMBER OF THE CEMENTATION GROUP OF COMPANIES



## IS OUR BUSINESS

Air Control Installations Limited,  
Britain's leading air treatment engi-  
neers, manufacture a very wide  
range of plant and equipment for:—

**Air Conditioning:**  
Industrial, Comfort and Marine

**Air Filtration**

**Dust and Fume Control**

**Fans for every purpose**

**Also,**  
**both wet and dry dust control**

*Descriptive literature will gladly be  
sent on request.*

## AIR CONTROL INSTALLATIONS LIMITED

RUISLIP • MIDDLESEX • VIKING 1222

BIRMINGHAM • MANCHESTER  
NEWCASTLE • GLASGOW

WHEN PLANNING FOR  
FIRE PROTECTION  
SPECIFY—

**L&G**

*Autoreel*

FULLY AUTOMATIC  
HOSE REEL

Essential for use in  
INDUSTRY • CINEMAS  
SCHOOLS • HOSPITALS  
EXHIBITIONS • HOTELS  
PUBLIC BUILDINGS  
HOMES, ETC.

*automatically—the best!*

L&G FIRE APPLIANCE  
CO. LTD.  
Caxton Street North,  
London E.16  
ALBERT Dock  
3991/4



SEND FOR  
ILLUSTRATED FOLDER  
AND FULL DATA



BRANCHES THROUGHOUT GREAT BRITAIN

## photomurals



## ... ask AUTOTYPE

ARCHITECTS throughout the country are using AUTOTYPE photomurals with great success in reception halls, offices, showrooms, shops, schools, restaurants, cafés, ballrooms, private houses, etc.

*In full colours, or black-and-white, mounted on prefabricated panels for fixing on site, or black-and-white unmounted. Photographs, engravings, originals of all kinds available for selection.*

Autotype are acknowledged the leading specialists in this growing development. The benefit of their long experience and advice is yours for the asking. Enquiries welcomed.

*See our  
photomurals on  
permanent exhibition  
in the Building  
Centres at London,  
Bristol and  
Glasgow*

## AUTOTYPE

The Autotype Company Limited  
Brownlow Road, West Ealing, London, W.13  
Ealing 8861

# NATURAL CHOICE FOR HYGIENE AND GOOD LOOKS-

the famous  
EKCO  
'Belvedere'



Modern good looks . . .  
complete hygiene . . .  
choice of sixteen colours  
. . . no wonder the  
Belvedere toilet seat is  
more popular than ever.  
Your customers will be  
delighted with its clean  
lines and the ease with  
which it is installed. From  
every point of view this  
is the perfect toilet seat.  
From **61/6**

The EKCO 'Belvedere' is  
guaranteed for ten years

## EKCO PLASTICS

There's an Ekco toilet  
seat for every  
taste . . . every pocket

### JUBILEE

—another elegant design  
from Ekco. The Jubilee  
offers an extremely simple  
and economical means  
of modernising an existing  
toilet. In a range of  
sixteen colours.

### 'SLIMLINE'

—winner of an I.C.I.  
Design Award, the  
popularity of this sensibly-  
priced fixture is greater  
than ever. The  
easily-fixed fittings are  
of non-rusting nylon.  
Six colours to choose  
from. 37/6 (Seat without  
lid 24/-)

### CAMELOT

This lightweight assembly  
has met the extensive  
need for a high-quality  
fitting at a very low cost.  
There are no metal  
fittings and the seat is  
available in seven  
delightful colours.

EKCO PLASTICS LTD.  
SOUTHEND-ON-SEA · ESSEX

# The lowest priced Plastic Cistern



and the only  
**unbreakable cistern too!**

Success follows success with Fordham. After the  
Fordham 'Eterna' in White plastic - the 'Eterna'  
in black plastic. Here is the lowest price plastic  
cistern. The only one in rigid polythene and so the  
only really unbreakable cistern. It has all the well-  
proved Fordham advantages too, resulting in de-  
pendable, ever-lasting, maintenance-free operation,  
whatever the conditions. For low cost housing, the  
Fordham black 'Eterna' is supreme.

To B.S.S.	1125/1959	<b>Note for Stockists.</b>
Width	19½ ins.	18 'Eternas' occupy less than
Depth	12½ ins.	4 square feet of floor space.
Projection	7 ins.	★Write NOW for fully illus-
Weight complete	8 lbs.	trated literature.
Front lever of unique design.		

## Fordham ETERNA

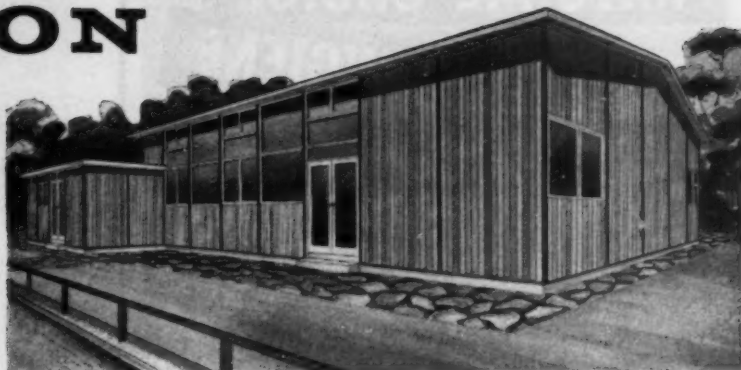
FORDHAM PRESSINGS LTD., DUDLEY ROAD, WOLVERHAMPTON.

Other factories at Earlsfield (London), Hinckley (Leics), Sedgley (Staffs).  
Makers of a complete range of Cisterns, Flushing Troughs, and other Sanitary Equipment.

WPS 424



# PLANNED EXPANSION



The special requirements of Local Authorities are the subject of careful study by Panel-Lastic Construction Co. Ltd., who have a large range of prefabricated buildings which incorporate very many variations in modern interior planning, so that any special need is almost certain to be met without delay. The building illustrated was designed for use as a social hall for old folk in a provincial town. It can be erected with phenomenal speed and has a high thermostatic rating and a very high daylight factor.

Designs are also available for the following:—

Canteens

Fruit Packing Stations

Laboratories

Recreation Rooms

Dormitories

Gymnasiums

Pavilions and Dressing Rooms

Schools

Drawing Offices

Industrial Offices

Public Halls

Tropical Buildings

For full details of buildings available for immediate assembly, with architect's drawings and specifications write to:—

## PANEL-LASTIC Construction Co. Ltd.

Belvedere Works · Feltham · Middlesex · Tel. : FELtham 5761

# Preformed

## TIMBER ROOF TRUSSES




**100 FEET  
CLEAR SPAN**

**A NEW, PATENTED FORM OF  
ROOF TRUSS SUITABLE FOR  
SPANS OF APPROXIMATELY  
25 FT. PARTICULARLY SUITABLE  
FOR SCHOOLS, PUBLIC HALLS,  
ETC. WHERE EXTERNAL APPEAR-  
ANCE AS WELL AS STRUCTURAL  
STRENGTH IS OF IMPORTANCE.**

**SEND FOR FULL DETAILS AND DESCRIPTIVE LEAFLET  
CW2723**

**WILLIAM KAY [BOLTON] LIMITED, BARK STREET., BOLTON, LANCASHIRE. TEL 3925/6/7.**

# PRECAST CONCRETE

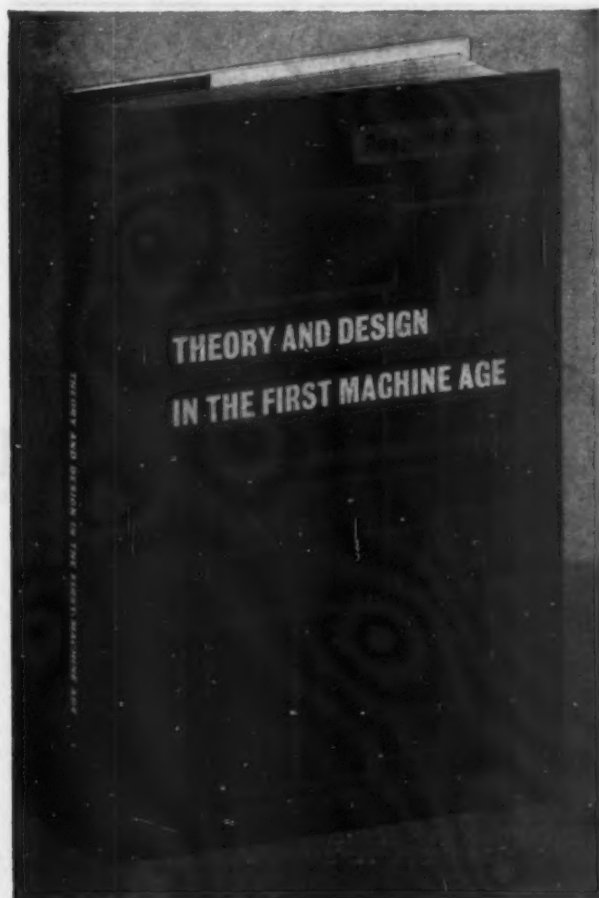
Our services are available for the design, manufacture and erection of all structural and engineering units. Technical representatives—backed by a country-wide organisation—are always available to discuss projects on request.

*By courtesy of Messrs. Shipley & Foster, Chartd. Archts., we show the Porta Frames to the new Anglican Church at Walsall. Clear Span 34ft. 0in., height to Apex 40ft. 0in. T. G. Construction Co. Ltd.—one of the Tarmac Group of Companies—erected the portals.  
Main Contractors: Messrs. Bird & Hough, Walsall, Staffs.*



## TARMAC VINCULUM LIMITED

Ettingshall Wolverhampton. Telephone Bilston 41101 (fourteen lines)



REYNER BANHAM

### THEORY AND DESIGN IN THE FIRST MACHINE AGE

IN THE FIRST THIRTY years of the twentieth century, architects made a tremendous effort to adapt themselves and their art to a new set of circumstances—life in a Machine Age. The whole theory of architecture was brought under scrutiny—some of it for the first time since Antiquity—in a wave of self-examination unparalleled in the history of art. Not only was a new climate of ideas created, but the Masters of Modern Architecture—Gropius, Mies van der Rohe, Le Corbusier and others of less fame but no less interest—used their writings to justify their buildings, and their buildings to confirm their theoretical writings. Dr. Banham's subject covers not only a mass of theoretical writings—much of it unknown to English readers—but also buildings, projects, industrial designs, painting and sculptures—many of them illustrated in an English-language publication for the first time. Dr. Banham shows how one unifying theme finally emerges from this melting pot of exciting designs and excited discussion—the theme of a Machine Age Architecture; the architecture of the International Style, as the historians term it; Modern Architecture with its white walls, flat roofs and big windows, as the man in the street understands it. Into the growth of this theme went many highly inventive designs, which the author illustrates and analyses; many and varied publications, ranging from the scholarly to the scandalous, from which he quotes extensively, showing not only how the theories are related to the finished products, but also how the theories—and even the theorists—are related to one another.

The size of the book is 8½ × 5½ in. 340 pages including over 150 half-tone and line illustrations. 45s. net, postage 1s. 9d. The Architectural Press, 9-13 Queen Anne's Gate, S.W.1.

## PLAN FOR T.V. AND RADIO



AS AN  
*essential* AMENITY

The need for a planned system to provide an efficient and reliable service to large numbers of receivers is essential in the modern planning of flats and similar properties.

Proven—and accepted by many Municipal and other authorities all over the country, the Antiference System provides ideal reception to every user—from ONE aerial—with no restriction on the type of receiver.

A nation-wide service is offered by this organisation—backed by our technical planning departments—with trained personnel to ensure trouble-free systems, installed at economic cost, needing an absolute minimum of maintenance and attention.

Our installations comply in every respect with Electricity Authority Regulations.

Send today for full details to:



**ANTIFERENCE INSTALLATIONS  
LIMITED**

19 DUNRAVEN STREET, PARK LANE,  
LONDON, W.1

TELEPHONE: GROSVENOR 106112

MIDLANDS: 39 HOLLAND STREET, SUTTON COLDFIELD 'Phone: 5254  
NORTH: 81 MEDLOCK STREET, LIVERPOOL, 4 'Phone: Booth 1727

A Member of the Antiference Group of Companies

LONDON BRUSSELS • TORONTO • SYDNEY

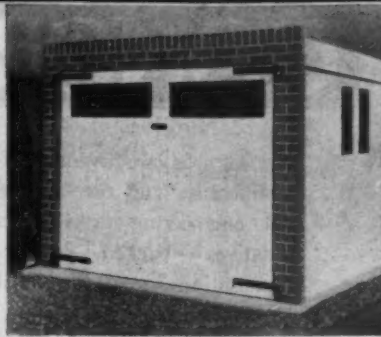
DHB 8236

## Garages by MARLEY

### MARLEY MASTER

#### Brick Style Garage

... the latest in the comprehensive range of Marley Concrete Garages. Far ahead in design, appearance and specification, Marley garages have a nation-wide reputation for a high standard of quality. The concrete posts, wall panels and rafters are reinforced with steel rods, guaranteed to comply with the requirements of British Standard 785:1938. Wide choice of doors, roofs and window arrangements. Models from £55.



#### OTHER MARLEY GARAGES

Marley Minor	Marley Medium	Marley Major	Marley Magna
Width 7' 10"	Width 9' 2"	Width 11' 10"	Width 13' 2"
Lengths 11' 2" to 19' 5"	Lengths 14' 1" to 22' 4"	Lengths 14' 1" to 22' 4"	Lengths 14' 1" to 22' 4"

#### MARLEY MULTIPLES

Width 8' 6"  
Lengths 16' 6" and 17' 10" Choice of up-and-over or timber doors.



#### TILED ROOF GARAGES

Width 9' 2"  
Lengths 14' 1" to 22' 4"



#### MARLEY CONCRETE COAL BUNKERS

in 6, 9, 11, 18, 22, 27, 33 and 44 cwt. capacities.

Prices from £4 15 0 plus carriage

**MARLEY  
CONCRETE  
LIMITED**



Peasmarsh, Guildford, Surrey (Head Office) Guildford 69171  
Shurdlington, Cheltenham, Glos. Shurdlington 334/5  
Waterloo, Poole, Dorset Broadstone 911/2  
London Showrooms: 251 Tottenham Court Road, W.1  
Please write to Dept. AB/S  
at your NEAREST Works for illustrated brochures.

*For people who plan right...*



*For people who build well*

**HADDON** Lightweight foamed slag blocks are manufactured under strict quality control to surpass the requirements of B.S.S. No. 2028, 1953—and every block is steam cured. Look at the many advantages the HADDON block offers—advantages that add up to better, warmer buildings and a considerable saving in time.

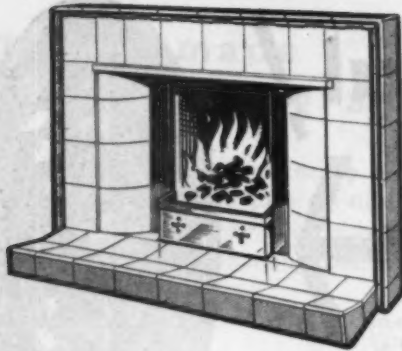
WRITE FOR DETAILS TO:—

**WILLIAM PRESTWICH & SONS LTD.**

HADDON CONCRETE WORKS,  
STAVELEY, DERBYSHIRE  
Telephone: Staveley 391 (3 lines)

- HIGH THERMAL INSULATION
- FIRE RESISTANT
- CONDENSATION PROOF
- MORTAR ECONOMY
- LIGHT TO HANDLE
- SAVING IN MAN HOURS

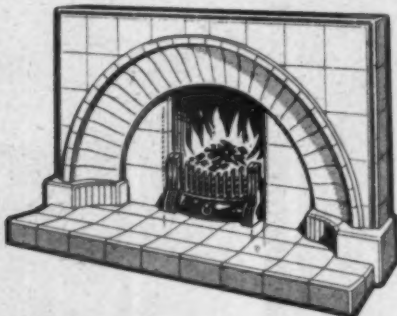




*For every home*



*there's a -*



## ROYAL VENTON FIREPLACE

(Top) Design No. 1852  
48" x 33" x 6" R.T.W.  
Fire Opening 16" x 22"  
4" Recess.  
R/H: 45 1/2" x 18" x 38" high.

(Centre) Design No. 1855  
52 1/2" x 34 1/2" x 6" R.T.W.  
Fire Opening 16" x 22"  
4" Recess.  
R/H: 47 1/2" x 18" x 38" high.

(Bottom) Design No. 9816  
56" x 34" x 8 1/2" R.T.W.  
Fire Opening 16" x 20"  
6 1/2" Recess.  
R/H: 54" x 18" x 38" high.



JOHN STEVENTON & SONS LTD., BURSLEM, STOKE-ON-TRENT, STAFFS.  
Tel: Stoke-on-Trent 84261/2 • Grams: Steventon, Burslem

## Seven symbols of progress



**3" Reb. P.S.**

The slab identified by this symbol is our 3" Rebated Channel Reinforced Pre-screeded Wood Wool Roofing Slab. It has all the advantages of our 3" Reb., including the unique Thermacoust anti-condensation insulated rebate over the steel channel reinforcing strips. It is, however, pre-screeded during manufacture with a hemi hydrate gypsum plaster. Thermal movement is accommodated without trouble because the slabs can move independently in a way that is not possible where continuous screeding is applied after installation. Dry construction becomes possible with the obvious additions of speed, immediate weather protection, and the elimination of construction moisture content: it opens the way for entirely new roofing techniques.

Like all Thermacoust roofing slabs, 3" Reb. P.S. has high resistance to fire and good thermal insulation, rated at 0.19 B.T.U. with felt applied.

The sound absorption factor at 500 c/s is 0.85.

Please write for full particulars.

## THERMACOUST LTD

### ROOFING SLABS

20 ALBERT EMBANKMENT LONDON SE11

Telephone Enquiries (Southern)—London: ELMbridge 5773/4/5

Telephone Enquiries (Northern)—Doncaster 54138 Ex. 25

When supported on inverted "T" or Thermacoust purlins no special fixing arrangements are required. Flat-top purlins or R.S.J.'s call for Type 1 site fixing clips.

Slabs may also be provided with any of the exclusive range of Thermacoust Pre-Clips for fixing copper, SNAPRIB aluminium, slates, tiles or false ceilings.



A member of the Cementation Group of Companies

# there is no equal!

The NORMANTON

# NEOS

for

ADJUSTABLE DIFFUSER

PATENTS PENDING

warm air heating systems and ventilation

ALL ANODISED ALUMINIUM CONSTRUCTION

Available in 5", 6", 7", 8", 9", 10" and 12" throat diameters.

The NEOS DIFFUSER operates on a new principle with the following advantages

- |  |  |
|--|--|
| ★ pleasing appearance                  | ★ attractive range of colours                |
| ★ completely flush fitting             | ★ corrosion resistant finish                 |
| ★ simple to install                    | ★ no maintenance                             |
| ★ exceptionally shallow design         | ★ can be locked for plenum systems           |
| ★ fully adjustable from open to closed | ★ smooth air flow with aerodynamic stability |
| ★ maximum diffusion                    |  |

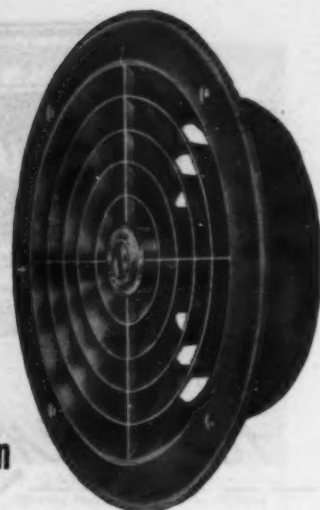
Illustrated literature is available on request. Please write for information sheet No. 1

## NORMANTON ENGINEERS LIMITED

REDCROSS WORKS, REDCROSS STREET, ROCHDALE, LANCs.

Telephone: ROCHDALE 40214/5

Telegrams: SPRINGS, ROCHDALE  
N.E.L.B.



it's unique!  
it's rod-operated  
and cordless



New in Venetian Blinds—rod operated by a steel tube connected to a gear in the headmember by means of a universal joint and having a cranked handle at the lower end. No cords—raising, lowering and tilting by one single control. A special locking device enables the blind to remain safely and positively in any position of tilt, or partly or fully raised. Detachable operating handles also available—one handle for any number of blinds.

This new Sunaire development is particularly suitable for Schools, Offices, Public Buildings, etc.

All the special features of Sunaire are also incorporated—"S"-shaped slat in full range of colours, with Carr's quality Terylene or cotton tapes. (Concave slat also available.)

... the NEW  
venetian blind by



naturally!

Venetian Blinds: Specify Unique Sunaire Rod-operated  
write for illustrated leaflet.



Illustration shows a Ministry of Works contract installation

**HOME FITTINGS (GT. BRITAIN) LTD** (Dept. A.J.S 10)  
VICTORIA WORKS, WEST BROMWICH, STAFFS. Telephone: Wednesbury 0761

## You've made the grade...

You're well on the way to the top, and with the wisdom of passing years you know it's time to finalize your plans for the future security of yourself and your family... or perhaps for financing some pet ambition of your own. The unique benefits included in the Confederation Life Professional Plan have been specially designed for professional men like yourself. Why not let us tell you about them?



### Confederation Life

(Incorporated in Canada in 1871 as a Limited Company). Assets over £145,000,000.

J. H. B. Clover, Manager for the United Kingdom,  
CONFEDERATION LIFE ASSOCIATION,  
18 Park Lane, London, W.1.

Please send without obligation, details of your  
PROFESSIONAL plan.

Name .....  
Address .....  
A.J.Ss. .... Date of Birth.....



What are they called?

"Hill Bros."



**Wire Rimmed:** They make 'Quickchange' noticeboards.  
**Horn Rimmed:** We're looking for something like that.  
**Wire Rimmed:** Give them a call, they make all sorts of boards. Directories for stores, Flight Indicator Boards for airports, etc.  
**Horn Rimmed:** 'Really?' We need a board to list the occupants and personnel for a new office block.  
**Wire Rimmed:** Just the people. They go to infinite trouble to design a board to fit one's requirements.

## HILL BROS

(SERVICE) LTD.  
BEACONSFIELD ROAD · ACTON GREENS · LONDON, W.3.  
WHIRWICK 2235/6

## The Finest Combination of Sound and Thermal Insulation

# JABLITE

### USED THROUGHOUT 18 STOREYS OF MOOR HOUSE



Architects: Lewis, Solomon, Kaye & Partners.  
Contractors: Token Construction Co. Ltd.

- \* JABLITE PLASTIC CEILINGS AND CURTAIN WALL INFILL PANELS.
- \* Jablite is the original and only expanded polystyrene available to the Building Industry in any size up to 12' x 4' in Standard, Non Flam and Vapour Seal grades.
- \* Prompt deliveries to site at short notice.

You can build lighter and higher with Jablite

JABLO PLASTICS INDUSTRIES LTD.,  
JABLO WORKS, WADDON, CROYDON.  
TELEPHONE: CROYDON 2261-3, 0822.





# POLYBOND

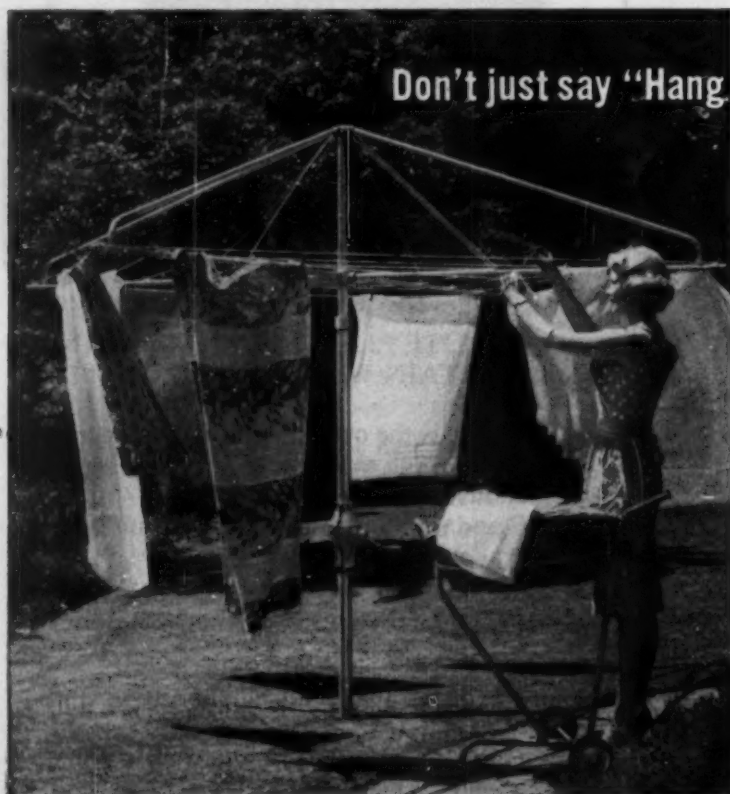
**Architects  
SPECIFY  
Builders &  
Contractors  
RECOMMEND  
Hospitals &  
Public Authorities  
APPROVE  
YOU Can Be SURE  
There is  
nothing else  
so efficient as  
POLYBOND**

**The Universal  
Building adhesive &  
sealer for all  
Materials!**



**new cement and  
plaster renders  
applied with no  
hacking and no  
difficulty**

For further information write or telephone the manufacturers, POLYBOND LTD. Southampton. London Office: 130 Crawford Street, W.1.  
Telephone: Welbeck 2349.



Don't just say "Hang the washing"

**SPECIFY *Hills*  
HOISTS** **LOW-COST SPACE-SAVING  
ROTARY CLOTHES DRIERS**

You can't ignore the washing. It may make all the difference to the final appearance of your housing project. The choice is between untidy, sagging, space-stealing clotheslines and the simple pleasing symmetry of Hills Hoists. These revolutionary revolving clothes driers enhance the landscape, save valuable ground, are so easily and quickly installed and cost very much less than you would imagine. They need no maintenance and last a lifetime. Write to us now for full details.



**IT'S NEAT AND TIDY**  
—no unsightly lines or props,  
no sagging or broken lines.  
Constructed in rust-proof  
galvanised steel.

**IT'S DUAL PURPOSE**  
—fit our canvas canopy to  
the 'Super' model and it  
changes into an attractive  
garden sunshade.

**HILLS HOISTS (UK) LTD. 424 Upper Richmond Road West, East Sheen, London SW14. Tel: PROspect 8221**

## CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advertisement Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post Friday morning for inclusion in the following Thursday's paper.

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

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

## Public and Official Announcements

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

## HUNTINGDONSHIRE

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

(a) ARCHITECTURAL ASSISTANTS

Special Grade (£766-£1,070).

(b) ARCHITECTURAL ASSISTANT

Grade APT II (£766-£880).

The persons appointed will become members of small architectural teams engaged in projects of varying size. It is desired that the persons appointed shall be keenly interested in architecture with an up-to-date approach to both planning and design.

Application forms and further particulars may be obtained from The County Architect, County Buildings, Huntingdon; completed forms should be returned to the undersigned as soon as possible.

A. C. AYLWARD,

Clerk of the County Council.

County Buildings, Huntingdon. 3246

## CITY OF WINCHESTER

Applications are invited for the posts of (a) JUNIOR ARCHITECTURAL and (b) JUNIOR ENGINEERING ASSISTANTS in the City Engineer's Department. Salary within Grade A.P.T. I, according to qualifications and experience. The appointments are subject to the terms and conditions laid down by the Southern Provincial Council, and to the Local Government Superannuation Act.

Applications, stating age and details of experience, together with the names of two referees, should be addressed to the City Engineer, Guildhall, Winchester, and should reach him not later than Monday, 31st October, 1960.

In the case of (a) the post has been designated as a key post for housing purposes, and suitable housing accommodation will be made available.

R. H. McCALL,

Town Clerk.

Guildhall, Winchester. 3624  
4th October, 1960.

## SURREY COUNTY COUNCIL

Applications invited for following appointments:—  
GRADE SPECIAL-IV. (£340-£1,310 p.a. plus £40/£45 p.a. London allowance.)

ARCHITECTS. Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

Approved removal expenses will be paid to successful candidates in this Grade.  
GRADE II. (£815-£960 p.a. plus up to £40 p.a. London allowance.)

ARCHITECTURAL ASSISTANTS. Must be of good general training, preference given those who have passed Intermediate R.I.B.A.

Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 3614

## ARCHITECTS

required by LONDON TRANSPORT for the following posts:—  
ASSISTANT ARCHITECTS: Salary range £1,070 p.a.-£1,245 p.a.

Applicants must be fully qualified and capable of supervising staff. (Reference 108/A/1.)  
ARCHITECTURAL ASSISTANTS: Salary ranges

£855 p.a.-£951 p.a.  
£969 p.a.-£1,028 p.a.

Applicants should be qualified to R.I.B.A. Intermediate standard with previous office experience. (Reference 108/B/1.)

FREE TRAVEL: FIVE-DAY WEEK: medical examination; contributory superannuation after probation.

Applications quoting reference number of post applied for and stating age, qualifications and full details of experience, to Staff and Welfare Officer, LONDON TRANSPORT, 95, Broadway, S.W.1. 3612

BOROUGH OF SWINDON  
SENIOR TOWN PLANNING ASSISTANT

A.P.T. IV (£1,440-£1,510)  
Applications are invited for the above appointment in the Borough Surveyor and Planning Officer's Department.

The Borough is expanding rapidly under the Town Development Act, and there is considerable scope for imaginative and skilful planning work—both in the layout of the large open areas earmarked for industrial and residential development about to proceed, and in the town centre, which is being extensively remodelled and developed on pedestrian way lines for shopping.

Candidates should have had suitable experience and have passed the Final Examination of the Town Planning Institute. The commencing salary will be in accordance with qualifications and experience.

A five-day week is in operation. Housing accommodation will be offered to married candidates from other areas, and assistance towards removal expenses may be granted.

Applications on forms to be obtained from the Town Clerk, Civic Offices, Swindon, must be returned by 3rd November, 1960. 3634

## LANCASHIRE COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

SENIOR ASSISTANT ARCHITECTS. N.J.C. Scale 'B'-£1,320 to £1,485 (now under review) according to experience, and covered by Lancashire County Council Superannuation Scheme.

The Governors of Salford College of Advanced Technology are proceeding with a major expansion of the College. This project is to be of advanced design, offering opportunity for experience in the design of buildings to meet the needs of pioneer scientific processes, which are estimated to cost £3,000,000.

The team for this scheme will work with Messrs. Ove Arup & Partners, Structural Consultants, and will include Quantity Surveyors and Mechanical Engineers. The team will work in the County Architect's Office at Preston.

On completion of the project, Architects will be engaged on a wide variety of new buildings for the Lancashire County Council.

Application Forms and details of appointment from:—

The County Architect,

P.O. Box 26,

County Hall,

Preston.

returnable by 3rd November, 1960, quoting reference A/AJ. 3690

BOROUGH OF CASTLEFORD  
APPOINTMENTS IN THE BOROUGH  
ENGINEER'S DEPARTMENT

Applications are invited for the following appointments:—

SENIOR ASSISTANT ENGINEER. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £960 per annum, rising to £1,145 per annum.

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

SENIOR ASSISTANT ARCHITECT. Salary—Special Grade: commencing salary according to qualifications and experience but not less than £960 per annum, rising to £1,145 per annum.

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

ARCHITECTURAL ASSISTANT. Salary—Grade A.P.T. II (£815-£960). Applicants should have passed the Intermediate Examination of the R.I.B.A. or its equivalent at one of the recognized Schools of Architecture.

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

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

Applications, on forms obtainable from me, to be returned by the 15th October, 1960.

Canvassing disqualified.

ERNEST HUTCHINSON,

Town Clerk.

Castleford. 3629

## LANCASHIRE COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructional methods, to work on a large and varied programme.

Permanent staff appointments within the salary range £1,310-£1,480 (A.P.T.V) starting point according to experience.

Application forms and details of appointment from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 3rd November, 1960, quoting reference A/AJ. 3699

## WEST SUFFOLK COUNTY COUNCIL

Applications are invited from suitably qualified persons for the following posts:—

(a) ARCHITECTURAL ASSISTANT, within

A.P.T. Grade II (£815-£960).

(b) JUNIOR ARCHITECTURAL ASSISTANT, within A.P.T. Grade I (£645-£815).

Position on scales according to qualifications and experience.

N.J.C. Service Conditions; posts pensionable; medical examination.

Application forms obtainable from the County Architect, 13, Westgate Street, Bury St. Edmunds, to be returned as soon as possible. 3609

SOUTH AUSTRALIAN GOVERNMENT  
Applications are invited for appointments in the following professions in the Government Service of South Australia:—

Salary Range. £A1,170-£A1,920

ARCHITECTS. £A1,170-£A1,920

ARCHITECTURAL ASSISTANTS. £A1,340-£A1,525

QUANTITY SURVEYORS. £A1,460-£A1,655

ASSISTANT QUANTITY SURVEYORS. £A1,340-£A1,525

SPECIFICATION WRITERS. £A1,340-£A1,525

SURVEYORS AND ASSISTANT SURVEYORS. £A1,340-£A1,525

DRAUGHTSMEN, ARCHITECTURAL. £A895-£A1,280

Commencing salaries within these ranges according to qualifications and experience.

First class passages provided for selected applicants and families.

Good leave conditions (Recreation, Sick and Long Service). Superannuation Fund available.

Houses on a rental basis provided.

Full information from:—

Agent General for South Australia,

55, Strand, London, W.C.2.

Whitehall 7471. 3611

## COVENTRY

Applications are invited for Planning Division posts:—

(a) AREA PLANNING OFFICER, Special Grade, £840-£1,145 p.a., or A.P.T. IV, £1,140-£1,310 p.a. according to qualification/experience.

(b) ASSISTANT PLANNING CONTROL ASSISTANT, A.P.T. II, £815-£960 p.a.

Interesting varied work with responsibility for development control and enforcement work and preparation of appeal evidence for one of three Area Divisions in the City, with close liaison with Development Plan and Suburban Areas Groups.

Permanent and pensionable subject to satisfactory medical certificate. Housing accommodation in approved cases. Removal expenses loan available. Five-day working week. Canteen facilities.

Application forms from Department of Architecture and Planning, Council House, Earl Street, returnable by 31st October, 1960. 3778

## LANARK

## COUNTY COUNCIL

## COUNTY ARCHITECT'S DEPARTMENT

The Council have decided that all Architectural Work of an Educational and Public Building Nature will in future be undertaken by the County Architect. Consequently a considerable re-organisation and expansion of the County Architect's Department at Motherwell is envisaged, creating a large number of vacancies for

ARCHITECTS AND ASSISTANTS

Salaries ranging from

£1,550 to £2,605

according to qualifications and experience.

The vacancies include a considerable number on salary range £1,450-£1,550 and afford opportunity to qualified Architects to apply their ability and knowledge to progressive design and modern construction techniques.

A Superannuation Scheme is in operation and a five-day week is under consideration.

Consideration given to applicants' housing requirements.

Applications to County Clerk,

P.O. Box No. 1, Glasgow. 3719

## BOROUGH OF SCUNTHORPE

## CLERK OF WORKS FOR 14-STORY BLOCK OF FLATS

## WESTCLIFF ESTATE

Applications are invited for the temporary appointment of Clerk of Works for the above scheme. It is expected that the building operations will commence towards the end of 1960 with an anticipated contract period of 18 months.

Applicants must have appropriate experience including reinforced concrete frame construction.

The salary will be at the rate of £17 per week.

Applications with full details of qualifications, past experience and age, together with the names and addresses of two referees must reach the undersigned not later than Tuesday, 1st November, 1960.

T. M. LISTER,

Town Clerk.

Municipal Offices

34 High Street,

Scunthorpe.

11th October, 1960. 3783

## COUNTY BOROUGH OF PRESTON

## APPOINTMENT OF ASSISTANT ARCHITECT

(Salary A.P.T. IV, £1,140-£1,310)

Applications are invited for the above-mentioned appointment in the Borough Surveyor's Department. Candidates must be Registered Architects and Corporate Members of the R.I.B.A.

The programme of works is large and varied and the appointment affords opportunities for good experience, particularly in educational buildings.

The National Scheme of Conditions of Service and Local Superannuation Acts apply, and the successful applicant will be required to pass a medical examination.

Forms of application can be obtained from the undersigned, to whom they must be returned, completed, not later than Tuesday, 4th November.

W. E. E. LOCKLEY,

Town Clerk.

Municipal Building,

Preston. 3787



**COUNTY BOROUGH OF SOUTHAMPTON  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT**

Applications are invited for the following appointments:

(a) **ASSISTANT ARCHITECT**, Grade A.P.T. III/IV (£960-£1,310), for duties in connection with housing estate development. Applicants must have passed Parts I and II of the R.I.B.A. Final examination. Commencing salary according to experience and qualifications.

(b) **ASSISTANT ENGINEER**, Grade A.P.T. III/IV (£960-£1,310). Applicants must be graduates of the Institution of Civil Engineers or hold the Testamur of the Institution of Municipal Engineers, or an engineering degree, with experience in the design and construction of sewage disposal works. Commencing salary according to qualifications and experience.

(c) **ENGINEERING ASSISTANT**, Grade A.P.T. II (£815-£960). Must have completed professional training, passed the Intermediate examination of a recognised engineering institution and have had subsequent experience in a Municipal Engineer's office.

The appointments are subject to the N.J.C. conditions of service, with housing accommodation available in approved cases, and approved removal expenses reimbursable up to a maximum of £50.

Apply on application forms obtainable from the Borough Engineer and Surveyor, Civic Centre, Southampton, returnable by not later than Monday, 7th November, 1960. 3791

**STAFFORDSHIRE COUNTY COUNCIL  
COUNTY PLANNING AND DEVELOPMENT  
DEPARTMENT**

Applications are invited for the appointment in the Northern Area Planning Office at Newcastle-under-Lyme of a Senior Planning Assistant on A.P.T. Grade V (£1,310-£1,480 per annum).

Applicants must be corporate members of the Town Planning Institute and should hold in addition a recognised qualification in architecture, engineering or surveying.

The person appointed will be required to act as Deputy to the Area Planning Officer, who is responsible for the control of development in the area and for assistance in the preparation of development and redevelopment schemes.

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

Applications, giving details of age, education, qualifications, present and previous appointments, experience, and the names of two persons to whom reference may be made, should be sent to D. W. Riley, County Planning and Development Officer, 41a Eastgate Street, Stafford, not later than 31st October, 1960.

Relationship to any member or senior officer of the County Council must be disclosed. Canvassing will disqualify.

T. H. EVANS,  
Clerk of the County Council. 3724

**HARLOW DEVELOPMENT CORPORATION  
Architect-Planner: FREDERICK GIBBERD, C.B.E.**

**Executive Architect: VICTOR HAMNETT, B.Sc.**  
**A.R.I.B.A., Dip.T.P., A.R.I.C.S., A.M.T.P.I.**

**STAFF VACANCIES**  
Applications are invited for **ARCHITECTURAL ASSISTANTS** Grade II (£815-£960) and **ASSISTANT ARCHITECTS** Grade III (£935-£1,140) and Grade IV (£1,140-£1,310) for work on

**HOUSING**  
All types of dwellings, multi-storey flats, maisonettes, bungalows, and individual houses for sale.

**INDUSTRY**  
Special, Standard, Intermediate, and Sectional factories, warehouses, laboratories, etc., including office blocks.

**COMMERCIAL**  
Shops, multi-storey offices, maintenance depots, neighbourhood units.

**SPECIAL WORKS**  
Health Centres and community buildings.

Unlimited scope for enthusiastic and able Assistants.

One vacancy for Assistant with planning qualifications or experience.

Houses available for sale or to rent.

Applications with full details of training, qualifications and experience, together with names of two referees to General Manager, Terlings, Harlow, Essex, within ten days. 3717

**STEPNEY M.B.C. require ARCHITECTURAL LEARNER.** Salary £320 p.a. at 16 years proceeding to £770 (under review). G.C.E. in English, Maths and three other subjects required; opportunity to become Qualified Architect. Application form and other particulars from Town Clerk, 227 Commercial Road, E.L. Closing date 29th October, 1960. 3736

**KENT COUNTY COUNCIL**

Architects are required in the office of the County Architect to assist with the Council's expanding building programme which includes schools, colleges, residential homes and other public buildings. The salary range extends to £1,480 a year, the starting grade and salary depending on qualifications, ability and experience. Application forms and further details from the County Architect, Springfield, Maidstone. Closing date 31st October, 1960. 3740

**BEDLINGTONSHIRE URBAN DISTRICT  
COUNCIL  
ASSISTANT ARCHITECT**

(Male or Female)  
Applications are invited for the undermentioned appointment in the Surveyor's Department.

Assistant Architect. Salary in accordance with Special Grade commencing at £380 per annum.

Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects, or its equivalent, and have had considerable housing and shop redevelopment. Housing accommodation will be made available in approved circumstances.

Applications accompanied by names of three referees to be delivered to the undersigned not later than Friday the 4th November, 1960.

F. S. FORSTER,  
Clerk to the District Council.

Council Offices,  
Bedlington,  
Northumberland.  
10th October, 1960. 3762

**CARLTON URBAN DISTRICT COUNCIL  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT**

Applications are invited for the above appointment at a salary in accordance with Grade IV of the A.P.T. Division of the Scales of Salaries of the National Joint Council commencing at £1,140 per annum and rising by annual increments to £1,310 per annum, the point of entry to be determined having regard to the experience of the applicant.

Applicants must be Associates of the R.I.B.A. or Registered Architects.

The appointment will be subject to the provisions of the Local Government Superannuation Act 1937 to 1953, the National Scheme of Conditions of Service and the satisfactory passing of a medical examination.

Applications stating age, qualifications and details of experience, together with the names of three referees should be forwarded to the undersigned by 10 a.m. on Wednesday the 26th October, 1960.

Housing accommodation will be made available if required and removal expenses will be paid by the Council.

A. E. F. WALKER,  
Clerk of the Council.

Council House,  
Burton Road,  
Carlton,  
Nottingham.  
11th October, 1960. 3764

**THE SOUTH WALES ELECTRICITY  
BOARD**

**ARCHITECTURAL ASSISTANTS**

Applications are invited for two Senior Architectural Assistants in the Chief Engineer's Department at Head Office, St. Mellons.

These opportunities will be of particular interest to candidates seeking to widen their experience in an expanding industry.

Salary within the scale £780-£1,015 per annum with a minimum starting salary of £890 per annum.

Preference will be given to candidates of Intermediate R.I.B.A. standard.

Conditions of service are excellent with generous holiday allowances and possibility of further assistance towards studying.

The posts are superannuable and arrangements for the transfer of present superannuation rights are possible for those joining from Public Utilities, Local Authorities, etc.

Please send full details regarding your age, present position, present salary, qualifications and experience to the undersigned at St. Mellons, Cardiff, so as to arrive not later than 5th November, 1960, quoting reference 137/60/AJ, endorsing envelope "Architectural Assistants."

R. G. WILLIAMS,  
Secretary. 3735

**ARGYLL COUNTY COUNCIL  
COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited from members of the Royal Institute of British Architects for the post of **SENIOR ASSISTANT ARCHITECT** on salary grade £1,050 x £50-£1,200 with placing according to experience. Applicants should have had considerable experience of architectural practice and in particular knowledge of modern school building with experience in organising large building projects and be capable of supervising assistant staff. Housing accommodation will be made available if necessary.

Applications, stating age, present salary, present and previous appointments, details of training and experience, together with the names and addresses of two referees, should be lodged with the County Architect, County Offices, Dunoon, on or before 22nd October, 1960.

A. D. JACKSON,  
County Clerk. 3785

**COUNTY BOROUGH OF CROYDON  
ARCHITECTURAL AND SURVEYING STAFF**

Applications are invited for the following appointments under the School Architect (C. T. Ayerst, A.R.I.B.A.).

(a) **THREE ARCHITECTURAL ASSISTANTS** for work on major and minor educational building programmes.

(b) **ONE SURVEYING ASSISTANT** for duties including measuring and valuing for interim and Final certificates and settling builders' accounts; knowledge of quantities essential.

Salary scale for both appointments-A.P.T. I/II/III/IV (£570 to £1,355 p.a.); commencing salaries will depend on qualifications and experience; pensionable posts; five-day week (38 hours).

"Essential User" car allowance payable when graded in A.P.T. IV with "Final" qualification. Housing advances up to 100 per cent. of Borough Valuer's valuation will be available where needed for the purchase of a suitable house in Croydon.

Further particulars and application forms from the School Architect, 38 High Street, Croydon. Closing date 7th November, 1960. 3695

**WILTSHIRE COUNTY COUNCIL  
COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited for the following posts:

**ONE ASSISTANT ARCHITECT**, A.P.T. IV, £1,140

**ONE ASSISTANT ARCHITECT**, A.P.T. III, £960-£1,140.

**TWO ARCHITECTURAL ASSISTANTS**, Special, £840-£1,145.

**THREE ARCHITECTURAL ASSISTANTS**, A.P.T. I and A.P.T. II, £645-£960.

Preference given to qualified Architects for the posts graded A.P.T. III and IV and to Assistants undertaking a course of study leading to qualification for the remaining posts. Day release may be considered in certain circumstances. Previous Local Government experience is not essential.

The appointments are subject to medical examination, the National Scheme of Conditions of Service and the provisions of the Local Government Superannuation Act 1937-53, and determinable by one month's notice in writing on either side. Alternative Saturday mornings are free and canteen facilities available.

Applications should be submitted on forms to be obtained from the County Architect. Completed forms, accompanied with the names and addresses of three referees should be returned to the Clerk of the Council, County Hall, Trowbridge, within fourteen days after the appearance of this advertisement. 3743

**ARGYLL COUNTY COUNCIL  
COUNTY ARCHITECT'S DEPARTMENT**

Applications are invited from Members of the Royal Institute of British Architects for the post of **SENIOR ASSISTANT ARCHITECT** on salary grade £1,050 x £50-£1,200 with placing according to experience. Applicants should have had considerable experience of architectural practice and in particular knowledge of modern school building with experience in organising large building projects and be capable of supervising assistant staff. Housing accommodation will be made available if necessary.

Applications stating age, present salary, present and previous appointments, details of training and experience, together with the names and addresses of two referees should be lodged with the County Architect, County Offices, Dunoon, on or before 22nd October, 1960.

A. D. JACKSON,  
County Clerk. 3746

**METROPOLITAN BOROUGH OF HAMPSTEAD  
REQUIRE IN THE  
HOUSING ARCHITECT'S DEPARTMENT**

**ARCHITECTURAL ASSISTANT (Group Leader)** on the permanent staff to lead a group on area redevelopment and the design and construction of new flats and houses.

Salary within new A.P.T. Grade IV (£1,140-£1,310 per annum) plus London weighting allowance.

Applicants must be members of the Royal Institute of British Architects. Applications giving training, experience, previous appointments and names of two referees are to be sent to the Town Clerk (A.J.), Town Hall, Haverstock Hill, N.W.3, by 26th October, 1960. No housing provided. 3741

**LONDON ELECTRICITY BOARD  
ARCHITECTURAL ASSISTANTS**

Applications are invited for the above positions in the Chief Engineer's Architect's Section at Lecco House, Stamford Street, S.E.1.

Applicants should be studying for, or have passed, the Intermediate Examination of the R.I.B.A., be capable draughtsmen and have had several years' experience in an architect's office.

Salary within the range £940-£1,065 p.a. incl. Application form obtainable from the Personnel Officer, New Broad Street, E.C.2, to be returned completed within 14 days of the publication date of this notice. Please quote ref. PER/V/2997/A. 3744

**BIRMINGHAM REGIONAL HOSPITAL  
BOARD**

**ASSISTANT ARCHITECTS** required for interesting work on all types of hospital architecture. Applicants must be registered architects having passed the requisite examinations. Salary scale £905-£1,310; commencing salary according to age and experience.

Apply naming two referees to Secretary, 10 Augustus Road, Birmingham, 15, as soon as possible. 3790



**PEAK DISTRICT NATIONAL PARK**

Applications are invited for the appointment under N.J.C. service conditions of **JUNIOR PLANNING ASSISTANTS, A.P.T. Grade I (£645-£915)** in the office of the Peak Park Planning Board at Bakewell. The posts offer a wide range of interest both in the field of general planning and in national park activities.

Forms of application and further particulars from the Planning Officer, Aldern House, Bakewell, Derbyshire. Applications to be received by 3rd November, 1960. Canvassing disqualifieds. 3756

**ARCHITECTS AND MAINTENANCE SURVEYORS.** Pensionable posts for men and women at least 25 and under 35 on 1.1.60 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate membership. Salary (men, London) £830-£1,125 according to age rising to £1,300. Promotion prospects. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form quoting S/60-61. 3757

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

Applications are invited for the above post at a salary in accordance with Grade II of the A.P.T. Division of the National Scale, viz. £815-£960 per annum plus appropriate London weighting according to age.

Applicants should have passed the Intermediate examination of the Town Planning Institute or other equivalent and have had experience in a town planning department of a local authority.

The appointment is a permanent one and conditions of service are those of the National Scheme.

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

Applications are to be submitted by 31st October, 1960, on forms to be obtained from and returned to the Borough Engineer and Surveyor, 88 Lampton Road, Hounslow.

**D. MATHIESON,**  
Town Clerk.

Town Hall,  
Hounslow, Middlesex. 3758

**BOROUGH OF HENDON BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT SENIOR ASSISTANT ARCHITECT Grade A.P.T. V**

Applications are invited for the above appointments in the Architectural Section, in which a general re-organisation is taking place and new sections are to be formed.

Applicants must be Associate Members of the Royal Institute of British Architects.

Grade A.P.T. V Commencing salary according to experience within the scale £1,355 to £1,525, including London weighting. The person appointed will be directly responsible to the Chief Assistant Architect with opportunity for suitable applicant to act as Group Leader. Previous experience in school work, housing and redevelopment, or civic buildings, will be an advantage.

Grade A.P.T. IV Commencing salary according to experience within the scale £1,185 to £1,355, including London weighting. Qualified architects are required to undertake work within the groups to be formed.

Pensionable posts; subject to National Scheme and medical examination. The Council is prepared to consider assistance with housing.

Applications with full details and names and addresses of two referees, must reach the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, by 31st October, 1960.

**R. H. WILLIAMS,**  
Town Clerk.

Town Hall,  
Hendon, N.W.4 3759

**ROYAL BURGH OF DUMFRIES**

**DEPUTY BURGH ARCHITECT**

Applications are invited from Qualified Architects, preferably with experience in Redevelopment work.

The appointment, within the salary scale £1,140-£1,220 (i.e. £100 in excess of Admin. Grade D of the N.J.C. Scheme) will be subject to the Town Council's Superannuation Scheme and N.J.C. Conditions of Service, and the successful applicant will require to pass a medical examination.

If required, the tenancy of a Council house will be given to the successful applicant.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, or the names of three referees, should be lodged with the undersigned not later than 2nd November, 1960.

**GEORGE D. GRANT,**  
Town Clerk.

Municipal Chambers,  
Dumfries.  
12th October, 1960. 3763

**METROPOLITAN BOROUGH OF GREENWICH APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT**

Applications are invited from suitably qualified persons with experience of multi-storey building, for appointment in the Borough Engineer and Surveyor's Department, at a salary of £880 to £1,190 per annum (including London weighting). The commencing salary will be according to qualifications and experience.

The successful candidate will be given opportunities for designing schemes and bringing them through to completion, as part of a varied and imaginative building programme in historic Greenwich.

Application forms obtainable from the Town Clerk, Town Hall, Greenwich, S.E.10, returnable by noon on Wednesday, 2nd November, 1960.

**G. C. TURK,**  
Town Clerk.

Town Hall,  
Greenwich,  
S.E.10.  
October, 1960. 3764

**THE POLYTECHNIC, 309 REGENT STREET, W.1. SCHOOL OF ARCHITECTURE, SURVEYING AND TOWN PLANNING**

Applications are invited for a full time post as Grade II ASSISTANT LECTURER IN ARCHITECTURE, duties to commence as soon as possible.

Candidates should hold the degree or diploma of a fully recognised School of Architecture and be Associates of the R.I.B.A.

The salary scale rises to a maximum of £1,240 per annum plus London allowance of £38 or £51. The commencing salary may include increments for previous teaching and/or professional experience. A form of application, which should be returned within two weeks of the publication of this advertisement, may be obtained from the undersigned.

Applications would also be welcomed from qualified architects for inclusion on the panel of visiting lecturers for either part time day or evening attendance.

**J. E. RICHARDSON,**  
Director of Education.

3713

**ARCHITECTS (MAIN GRADE): MINISTRY OF HEALTH—Hospitals Research and Development.**

Two pensionable posts in London for Registered Architects (men or women) normally at least 35 on 1.1.60, with experience of client-architect briefing, collaboration with engineers, manufacturers, or research organisations in the development of new techniques or specialist services, and of design cost data. No previous hospital building experience necessary. Duties include examination of current schemes and collation of past and current experience in the planning, design, construction and building costs of hospital and other health buildings; and the production of Hospital Building Notes. Salary (men) £1,325-£1,790. Starting salary may be above minimum. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form quoting S/5219/60. Closing date 11th November, 1960. 3793

**BOROUGH OF SLOUGH**

**APPOINTMENT OF ASSISTANT ARCHITECTS Grade A.P.T. IV (£1,140-£1,310 per annum) and JUNIOR ARCHITECTURAL ASSISTANT Grade A.P.T. II (£815-£960)**

These vacancies arise in consequence of the Council's approval of a MAJOR PROGRAMME OF BUILDING WORKS, including, in addition to normal housing development, 12-storey blocks of flats, factories, shops, and buildings for parks and other municipal functions.

The appointments will be for the duration of the programme, which it is estimated will be completed in 3-4 years. The appointments on Grade A.P.T. IV are suited to fully qualified architects who are particularly interested in the application of original thought to the design of buildings for a variety of functions and to whom contemporary architectural design appeals. The junior appointment is particularly suited to students who have passed the Intermediate examination and wish to extend their experience in a progressive town, and facilities for part-time release will be arranged for the successful applicant who is pursuing a recognised course of architectural study.

A five-day week is in operation and housing accommodation will be provided for married candidates, if required.

Persons interested in these appointments are invited to write to the Borough Engineer, Town Hall, Slough, Bucks, giving brief details of their qualifications and experience. He will be pleased to send them details of the programme of design work, together with information which would be of particular interest to those not familiar with Slough in regard to the Department, the town and its surroundings. 3777

**BOROUGH OF EALING FOUR ARCHITECTURAL ASSISTANTS**

Within scale A.P.T. IV according to experience (£1,185-£1,355 inclusive). Must have recognised architectural qualifications.

**JUNIOR ARCHITECTURAL ASSISTANT A.P.T. I (£645-£815 plus London weighting).**

Full particulars and forms of application obtainable from Borough Engineer, Town Hall, Ealing, W.5.

Closing date 31st October, 1960.

**E. J. COPE-BROWN,**  
Town Clerk.

3719

**BOROUGH OF EDMONTON BOROUGH ARCHITECT'S DEPARTMENT TOWN PLANNING ASSISTANT**

Applications are invited for the above appointment from persons appropriately qualified. Applicants should have had experience in development control and central area redevelopment. Salary £840-£1,145 plus £45 London weighting.

Applications on forms obtainable from the Town Clerk, Town Hall, Edmonton, N.9, must be delivered by the 29th October, 1960.

**H. BACKHOUSE,**  
Town Clerk.

Town Hall,  
Edmonton, N.9. 3761

**EXHIBITIONS OFFICERS FOR D.S.I.R.**

Two officers required in the Assistant Information Officer grade to work in Headquarters Exhibitions Section, London, S.W.1, of the Department of Scientific and Industrial Research. The work involves publicising the results of scientific research by means of exhibitions. One officer must have some years training at a recognised school of art or architecture as well as a keen interest in scientific matters. Work will necessitate familiarity with drawing board techniques and practical knowledge of contemporary design and materials. The other must have some years experience in laboratory work with an interest in transmission of scientific information by exhibition techniques. Salary (Men) £640 (age 22)-£755 (age 25)-£1,140. Women slightly less until 1st January, 1961. Application forms from Manager (P.E. 3157) Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. 3799

**AUSWALITE**

SIGNS

**AUSTIN WALTERS**

**PLASTIC & NEON**

**SIGNS**

NEW STYLES, NEW MATERIALS

An adequate after-sales service

Look for the symbol "AUSWALITE"

AUSTIN WALTERS & SON LTD.
AYRES RD
MANCHESTER 16
Tel: TRA 1927/8/9

**LARNE BOROUGH COUNCIL  
ARCHITECTURAL ASSISTANT**

Applications are invited for the above temporary appointment. Commencing salary will be on the scale £580-£590 with entry according to qualifications and experience.

Candidates must have obtained Associateship of R.I.B.A., and preference will be given to those with planning experience. Consideration will also be given to applicants who have passed the Intermediate examination of the R.I.B.A. and if suitable they will be appointed on the salary scale £570-£765.

The appointment offers good opportunity for a young architect to gain experience in the various branches of Municipal Architecture and Planning work and is limited in the first instance to five years from the 1st October, 1960.

Applications giving date of birth, qualifications and experience together with two recent testimonials should be lodged with the undersigned not later than Friday, 28th October, 1960.

R. LYTTLE,  
Town Clerk.

Gardenmore House,  
Larne.  
13th October, 1960.

3728

**BUCKS COUNTY COUNCIL**

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

ASSISTANT COUNTY ARCHITECT, J.N.C.

Scale "D." £1,520-£1,755 p.a.  
ASSISTANT ARCHITECT, J.N.C. Scale "C."

£1,385-£1,620 p.a.

ASSISTANT ARCHITECT, A.P.T. Grade V

£1,220-£1,375 p.a.

ARCHITECTURAL ASSISTANT, A.P.T. Grade

III, £880-£1,365.

These appointments are superannuable and subject to medical examination and applicants should be suitably qualified for architectural appointment.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications, on forms provided, must be returned by the 7th November, 1960.

F. B. POOLEY,  
County Architect.

County Offices,  
Aylesbury,  
Bucks.

3768

**COUNTY BOROUGH OF BARNSLEY  
BOROUGH ENGINEER AND SURVEYOR AND  
PLANNING OFFICER'S DEPARTMENT**

Applications are invited for the following appointments:—

(a) CHIEF PLANNING ASSISTANT, A.P.T. V

(£1,310-£1,480). Essential User Car Allowance.

(b) ASSISTANT ARCHITECT, A.P.T. III (£960-

£1,140).

For appointment (a) applicants must be suitably qualified and have had considerable planning experience including development control and redevelopment work. For (b) candidates should have had previous experience in the design of housing and public buildings although municipal experience is not essential.

The posts are superannuable and subject to passing of medical examination, N.J.C. Conditions of Service and one month's notice on either side.

HOUSING ACCOMMODATION CAN BE PROVIDED IF NECESSARY AND 50 PER CENT. OF REMOVAL TRANSPORT EXPENSES WILL BE PAID IN APPROVED CASES.

Applications, stating age, present and previous appointments, qualifications, experience, etc., together with the names of two persons for reference, should reach the Borough Engineer, Town Hall, Barnsley, by Tuesday, 1st November, 1960. Canvassing will disqualify.

A. E. GILFILLAN,  
Town Clerk.

Town Hall,  
Barnsley.  
October, 1960.

3696

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

SENIOR ASSISTANT ARCHITECT

Applications are invited from Chartered Architects for the appointment of Senior Assistant Architect, Grade A.P.T. IV, £1,140-£1,310, plus London "Weighting" and car allowance of £75 per annum, commencing salary according to experience and qualifications. Forms of application, which must be returned endorsed by not later than Monday, 7th November, 1960, to be obtained from John Apse, A.M.I.C.E., Borough Engineer and Surveyor.

HAROLD E. BARRETT,  
Town Clerk.

Municipal Offices,  
New Malden,  
Surrey.

3808

**BOROUGH OF ENFIELD**

Borough Engineer and Surveyor's Department (Non-County Borough in the County of Middlesex. Population 169,700. Area: 12,406 acres)

Applications are invited, from suitably qualified persons, for the following permanent appointments:—

1. ARCHITECTURAL ASSISTANT, A.P.T. II

£815-£960 per annum plus London weighting.

2. JUNIOR ARCHITECTURAL ASSISTANT

A.P.T. I, £645-£815 per annum plus London weighting.

The commencing salary will be fixed at points within the scale commensurate with qualifications and experience.

There is a large varied programme of work, including the redevelopment of Clearance Areas and other areas scheduled for Comprehensive Development.

Housing accommodation may be made available in appropriate cases. The Council is also prepared to consider 100 per cent. advances to successful applicants for house purchase within the Borough.

Saturday mornings are normally free from duty. Application forms, obtainable from H. D. Peake M.Sc.(Eng.), M.I.C.E., Borough Engineer & Surveyor, 7 Little Park Gardens, Enfield, Middlesex, must be delivered to the undersigned not later than Monday, 7th November, 1960.

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

Public Offices,  
Enfield, Middx.

3772

**NATIONAL COAL BOARD  
NORTH EASTERN DIVISION**

ARCHITECTURAL ASSISTANTS required in Architects Branch, Denaby Main, Nr. Doncaster. R.I.B.A. Intermediate and three years' subsequent practical experience, or Final (practical experience not necessary) or considerable practical experience without qualifications.

Salary £715 x £25 to £850 (exceptionally £1,000).

Full details and application forms from Mr. H. Smith, F.R.I.B.A., P.O. Box No. 4, Denaby Main, Nr. Doncaster; forms to be returned by 28th October.

3699

**BOROUGH OF EALING**

DRAUGHTSMAN for Civil Engineering Work. Miscellaneous Grade V, £725-£800 inclusive.

Full particulars and application forms obtainable from the Borough Surveyor, Town Hall, Ealing, W.5. Closing date 31st October, 1960.

E. J. COPE-BROWN,  
Town Clerk.

3730

**ARCHITECTURAL  
ASSISTANTS**

Drawing Office Assistants are urgently required for the Architectural Section of the Civil Engineering Development Department at one of Britain's largest Steel Works.

Candidates should be neat draughtsmen and possess a general knowledge of building construction with a qualification at ordinary National Certificate level.

Salary will fully reward experience, ability and age.

Write c/o Box 3733  
Architects' Journal

**ARCHITECTS  
ASSISTANT  
ARCHITECTS**

A leading firm of London Consulting Engineers have vacancies in their Architect's Department (Chief Architect: Mr. K. A. Brundle, F.R.I.B.A., A.A. Dipl.) for work in a wide and interesting field of Industrial Projects. These are permanent and pensionable positions; five-day week, luncheon vouchers.

Applications, stating qualifications, experience and present salary should be sent in confidence, to the

Personnel Manager,  
W. S. Atkins & Partners,  
158 Victoria Street, London, S.W.1.



**BOROUGH OF ACCRINGTON**

Applications are invited for the following permanent posts in the Borough Engineer's Department:—

- (a) QUANTITY SURVEYOR, A.P.T. Grade III.  
(b) ARCHITECTURAL ASSISTANT, A.P.T. Grade I.

The posts offer interesting work in a variety of projects including central area redevelopment, new market, bus station, etc.

Applicants should be suitably qualified and for post (a) should have experience in preparation of bills; taking-off; measurement of works and settlement of final accounts.

Housing accommodation will be provided if required.

The appointments will be subject to N.J.C. service conditions and to a medical examination.

Applications, with names of two referees, stating post applied for, should be sent to the Town Clerk, Town Hall, Accrington, by 31st October, 1960. 3766

**COUNTY BOROUGH OF EAST HAM**  
**SENIOR ASSISTANT PLANNING OFFICER**  
GRADE A.P.T. II, £815-£960

Vacancy in Borough Engineer's Department. London weighting paid in addition. Salary above minimum paid according to qualifications and experience.

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

Details and application form (to be returned within 7 days) from the Town Clerk, E.6. 3700

**LANCASHIRE COUNTY COUNCIL**

**SENIOR ARCHITECTURAL ASSISTANT** required at PRESTON, A.P.T. Grade V, salary £1,310-£1,490 per annum.

Applicants must be qualified architects, planning experience is desirable but not essential. Duties include the design of housing layouts and central area redevelopment schemes, and the preparation of working drawings for houses, flats and shops.

Applications, giving age, qualifications, present appointment, experience, etc., and two referees, to the County Planning Officer, East Cliff County Offices, Preston, by the 25th October, 1960. 3715

**BOROUGH OF AYLESBURY**

**APPOINTMENT OF ASSISTANT ARCHITECTS**  
Applications are invited from suitably qualified persons for the above appointments in the Consultant Architect's office at a salary within the A.P.T. Grade V (£1,310 to £1,490 per annum).

The Council has embarked on a scheme of town expansion under the Town Development Act 1952 for the acceptance of industry and population from the greater London area entailing a considerable architectural programme including the provision of new Civic buildings, town centre shopping facilities, industrial and housing development.

The appointments will be subject to the Local Government Superannuation Acts and to the National Scheme of Conditions of Service and will be terminable by one month's notice on either side. The successful candidates will be required to pass a medical examination.

Applications giving the names of two referees should be sent to F. B. Pooley, F.R.I.B.A., Consultant Architect to the Borough Council, 1, Church Street, Aylesbury, Bucks, not later than 31st October, 1960.

B. D. W. MAXWELL,  
Town Clerk.

Town Hall, Aylesbury. 3796

**COVENTRY REDEVELOPMENT**

Applications invited for the following Planning Division appointment:—

**SENIOR GROUP PLANNING OFFICER** (Redevelopment Plans) Scale "B" £1,305-£1,485 per annum (plus approx. 12½ per cent revised scale awaited).

The person appointed will be responsible to the Assistant Principal Planning Officer (Redevelopment) for matters affecting design in the reconstruction areas (at present approx. 250 acres).

Permanent and pensionable subject to satisfactory medical certificate. Housing accommodation in approved cases. Removal expenses loan available. Five-day working week. Canteen facilities.

Application forms from Department of Architecture and Planning, Council House, Earl Street, returnable 14 days publication. 3795

**BOROUGH OF NEWCASTLE-UNDER-LYME**

**REQUIRES:**

(a) ASSISTANT ARCHITECT—Special Grade. Salary £840-£1,145 per annum.

(b) ARCHITECTURAL ASSISTANT—Grade A.P.T. II. Salary £815-£960 per annum.

Applicants for (a) are required to have passed Parts 1 and 2 of the R.I.B.A. Final or Special Final Examination.

Applicants for (b) should have passed the Intermediate examination, and will be allowed to attend a one day per week school course leading to the Final examination.

Commencing salaries will be in accordance with qualifications and experience.

Favourable consideration will be given to the provision of housing accommodation in suitable cases.

Further particulars and conditions of appointments may be obtained from the Borough Surveyor, Lancaster Building, Newcastle, Staffs. to whom applications must be submitted by Tuesday, 1st November, 1960.

C. J. MORTON,  
Town Clerk.

District Bank House, High Street, Newcastle, Staffs. 3805

**BOROUGH OF ALTRINCHAM**  
**ARCHITECTURAL ASSISTANT**  
(Special Grade £840-£1,145)

Applications are invited from suitably qualified persons for the above appointment in the Borough Surveyor's Department.

The appointment will be subject to the National Joint Council's Conditions of Service, the Local Government Superannuation Acts 1937 and 1953, to one month's notice on either side and to the passing of a medical examination.

Applications, stating age, qualifications and experience, with the names of two referees, should be delivered to me not later than Friday, 4th November, 1960.

Consideration will be given to the provision of housing accommodation.

Candidates must disclose whether they are related to any member or senior officer of the Council.

Canvassing will disqualify.

E. GRAHAM THOMAS,  
Town Clerk.

Town Hall, Altrincham. 3770  
October, 1960.

**COUNTY BOROUGH OF EAST HAM**  
**ASSISTANT PLANNING OFFICER—**  
GRADE A.P.T. I—£645-£815

Vacancy in Borough Engineer's Department. London Weighting paid in addition. Salary above minimum paid according to qualifications and experience.

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

Details and application form (to be returned within 7 days) from the Town Clerk, E.6. 3802

**MODERNISATION OF BRITISH RAILWAYS**

The Western Region requires the following technical staff: CIVIL ENGINEERING, ARCHITECTURAL, BUILDING, HEATING & VENTILATING, SOIL MECHANICS.

Interesting work in pleasant conditions with promotion on MERIT. Superannuation Fund.

Reduced rates of travel in this country and abroad and other concessions.

Commencing salaries up to £1,000 according to ability.

A limited number of posts in ranges between £1,150 and £1,695.

Five-day week.

Applications giving qualifications and experience to: Chief Civil Engineer, British Railways, Western Region, Paddington Station, London, W.2. 3813

**ROYAL COUNTY OF BERKSHIRE**

**ASSISTANT ARCHITECT, A.P.T. Grade V, £1,310-£1,490.** Candidates must be Associates of the R.I.B.A. and have had considerable experience in design and the running of contracts. The post will rank as second in a group of eight.

**ASSISTANT ARCHITECT, Special Grade, £840-£1,145.** Candidates should be members of the R.I.B.A. and have had good architectural training.

**ARCHITECTURAL ASSISTANT, A.P.T. Grade II, £815-£960.** Candidates should have passed the Intermediate examination of the R.I.B.A. One day per week will be allowed for study at a recognised School of Architecture.

**ASSISTANT QUANTITY SURVEYOR, Special Grade, £840-£1,145.** Candidates should be Associates of the R.I.C.S. (Quantities Sub-Division) or member of the I.Q.S.

The office is engaged on all types of County buildings and owing to the rapid increase in population a very full programme lies ahead.

There is a number of staff houses and flats, some of which become available from time to time, and assistance up to 75 per cent of removal expenses is given.

Application forms obtainable from the County Architect, Wilton House, Parkside Road, Reading, are to be returned by October 25th, 1960. 3816

**AIR MINISTRY require SENIOR TAKERS**

OFF in the Quantities Division, London. Must have wide experience of all classes of work and preferably be A.R.I.C.S. (Sub-Division III Quantities). Salary scale £1,375 to £1,785. Commencing salary A.Q.E. Non-pensionable but long term.

Good prospects of establishment and/or promotion. Five-day week. 22 days' paid leave.

Applicants must be natural born British subjects. Forms from Ministry of Labour, Technical and Scientific Register (K 26, King Street, London, S.W.1. Ousting J 340/QA. 3564

**BRACKNELL DEVELOPMENT CORPORATION**

Applications are invited for the post of CLERK OF WORKS in the Chief Architect's Department.

Salary range £680-£1,065. Superannuation schemes, medical examination, Housing available.

Apply by 1st November, 1960, stating age, when available to commence duties, experience and appointments held (with dates and salaries) and names of two referees, to General Manager (C.W.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 3767

**LANCASHIRE COUNTY COUNCIL**

**TRAINER ARCHITECTS AND QUANTITY SURVEYORS**

There are vacancies in the County Architect's Department for Trainee Architects and Quantity Surveyors. The office offers a wide scope for young men of the right calibre who wish to take up a professional career.

The applicants should be between the ages of 16 and 21 and should apply immediately for further details to the County Architect, P.O. Box 26, County Hall, Preston. 3755

**AIR MINISTRY require JUNIOR WORKERS UP in Quantities Division in London.** Must be fully experienced and competent to Work Up entire Bills of Quantities. Candidates must hold O.N.C. or C. & G. (Quantities) or equiv. technical quals. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 13 days' paid leave a year initially.

Salary ranges from £820 (at age 36) to £975. Applicants, who must be natural-born British subjects, should write stating age, quals, and exp. to the Manager (PE1234), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. No original testimonials should be sent. 3085

**QUANTITY SURVEYING ASSISTANTS GRADE III** required by AIR MINISTRY in the PROVINCES. Duties include abstracting and billing, site measurement and preparation of estimates. Candidates must hold O.N.C. (Building or Builder's Quantities) or equiv. and have good experience under Quantity Surveyor or Building Contractor. Knowledge W.D. Schedule an advantage. Financial assistance and time off given for recognised courses of study. Promotion and pension prospects. Five-day week with 18 days' paid leave a year initially. Overseas tours for which special allowances granted.

Salary ranges from £770 (at age 25) to £925. Commencing salary dependent upon age, quals, and exp. Applicants, who must be natural born British subjects, should write stating age, quals, and previous appointments including type of work done, to Manager (PE2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. No original testimonials should be sent. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised. 3084

**LANCASHIRE COUNTY COUNCIL**

**COUNTY ARCHITECT'S DEPARTMENT**

**SENIOR ASSISTANT ARCHITECTS—N.J.O.**

Scale "B" £1,320 to £1,485 (now under review) according to experience.

Applications are invited from experienced, registered architects to deal with a wide variety of buildings, including Magistrates' Courts, Police Training Schools and Technical Colleges.

Application Forms and details of appointment from: The County Architect, P.O. Box 26, County Hall, Preston, returnable by 3rd November, 1960, quoting reference A/AJ. 3691

**CITY OF PETERBOROUGH**

Applications are invited from qualified Architects with Local Government experience for the appointment of a **SENIOR ARCHITECTURAL ASSISTANT** in Grade IV, A.P.T. Grade V. Housing accommodation, if desired, will be provided.

Forms of application from the City Engineer, Town Hall, Peterborough. Closing date for applications 27th October, 1960.

C. PETER CLARKE,  
Town Clerk. 3796

**Architectural Appointments Vacant**

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

**ARCHITECTURAL ASSISTANTS** required for interesting work on new Colleges. One Senior and one Junior. Good salaries according to ability. H. V. Ashley & Winton Newman (HOLBORN 2804). 2828

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

**ARCHITECTURAL ASSISTANTS** required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 910, c/o 7, Copple Street, W.C.1. 8815

**LEWIS SOLOMON, KAYE & PARTNERS,** rapidly expanding practice require **ARCHITECTS** and **ASSISTANTS** with initiative and competence to work on major design projects in the London area. These projects include Comprehensive Development Schemes, Hotels, Schools, Offices, and Luxury Flats. Good salaries according to ability and experience, luncheon vouchers, five-day week and excellent working conditions. Write 5, Holborn Circus, Tavies Inn House, E.C.1. or telephone CITY 8811, quoting SLR in both instances. 7700

**BASIL SPENCE & PARTNERS** require qualified and experienced **ARCHITECTS** to all positions of responsibility on a major building programme. Write to 46, Green Anne Street, W.1. stating experience and salary required. 9224

**LEICESTER—SENIOR ARCHITECTS** and **ASSISTANTS** required for general practice. Appropriate salary paid. Five-day week. Apply by telephone or in writing for an interview to Herbert. Son & Sawday, 18, Friar Lane, Leicester. Tel. 56476. 9413



# APPLIED LETTERS **E**

All sizes, types and materials  
for internal or external use.  
Illuminated letters and box signs.  
Brochures sent on request.

**WARD & CO. (letters) LTD.**

6 - 12 WILDER ST. BRISTOL 2 · TELEPHONE BRISTOL 21536

## LAMP LIFE TREBLED

OVER QUARTER OF  
A MILLION IN USE  
HOME & OVERSEAS



One of many testimonials  
received.  
H. Lees and Sons Ltd., Park  
Bridge, Ashton-U-Lyne.  
Dear Sir,  
Your patent shock absorber,  
fitted in 1944, has well  
proved its great saving  
over the last 16 years,  
and is still giving every satis-  
faction. We have no hesitation  
in saying that it has saved us many pounds.  
Geo. H. Short, Director.



## PROTECTAFIL' ANTI VIBRATOR SHOCK ABSORBERS

WILL FIT ALL LIGHTING POINTS  
DISPERSIVE OR FLUORESCENT.  
SAVES THE FILAMENT—REDUCES  
MAINTENANCE COSTS.

Write today for full particulars illustrated  
catalogues to Dept. A.



**J.E. WILDBORE LTD.** PETER ST. OLDHAM · MAIL 4475



## LOCKHEED HYDRAULIC BRAKE CO. LTD.

and Associated Companies

Leamington Spa,  
Warwickshire

have a vacancy on the permanent  
staff for an

## ARCHITECTURAL ASSISTANT

with sound experience as an architectural  
draughtsman and capable of preparing work-  
ing drawings, details and specifications. A  
knowledge of industrial work an advantage.  
This is a monthly staff appointment with  
substantial profit sharing and pension  
benefits.

Please write quoting ref. K.3276 giving full  
details of personal history and present  
salary to The Employment Officer.

## Central Electricity Generating Board

### DESIGN AND CONSTRUCTION DEPT.

Headquarters, London, S.E.1.

### ARCHITECTURAL SECTION

Applications are invited from Fellows or  
Associates of the R.I.B.A. and the I.L.A.,  
and others suitably qualified by training and  
experience, for the following posts in the  
Architectural Section. The Board's Architect  
is M. H. Shephard, B.Arch., A.R.I.B.A., and  
the Board Member with responsibility for  
architecture and amenity is Sir William Holford,  
M.A., P.R.I.B.A., P.P.T.P.I.

The section is responsible for giving advice  
to the executive departments on the architectural  
aspects of the Board's activities, which include  
the construction of new power stations,  
ancillary buildings, switching stations and  
transmission lines, and furnishes guidance to  
and maintains close liaison with the Executive  
Architects dealing with individual major  
projects.

For posts (a) and (c) previous experience within  
the Industry will be an advantage.

### (a) ASSISTANT ARCHITECT

(Materials and Standards)

To assist the Architect and in particular to advise on materials  
and standards of building construction and to maintain  
liaison with the Building Research Station. SALARY  
WITHIN THE RANGE £2,025-£2,230 P.A.

### (b) LANDSCAPE ARCHITECT

This is an entirely new post and will require considerable  
initiative. The first task of the Landscape Architect will  
be to establish a policy for maintenance of the Board's  
schemes on power station and other sites of major develop-  
ment. He will be required to assist the Board's Architect  
with the co-ordination of the Board's landscape work in  
connection with major projects. SALARY WITHIN THE  
RANGE £1,450-£1,890 P.A.

### (c) ARCHITECTURAL ASSISTANT

(Projects)

The first requirement is exceptional draughtsmanship and the  
ability to give general assistance with detailed development  
of projects involved in the design of power stations and  
ancillary buildings. SALARY WITHIN THE RANGE  
£1,335-£1,670 P.A.

### (d) ARCHITECTURAL ASSISTANT

(Technical Records)

To take charge of technical records, drawings records and the  
section library with responsibility for setting up a system  
of filing and recording all data used by the section. Draughting  
ability is required and some architectural qualification, at  
least to intermediate standard, would be an advantage.  
SALARY WITHIN THE RANGE £740-£815 P.A.

● Applications, stating age, qualifica-  
tions, experience, present position, salary,  
and indicating post applied for, to the  
PERSONNEL OFFICER, 24/30, HOLBORN,  
LONDON, E.C.1. BY 10th NOVEMBER.  
Envelopes should be marked "Confiden-  
tial Ref AJ/350".

**ARCHITECTURAL APPOINTMENTS VACANT AUSTRALIA**

**ARCHITECTS** for our three offices.  
 Sydney ..... 2 Architects.  
 Goulburn (N.S.W.) ..... 1 Architect.  
 Orange (N.S.W.) ..... 1 Architect.  
 This is an established and expanding firm of young men. Yours is the opportunity to share in this firm and this country's growth.

**SALARY:** £40 per week (Aust.) to start.  
**FARES:** We will arrange this with no resultant cost or obligation to you (including families) through the assisted Passage Migration Scheme.  
 Contact Chief Migration Officer, Mr. K. J. Smith, Australia House, London, for details.

**ACCOMMODATION:** We will have accommodation available to suit your needs on arrival.

**QUALIFICATION:** A.R.I.B.A. or equivalent (min.). Age max. 35.

**APPLICATION:** Give full details of training and experience. Forward to:  
 Brown, Brewer & Gregory, Architects,  
 26, Alfred Street, Milson's Point,  
 SYDNEY, AUSTRALIA. 3471

**RONALD WARD AND PARTNERS** invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29, Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELGRAVIA 3361. 2960

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

**£850-£1,400.** ARCHITECTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write—Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. HOLBORN 4071. 2185

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

**SENIOR ASSISTANTS** required immediately. Salary by arrangement. Theo. H. Birks, 34, Portland Place, London, W.1. LAN. 7236. 1489

**MONROE AND PARTNERS** require ARCHITECTURAL ASSISTANTS of Intermediate/Final R.I.B.A. standard in their London, Watford, and Glasgow Offices for work on interesting industrial and commercial projects. Salary range £2000-£1,000 p.a. Non-contributory Pension Scheme. Five-day week. Apply in writing to 32, Clarendon Road, Watford. 3609

**SENIOR ASSISTANT** required by Harker & Hall, L.F.R.I.B.A., in their office in Warwickshire. Good salary, with scope for initiative and responsibility. Write Longdon House, High Street, Knowle, or telephone Knowle (Birmingham) 3502. 3143

**INTERMEDIATE** to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 34, Portland Place, London, W.1. LAN. 7236. 9739

**WELCH AND LANDER** require ASSISTANTS, Intermediate to Final standard, preferably with office experience. 38, Gloucester Place, W.1. Tel. WELbeck 6551. 3442

**SIR JOHN BURNET, TAIT & PARTNERS** have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries ranging from £1,000 to £1,500 per annum. Luncheon vouchers. Pension and Medical schemes (non-contributory). Telephone LANGHAM 3626 for appointment. 2113

**ARCHITECTURAL ASSISTANTS** of all categories required for busy City office engaged in industrial and commercial work. Good working conditions, 5-day week, luncheon vouchers. Salary by arrangement. Please contact Eric Firmin & Partners, Thavies Inn House, Holborn Circus, E.C.1. Tel.: City 8811. 2692

**A PROGRESSIVE** and expanding building and civil engineering organisation requires the services of an ARCHITECTURAL ASSISTANT in their Housing Division. Applicants should be experienced in the design and execution of working drawings in connection with Housing and Flat Development Schemes. Permanent and progressive position. Pension and Luncheon Voucher Schemes. Salary according to ability and experience. Write or phone Percy Bilton Ltd., Bilton House, 54-58 Uxbridge Road, Ealing, W.5. Tel. EALING 7777. 2068

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

**CITY OFFICE** requires ASSISTANTS for industrial and commercial work. 5-day week, luncheon vouchers. Salary £1,200 p.a. 2691

**SIR GILES SCOTT, SON & PARTNER** require a SENIOR ASSISTANT with good general experience in practical supervision of work and also in administration. Varied work including schools, hostels, churches, office buildings, municipal buildings, etc. Five-day week, luncheon vouchers, and salary in accordance with experience. Please apply in writing to 9, Gray's Inn Square, London, W.C.1. 2710

**SIR GILES SCOTT, SON & PARTNER** require ARCHITECTURAL ASSISTANT, qualified or unqualified, with practical experience. Interesting and varied practice. Salary up to £1,000 plus luncheon vouchers. Write 9, Gray's Inn Square, W.C.1, or telephone CHANCERY 8387/8. 2469

**ASSISTANTS** required urgently in expanding Practice. Plenty of scope with opportunities of varied site experience. Initiative encouraged. Write giving particulars and experience and salary required. Box 3503.

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

**A VACANCY** occurs in the West End Branch of large provincial Architectural Practice for an ASSISTANT at Intermediate standard. The post offers considerable scope on varied projects. Five-day week, luncheon vouchers. Write, giving particulars of age, experience and salary required, to Box 3511.

**A QUALIFIED ARCHITECTURAL ASSISTANT** required immediately in Home Counties office. Successful applicant will have the opportunity of working on widely varying industrial, commercial and housing schemes. Five-day week. Write full particulars to Box 3512.

**BRIGHTON & HOVE.** Experienced ASSISTANTS in all grades required. Details please to:—H. Hubbard Ford & Associates, 51, Church Road, Hove, 3, Sussex. 3482

**MR. H. HUBBARD FORD, F.R.I.B.A.,** requires immediately—Intermediate and Junior ASSISTANTS to work in his London office on interesting projects. Salary by arrangement. Please telephone GROsvenor 6209/9 for interview. 3504

**ARCHITECTURAL ASSISTANTS** of Final standard required immediately for busy country practice with varied programme of work. Some office experience essential. Experience in country house and ecclesiastical work an advantage. Salary by arrangement. Write stating experience and salary required to Forsyth Lawson, Cunningham & Partners, 30, Horse Fair, Banbury, Oxon. 3483

**ONE** qualified ASSISTANT required—salary by arrangement—and Two Intermediate standard ASSISTANTS required, salary within range £700-£200. Wilburn & Son, 11, South Parade, Doncaster. 3487

**ARCHITECTS** require Senior and Intermediate ASSISTANTS in their well-established office near Charing Cross. Interesting and busy general practice. Write Box 3501.

**ARCHITECTURAL ASSISTANTS** required in medium sized general practice. Apply in writing only, stating age, qualifications, experience and salary required, to Thomas Sibthorp, F.R.I.B.A., A.R.I.C.S., A.M.T.F.I., 10, Manchester Square, London, W.1. 3489

**ON OFFER.** A variant works programme. Occasional Travel. Five-day week. Annual Bonus. Non-contributory Pension Scheme. A base in Ealing.

A secure job with a Multiple Company. Canteen facilities. Wanted: Keen Young Intermediate Standard Assistants. Apply for appointment, stating age, experience and salary required. Box 3538.

**ELIE MAYORCAS** requires ARCHITECTURAL ASSISTANTS with a minimum of three years' office experience in this country. Write, giving brief particulars of architectural education and experience, and salary required, to: 15, David Mews, Baker Street, W.1. 3293

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

**RESPONSIBLE** position vacant in congenial City Office. Salary by arrangement, reviewed annually. Luncheon voucher scheme. Applicants of Intermediate to Final R.I.B.A. standard (at least two years' office experience) should ring MET. 6511 or write Seely and Paget, 41, Cloth Fair, E.C.1. 3281

**ARCHITECTURAL ASSISTANT**, Intermediate or Final standard, required in West Riding. State experience, salary required, etc., to Box 3546.

**APPLICATIONS** are invited for the post of ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A. standard, in busy office engaged on varied work; five-day week. Salary commensurate with experience and ability. Quick & Lee, Chartered Architects, 11, Waterloo Place, Leamington Spa, Warwickshire. 3547

**ARCHITECTS** with initiative and responsibility for a variety of contemporary work in expanding practice in South Yorkshire. Bonus, Pension and Life Assurance Scheme. Travelling and removal expenses paid by agreement. Salary according to ability. 3550

**ASSISTANT** with several years' office experience and accustomed to preparing working drawings from sketches, required immediately by West End Architects. Should be interested in supervising the work and have a sound knowledge of construction. Write for interview to Box 3557.

SHOREDITCH BOROUGH COUNCIL

## ASSISTANT ARCHITECT

Applications to:

BOROUGH ARCHITECT, TOWN HALL, E.C.1.

has a vacancy for a qualified Assistant Architect for varied and interesting programme of important Public Buildings.  
 Salary £1185 - £1355 p.a.



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

**SENIOR AND JUNIOR  
ARCHITECT'S ASSISTANTS**

to work on a variety of interesting commercial and industrial projects.  
Five day week. 3 weeks' Holiday. Pension scheme.

Commencing salary up to £1,300 according to experience and qualifications.  
Apply in writing with details of age, qualifications and experience to:—  
G. S. Hay, F.R.I.B.A.,  
Chief Architect,  
Co-operative Wholesale Society Ltd.,  
1, Balloon Street,  
MANCHESTER, 4. 3565

**ASSISTANT** with office experience required in a small busy general practice. Work on flats, multi car parks, etc. Salary according to age and experience. Apply in writing to:—  
R. Jelinek-Karl Esq., F.R.I.B.A.,  
6, Buckingham Street,  
Strand,  
London, W.C.2. 3544

**WIMPEY**

**AN** expanding programme of work in the Architects' Department offers to experienced and able

**ARCHITECTS AND ASSISTANTS**  
good opportunities to work as Project Architects and Leaders of design and construction groups, on work covering various types of Industrial, Commercial and Domestic Projects of considerable size and interest.

Permanent appointments with good progressive salaries for the right men are immediately available at Head Office.

Five-day week and Pension Fund available.  
Similar appointments are also available in Regional Offices for applicants preferring to work in the Midlands or North of England.

Applicants should write to:—  
E. V. Collins, A.R.I.B.A., Chief Architect,  
George Wimpey & Co. Ltd.,  
27 Hamersmith Grove, London, W.6. 3625

**WATKINS, GRAY & PARTNERS**, 57 Catherine Place, S.W.1, require **ASSISTANTS** of Intermediate standard for work on large hospital projects. Excellent opportunities for those seeking first hand experience in this most interesting and rapidly developing field. Luncheon vouchers and pension scheme in operation. Write giving full particulars. 3673

**WILLIAM RYDER** requires **ASSISTANTS** in the salary range £800 to £1,100 according to age and experience. Hours 9.30 to 5.30. Five-day week. Apply in writing to 21 Bruton Street, Berkeley Square, W.1. 3676

**£700-£1,300 P.A. WILL BE PAID ACCORDING TO EXPERIENCE AND ABILITY TO ARCHITECTS AND ARCHITECTURAL ASSISTANTS WORKING ON VARIED AND INTERESTING PROJECTS AT HOME AND ABROAD. FIVE-DAY WEEK, NON-CONTRIBUTORY AND CONTRIBUTORY PENSION SCHEME. SALARIES REVIEWED ANNUALLY. PLEASE APPLY: E. J. D. MANSFIELD, A.R.I.B.A., SIR WILLIAM HALCROW & PARTNERS, STANHOPE HOUSE, 47 PARK LANE, LONDON, W.1. 3664**

**REEMA CONSTRUCTION LTD.** ARCHITECTS AND DRAUGHTSMEN are required in a young and expanding office for work on a wide variety of projects including multi-storey flats, halls, swimming pools, office buildings and housing. We design and build in pre-cast concrete units and need men who are anxious to apply their knowledge to the problems of prefabrication. We would expect to pay a salary of £1,000 for newly qualified architects and correspondingly more for those with some experience. Applicants should telephone or write to: R. H. Ball, A.R.I.B.A., A.A.Dipl., Chief Architect, Reema Construction Ltd., Milford Manor, Salisbury. Telephone No. Salisbury 5141. 3663

**DESIGN GROUP NIGERIA** requires a qualified **ASSISTANT ARCHITECT** for design work in Ibadan and to supervise building in various parts of Nigeria. Salary £1,400-£2,000 according to age and experience; tours each of 18 months with three months' fully paid leave; free medical attention; car provided; free accommodation suitable only for unmarried applicants. The appointment is to be taken up as soon as possible. Write to 269 King Street, London, W.6. 3642

**NORMAN & DAWBARN** require an **ASSISTANT** in their Wolverhampton office. This position could afford useful experience of small and medium size jobs in a small but expanding office, with possibility of later transfer to London office or overseas if desired. Minimum two years' previous office experience preferred. Working conditions are good, five-day week, three weeks' annual leave, lunch vouchers. Please write or phone to 7 Portland Place, London, W.1. Langham 8011. 3649

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

**SOUTHAMPTON.** Senior and Junior **ARCHITECTURAL ASSISTANTS** required for interesting contracts in the Southern Counties. Apply with details of experience and salary required to E. M. Gailway & Partners, F./A.R.I.B.A., 10 Portland Street, Southampton. 3665

**SCHERRER & HICKS**, 19 Cavendish Square, W.1, require immediately several **ASSISTANTS** of Intermediate to Final standard. Salary £700-£1,000. 3652

**HICKSON & WELCH LTD.**, Chemical Manufacturers, Ings Lane, Castleford, ARCHITECT. Vacancy for a qualified Architect to assist the Group Architect. Varied commercial and industrial works. Salary not less than £1,250. Hours 8.45 a.m.-6 p.m. and 8.45 a.m.-12 noon alternate Saturdays. Staff canteen. Pension scheme after qualifying period. Apply by post to the Group Architect. 3660

**FIRST ASSISTANT** required to help two busy partners and secretary. Intermediate or qualified. Ring HOLBORN 5101. 3644

**SENIOR ASSISTANT** urgently required for newly established City practice. Excellent opportunities for experienced and capable man. Salary £900-£1,200. Replies to Box 3650 or telephone MONARCH 1746 for appointment.

**FIRST CLASS ASSISTANT** required by harassed Architect in busy new practice. Variety of work with excellent opportunities for right man. Salary limit £1,200. Box 3651.

**ARCHITECTURAL ASSISTANT**, Intermediate standard, required for interesting work mainly on housing. Ability to prepare working drawings and use own initiative essential and preference will be given to applicants who have had previous experience in this class of work. Apply in first instance to: Chief Architect, Taylor Woodrow Homes Limited, Western House, Western Avenue, Ealing, London, W.5. 3615

**A SMALL** expanding practice in Hampstead carrying out varied and interesting projects requires the services of a qualified **ARCHITECT**, aged 25/30, also an **Intermediate standard ASSISTANT**, with drive and initiative, willing and able to accept responsibility, in return for the fitting rewards of a progressive practice. Will applicants kindly write details of age, experience and salary required to: Kenneth C. Saunders, Esq., "Lymington House," 341 Finchley Road, London, N.W.3. 3675

**EDINBURGH:** Michael Laird requires 2 **ASSISTANTS** for variety of interesting work in congenial conditions. Salary according to aptitude and experience. Please write, in confidence, to 22, Moray Place, Edinburgh. 3622

**JOHN MOWLEM & CO. LTD.**

**ARCHITECTURAL ASSISTANTS**

**IMMEDIATE** vacancies for Assistants up to Final standard.

Interesting Domestic & Commercial work.

Permanent positions for suitable men. Salary according to ability and experience. Five-day week. Pension scheme.

Apply in writing to:

G. P. Nodes, A.R.I.B.A.,  
John Mowlem & Co. Ltd.,  
91, Ebury Bridge Road, London, S.W.1. 3586

**ASSISTANT ARCHITECT**

**A QUALIFIED** and imaginative Assistant Architect (A.R.I.B.A.) is required for an architect's department offering an interesting and varied industrial experience. The post is pensionable with all the welfare and social amenities of a large industrial concern. Please send details of qualifications, age and approximate salary required to Men's Employment Officer, Personnel Department, G.K.N. (Screw Division), Heath Street, Birmingham, 18. 3607

**CLIFFORD CULPIN & PARTNERS**, who have a wide variety of interesting work, require two experienced **ASSISTANTS** in their London office. Must be capable of taking initiative and responsibility. Write giving brief particulars to 39 Doughty Street, W.C.1. CHANCERY 5395. 3598

**WELLS, HICKMAN & PARTNERS** require **ARCHITECTURAL ASSISTANTS**. Salaries £700 to £1,000 according to ability and experience. Please ring Terminus 1404 for appointment. 3602

**EXPERIENCED ASSISTANTS** required for small office in Baker Street for work ranging from jewellery showrooms and cowsheds, through houses and laboratories to interiors and exhibition work. Write with full particulars and stating salary required to Roger Worboys, M.A., A.R.I.B.A., 50 Baker Street, W.1. 3603

**RICHARD SHEPPARD, ROBSON & PARTNERS** require **ASSISTANTS of Intermediate and Final standard**; salary range £750-£1,000 according to ability. 5 Southampton Place, W.C.1. CHANCERY 4261. 3599

**PETER EDNIE & PARTNERS** of 4, Gray's Inn Square, W.C.1, require experienced **ASSISTANTS** for permanent staff. Life and pension schemes operating. 3606

**WELL** established firm of London Architects require experienced, qualified or unqualified, staff for their new Hasbourne office age 20/35. Salary £500-£1,100 according to age and experience. Ganton & Ganton, Empire House, St. Martin's le Grand, E.C.1. 3589

**CHIPPINDALE & EDMONDSON** have vacancies for **ASSISTANTS** of all grades in their new Darlington office. Commencing salaries ranging from £600 to £1,200 per annum. Interesting individual work. Five-day week. Apply in writing to 37a Tubwell Row, Darlington. 3588

**SENIOR ASSISTANTS** required for small office with interesting and varied work. Green, Lloyd & Son, 5 Pickering Place, St. James's Street, S.W.1. Whitehall 8925. 3585

**ASSISTANT ARCHITECT** about Intermediate standard, but ability more important than qualifications, needed to assist with prestige office building in High Holborn. Salary by arrangement. Architect in Charge, Co-operative Permanent Building Society, New Oxford House, Bloomsbury Way, W.C.1. 3574

**ARCHITECT'S ASSISTANT**. Responsible post as team leader in busy office 10 miles from London. Flat available. Tooley and Foster, Buckhurst Hill, Essex. Tel. EUC 2211. Write or ring. 3622

**CROUDACE LTD.** of Caterham have a large and interesting expansion programme of work requiring the following additional staff to work on large and small housing schemes, houses, flat and maisonette designs.

Architects. Recently qualified architects to work under the Chief Architect, as team leaders on house design, etc. Excellent opportunities for scope and initiative, and a chance to get experience on design cost work, as well as using some of the latest building methods.

**Architectural Assistants**. Pre and post inter standard assistants to work on design and detailing in small teams on the above work.

Commencing salary £700-£900.

Both posts are permanent and pensionable and assistance can be given with housing in every case.

Please write stating experience and salary required or phone the Chief Architect, Croudace Ltd., 97, Godstone Road, Caterham, Surrey. Caterham 4221. 3684

**JUNIOR PARTNERSHIP** offered in expanding practice after probationary period for **SENIOR ASSISTANT**. Commencing salary in the £1,000 bracket.

Vacancy also for **ASSISTANT** with Intermediate. Good salary by arrangement.

Application, with full particulars, to G. Raymond Jones, A.R.I.B.A., 23, Regent Street, Wrexham. 3801

**£1,200.** PLUS profit sharing, PLUS pension scheme, PLUS housing accommodation or car, PLUS hard work in expanding office, South Yorkshire, for keen and energetic young **ARCHITECT** with good personality. Box 3797.

**NO INDUCEMENT OFFERED** except adequate reward in exchange for enthusiasm and diligence by capable **ARCHITECT** possessing imagination (Sheffield area). Box 3798.

**KATZ & VAUGHAN** require a **SENIOR** and **INTERMEDIATE ASSISTANT**. Phone REG. 5401. 3799

**BROMLEY** Architects require **Intermediate standard ASSISTANTS** immediately, for work on large commercial and residential schemes. Telephone Robert J. Wood & Partners, Ravensbourne 9788. 3702

**QUALIFIED ARCHITECT** required by London firm to work in their Nigerian office. Varied and interesting projects, good salary, pleasant location and conditions. Apply: J. E. K. Harrison, F.R.I.B.A., Eagle House, High Street, Wimbledon, S.W.18. Tel.: WIM. 4244. 3701

**ARCHITECT** wanted for small practice specialising in quality work, mainly residential. Good designer with sound construction and administrative ability, also good draughtsman and keen to gain experience (day release if studying). Write, giving full details, to R. H. Dolan, 36, Kenwood Drive, Walton-on-Thames. 3697

**LOUIS DE SOISSONS, PEACOCK, HODGES, ROBERTSON & FRASER** require competent **ASSISTANTS**, both senior and junior, in their Exeter Office. Applications, giving details of age, training and experience, should be submitted to 12, Baring Crescent, Exeter, as soon as possible. 3696

**ASSISTANT ARCHITECTS** required for staffing a new office opening in Southampton for work on interesting projects including University, War Department and Ecclesiastical programmes. **JUNIORS** also required. Apply, stating age, qualifications, experience and salary required, to Robert Potter, F.R.I.B.A., & Richard Hare, B.Arch., A.R.I.B.A., 62, The Avenue, Southampton. 3729



**OPPORTUNITY** offers for qualified ASSISTANT interested in cost-conscious contractor-proof contemporary architecture, to join expanding practice in Eastern Scotland, busy with University, Hospital, Home Office, Local Authority and private work. Basic salary plus a guaranteed share of the firm's profits: prospect of associateship. Free holiday house on seacoast available. Gaudie, Hardie, Wright & Needham, 1, High Street, Dundee. 3731

**EXPERIENCED ASSISTANT ARCHITECT** required to carry out a programme of additions and alterations to Hospitals and other work. Responsible position. Age preferably over 30. Salary in the range of £1,200 to £1,500 according to ability. Three weeks holiday with pay. Luncheon vouchers. London W.1 area. Reply to Box 3732.

**BREWERY COMPANY**, Manchester area, requires SENIOR ASSISTANT as deputy to Principal. Good design and sound technical ability essential. Excellent conditions, contributory Pension Scheme. State age, qualifications, experience and salary required to Box 3716.

**MISHA BLACK** requires SENIOR ASSISTANT for general architectural work and interiors. Design ability essential and capacity to handle jobs. Salary £900-£1,000. Reply in writing to Design Research Unit, 37, Duke Street, London, W.1. 3721

**DESIGN RESEARCH UNIT** requires ASSISTANTS for general architectural work, exhibitions and interiors. Good design sense essential and some office experience. Salary £700-£900 according to experience. Reply in writing to Design Research Unit, 37, Duke Street, London, W.1. 3722

**GOLLINS, MELVIN, WARD & PARTNERS** require ARCHITECTURAL ASSISTANTS for their Sheffield Office to work on interesting University projects. Five-day week, quarterly bonuses and pension scheme. Write: 281, Glossom Road, Sheffield 10, or telephone Sheffield 29922, for an appointment. 3723

**BOISSEVIN & OSMOND** require the following staff for their Head Office in Epsom to work on interesting major projects. Intermediate ASSISTANTS and qualified ARCHITECTS (all grades required). This is a growing practice with excellent working conditions providing a stimulus for men with initiative. Salary scales are generous and in accordance with ability and experience. Please write to Kings Shade Walk, Epsom, Surrey. 3725

**HARD WORK?** Yes, in plenty for the enthusiastic ASSISTANT. If you are good we shall be pleased to hear from you—if not, please don't waste time. Cecil Howitt & Partners, St. Andrew's House, 40, Princess Road, Leicester. 3726

**WINCHESTER.—ARCHITECT'S ASSISTANT**, Final standard, required. Apply in writing, giving particulars to A. H. Howard, L.R.I.B.A., West Way House, St. Thomas Street, Winchester. 3727

**ARMSTRONG & MACMANUS** have vacancies for competent ASSISTANTS with initiative. Prospects and salary according to ability. Please write 28, Gloucester Place, W.1, or telephone WELbeck 2275 for appointment. 3750

**ARCHITECTURAL ASSISTANTS** LICHFIELD office has vacancies for two INTERMEDIATE ASSISTANTS. Salary £650-£850 according to experience. Telephone Lichfield 2667, or write to:—CLIFF & JUKES, 5, MARKET STREET, LICHFIELD, STAFFS. 3749

**CIVIC TRUST** ASSISTANT required for design work in connection with all aspects of town improvement schemes. High standard of draughtsmanship, presentation, lettering and colour essential. Applicants should be A.R.I.B.A. and/or M.S.I.A. and interested in townscape. Salary according to qualifications with max. £1,200 per annum. Apply to Civic Trust, 79, Buckingham Palace Road, Tel. Tate Gallery 0891. 3765

**CHIPPINDALE & EDMONDSON** REQUIRE FOR THEIR BRADFORD AND DARLINGTON OFFICES THE FOLLOWING STAFF:

1. ASSISTANT ARCHITECTS with at least two years' office experience after qualification.
2. ARCHITECTURAL ASSISTANTS, all grades. The offices have a five-day week, pension scheme and luncheon vouchers. Applications to Chippindale & Edmondson, Empire House, Piccadilly, Bradford. Endorse the envelope "Private—Staff." 3760

**ASSISTANT ARCHITECT** required by Harker & Hall, for responsible position in their London Office, 13, Welbeck Street, W.1 (WEL. 0061). 3765

**OXFORD** Office requires ASSISTANT ARCHITECT to fill position of responsibility. Salary and interview by arrangement. Details to Box 3751.

**ARCHITECTURAL ASSISTANTS** required of intermediate standard. Plenty of opportunities for responsibility and administration of contracts, large and small. Facilities given for study of design at London Schools. Salary commensurate with experience. 3748

**POWELL & ALPORT** require an ASSISTANT in their Croydon office to work on industrial and domestic developments. Salary by arrangement. Write giving brief details. Box 3747.

**NEW** West End practice requires enthusiastic ASSISTANT to undertake jobs with the minimum of supervision. Salary by arrangement. J. S. Routley & Partners, 7, Carlisle Street, W.1. GERard 0904. 3745

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

**URGENTLY REQUIRED—ARCHITECTURAL ASSISTANTS AND DRAUGHTSMEN**, all standards, but must be able to work with minimum supervision. Small but extremely busy West End Office. E. Norman-Bailey & Partners, Ring VICTORIA 7088 for appointment. 3738

**FREDERICK GIBBERD** requires at HARLOW office: (a) Qualified ASSISTANT ARCHITECTS and (b) Intermediate standard ASSISTANTS. Good salaries in accordance with ability. Work includes central area redevelopment, public and commercial buildings, swimming baths, technical colleges, shopping centres and housing in the provinces and in Harlow. Houses and flats available. Please apply in writing to Frederick Gibberd, 19, The Rows, Stone Cross, Harlow, Essex. 3739

**ASSISTANT ARCHITECT** with experience in and/or interest in schools and multi-storey flats. Write ERIC LYONS, MILL HOUSE, BRIDGE ROAD, HAMPTON COURT, SURREY. 3562

## ARCHITECT'S DEPARTMENT CAMBERWELL BOROUGH COUNCIL

vacancies occur in the following grades for architects to carry out an interesting building programme

A.P.T. V. £1,355-1,525 p.a.

A.P.T. IV. £1,185-1,355 p.a.

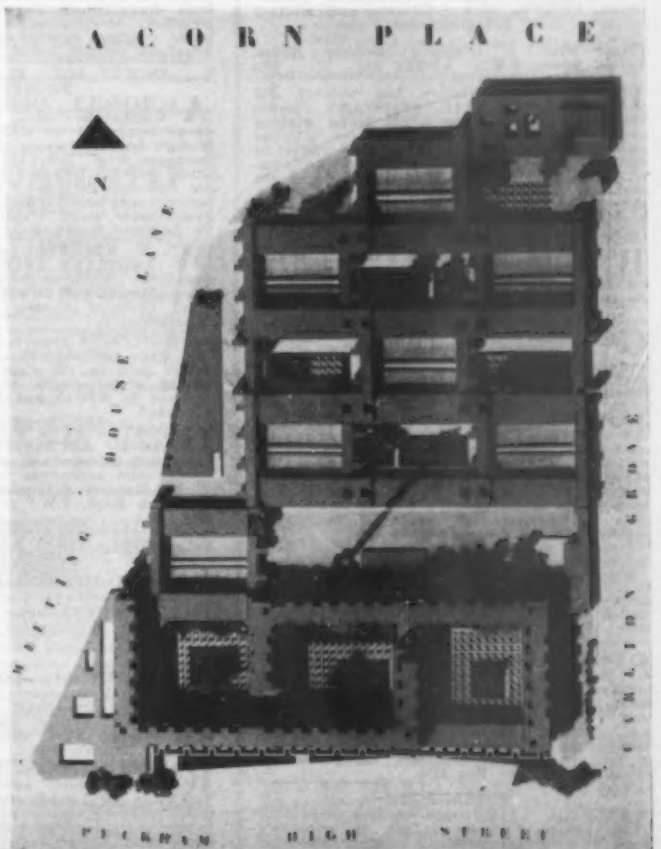
A.P.T. III. £1,005-1,185 p.a.

vacancies also occur in the following grade for assistants who have passed in all subjects, except professional practice, for the Associateship of the R.I.B.A.

A.P.T. II. £855-1,000 p.a.

Application forms from the Town Clerk, Town Hall, Camberwell, S.E.5.

Applications to be returned by the 31st October 1960



**RALPH TUBBS** requires ARCHITECTS and ASSISTANTS. The work includes a new hospital, a television centre and publishers' headquarters. Phone WELbeck 2129 or write 46, Queen Anne Street, W.1. 3704

**SENIOR ARCHITECTURAL ASSISTANT** required by Development Co. Varied work, good salary, prospects. Staff Bonus and Pension Scheme. Apply in writing to Pwong Limited, Bury Street, Ruislip, Middlesex. 3705

**CHAMBERLIN, POWELL & BON** require ASSISTANTS, with experience and ability to work on a variety of large developments. An interest in architecture is imperative. Please reply to Staff Manager, Avenue Studios, 15, Sydney Mews, Fulham Road, S.W.3. 3706

**INTERMEDIATE** to Final Standard. Design-conscious expanding practice engaged large-scale commercial projects requires ARCHITECTURAL ASSISTANTS with initiative and perspective ability. Good salaries according to capabilities. Five-day week. L.V.s. Raymond Spratley & Partners, 9, Hertford Street, Park Lane, W.1. GBO 1532. 3707

**NOTTINGHAM:** The following staff are urgently required to assist in our extensive building programme:  
1. SENIOR ARCHITECTS, £1,050 to £1,500.  
2. ARCHITECTS, £800 to £1,050.  
3. INTERMEDIATE ASSISTANTS, up to £800 depending on experience.  
Five-day week. Pension Scheme about to be instituted.  
Bartlett & Gray, Dip. Arch., F.F.R.I.B.A., 16, Bridgford Road, West Bridgford. Tel. No. 89711/2. 3708

**COLWYN BAY.**—Lingard & Associates require ARCHITECTS. Commencing salaries around £1,000. School trained with a few years' office experience. Completely contemporary work. 90, Conway Road, Colwyn Bay 2838. 3710

**ARCHITECTURAL ASSISTANTS** offered excellent opportunities and prospects in expanding organization to work on Atomic Project and Industrial Buildings. Write, stating age and experience, to the Chief Architect, Nuclear Civil Constructors, 52/55, Carnaby Street, London, W.1. 3714

**FARMER AND DARK** have vacancies for:—  
ASSISTANT ARCHITECTS  
JUNIOR ASSISTANTS

Wide variety of interesting projects both here and abroad; including Schools, Offices, Laboratories, Factories, Power Stations and Military Establishments.

Please write or telephone:—Romney House, Tufton Street, S.W.1. ABBEY 6311. 3774

**BUSBY** private practice has vacancy for ARCHITECTURAL ASSISTANT, preferably car driver. Pleasant office and working conditions. Five-day week. Scope for initiative and responsibility on varied and interesting works including Domestic, Commercial, Industrial and Ecclesiastical, over wide area of the country. Commencing salary according to experience and ability up to £1,000. Please apply giving fullest details to A. R. Laing, Deacon & Laing, 65, Goldington Road, Bedford. 3769

**BOURNEMOUTH.**—Jackson & Greenen, Hinton Buildings, have immediate vacancy for SENIOR ASSISTANT. Work including Schools, Banks, Offices, Flats, Hospital work and Shops. 3771

**GUILDFORD.**—Small practice requires ARCHITECTURAL ASSISTANT, Intermediate Standard. Good offices. Interesting work. Excellent prospects. Five-day week. Details please to Box 3773.

**RECENTLY** qualified ARCHITECTURAL ASSISTANTS required in small progressive office where ability to take responsibility will be welcomed. The selected applicants will have the opportunity to gain experience of all aspects of contemporary professional practice by working both as job architects in charge of smaller projects and as assistants on larger projects in various parts of the country.  
Five-day week. Fifteen days annual leave. Salary £750—£850.

Write or telephone for appointment:  
Michael Greenwood,  
Broadway Court,  
London, S.W.1.  
Tel.: ABBey 5264, Ext. 1. 3775

**SENIOR ARCHITECTURAL ASSISTANT** required to join Group Architect's Department of a large industrial concern in the Midlands. Previous industrial experience an advantage. Fully qualified. Minimum salary £1,200 p.a. Five-day week. Pension Scheme. Three weeks holiday after qualifying period. Apply in first instance, stating age, experience and salary required, to Box 3776.

**EDINBURGH**  
**MICHAEL LAIRD** requires two responsible ASSISTANTS for variety of interesting work in congenial conditions. Salary according to aptitude and experience. Please write, in confidence, to 22, Moray Place. 3780

**WE** also have a "congenial atmosphere" in our office, except that we are short of Intermediate standard and Senior ASSISTANTS. Please ring Paddington 4950, Feast and Anderson, 52, Upper Berkeley Street, W.1. 3782

**ARCHITECTURAL ASSISTANT** (Intermediate) required in private practice near Chipping Norton, Oxon. Exceptionally varied work, capable of surveys, working drawings, details, specifications. Car driver. Office experience, salary required, status. Accommodation might be arranged. Box 3786.

**ARCHITECTS' ASSISTANTS** urgently required in busy City Office. Qualifications unnecessary, but experience in preparation of working drawings essential. Long-term engagement and opportunity for considerable experience and advancement. Five-day week. Salary £1,250 per annum plus luncheon vouchers. Box 3785.

**DENYS LASDUN & PARTNERS** require qualified and experienced ARCHITECTS to fill positions of responsibility. Salaries from £1,100 p.a. according to ability and experience. Write to 3, Albany Terrace, N.W.1, or telephone HUNter 1822 for an appointment. 3792

**F. W. WOOLWORTH AND CO. LIMITED**  
ARCHITECTS' DEPT.  
KING STREET, DUDLEY  
WORCS.

**WE** have a few vacancies for capable ASSISTANTS in our Architects' Dept., for interesting development programme in multiple stores.  
Experience in preparation of working drawings and details essential. Good salary and prospects to suitable applicants.  
The positions are permanent and pensionable. Five-day week, canteen facilities, luncheon vouchers. 3789

**URGENTLY** required by Leonard Manasseh & Partners one senior ASSISTANT to run large Contract, not less than six years' experience. Write giving full particulars and salary required to 39-40, Bedford Street, Strand, W.C.2, or telephone first COVent Garden 2907. 3805

**ASSISTANT** required Intermediate to Final Standard, five-day week. Write with full particulars to Reginald H. Gallanough & Partners, 54, Queen Anne Street, London, W.1. 3810

**LEEDS:** ARCHITECTURAL ASSISTANTS.  
Two Senior ASSISTANTS (A.R.I.B.A.) for Leeds Office engaged on University, Schools, Hospital and Office projects. Must be competent to undertake contract management at all stages. Starting salary range £1,250 to £1,400. Two ASSISTANTS, Intermediate R.I.B.A. standard, neat draughtsmen, knowledge of building construction. Starting salary, £500 to £600. Please write or phone Jones & Stocks, F.F.R.I.B.A., 7, Blenheim Terrace, Leeds, 2. Tel.: 25169. 3811

**SECURE YOUR FUTURE IN YOUR PROFESSION**

**ARCHITECTS' ASSISTANTS** required by Westminster Bank. Commencing salary range from £550 to £950 with good prospects. Modern London drawing office. Favourable house mortgage rates. Luncheon club. Sports club and other social activities. Pensions scheme. Fare for interview refunded. Write stating age, experience and salary required to:—The Architect, Westminster Bank Limited, Post Office Court, 10, Lombard Street, E.C.3. 3812

**W. S. HATRELL & PARTNERS** require ASSISTANT ARCHITECTS (Intermediate Standard). Write or telephone to 21, Cleveland Place, London, S.W.1 (Whitehall 4076); 1 Queen's Road, Coventry (Coventry 26446); 15, Piccadilly, Manchester, 1. 3807

**ARCHITECTS** require Qualified and Unqualified ASSISTANTS, five-day week. Good salary paid to the right applicant. Apply in writing giving details of qualifications and experience to Willink and Dod, Canard Building, Liverpool. 3806

**OPPORTUNITY** in growing and varied practice for ARCHITECTURAL ASSISTANTS of around Intermediate standard seeking responsibility and experience for good remuneration. Write: Pomeroy & Gaining, A.R.I.B.A., 176, Old Brompton Road, S.W.5 or telephone FREmantle 6311. 3815

**WALLIS GILBERT AND PARTNERS ALSO**  
NEED STAFF URGENTLY. 5, Cromwell Road, S.W.7. KENington 1450. 3814

**ARCHITECTURAL ASSISTANT** required in National Developers' design group. Age, qualifications immaterial BUT real experience and practical outlook essential. Salary £850—£950. Five-day week. Sense of humour an advantage. Box No. 3818.

**RONALD FIELDING, F.R.I.B.A.**, immediately requires senior and intermediate ASSISTANTS in his London office. Salaries according to ability and experience with regular twice yearly review, pension scheme with life assurance during employment, luncheon vouchers. Please write or telephone Aldwych House, London, W.C.2. CHAncery 8201. 3819

**GUILDFORD ARCHITECTS** urgently require qualified and unqualified ASSISTANTS to work on projects of considerable interest. An opportunity exists for applicants living or wishing to live in Surrey to work locally in a pleasant atmosphere and at a good salary. Would applicants please reply in writing, stating age, experience and salary required, to Malcolm Peck, Roberts and Associates, 15, Friary Street, Guildford, Surrey. 3821

## Architectural Appointments Wanted

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

**ASSOCIATE** with expanding practice in Hampshire, wishes to contact another with work in same area, also Berkshire, Surrey and Wales. A London office would be an advantage. Box 3402.

**YOUNG WOMAN**, having standard Interior Design at L.C.C. Central School of Arts and Crafts, is looking for a job. Box 3820.

## Other Appointments Vacant

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

**ARCHITECTURAL DRAUGHTSMAN** required by a large and expanding Group, with headquarters close to West London, to carry out varied and interesting work relating to Industrial and Commercial building designs. Salary scale is £1,000 to £1,500. Profit participation and non-contributory pension schemes are in operation. Applications in writing only, giving details of age, qualifications and experience, and quoting AD97, to Box 3653.

**THE ARCHITECTS' JOURNAL** requires a good DRAUGHTSMAN for the preparation of Information Sheets and Working Details. Some knowledge of line block reproduction desirable and an interest in the compilation of technical data essential. Write to the Editor (Information Sheets), 9, Queen Anne's Gate, S.W.1, stating age, architectural training and experience. 3304

**ARCHITECTURAL DRAUGHTSMAN** required by large Building Company in Cornwall. Applicants should have at least two years' experience as a senior. Apply, stating experience, age and salary required, to Box 3488.

**YOUTH HOSTELS ASSOCIATION** require ASSISTANT SURVEYOR to help in survey, maintenance and adaptation of hostel buildings. Salary scale £750 to £850. Particulars and application form from National Secretary, YHA, 84, Albans. Closing date for receipt of applications, November 14th, 1960. 3674

## ALCAN INDUSTRIES LIMITED ROGESTONE (MON.)

**SENIOR ARCHITECTURAL DRAUGHTSMAN** for interesting and varied work connected with extensive development of company sites and plant, new office blocks, extensions and industrial buildings.  
Write giving full details of age, qualifications and career to date, to: Chief Draughtsman, General Engineering Dept., Alcan Industries Limited, Rogestone, Newport, Mon.  
(A member of the Aluminium Limited of Canada group of companies.) 3794

**AN** old established national organisation wishes to extend its activities with the Architectural and allied professions by the appointment of REPRESENTATIVES, accustomed to negotiations at all levels, to give a sales service. This opportunity provides a career offering a salary during initial training and high future earnings. Enquiries are invited from men of high calibre for these pensionable positions. Age 25-40. Write Box 3719.

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

**HAS** a vacancy for an ASSISTANT in the Civil Engineering Building Dept.  
The successful candidate will take charge of new industrial building projects, at home and overseas. He will work with minimum supervision and his responsibilities will extend from the initiation of a project to the settlement of final accounts. Detail drawing assistance will be provided.

He will also be required to carry out similar duties in relation to the modification of existing industrial buildings.

Applicants should be qualified to H.N.C. (Building) or Intermediate R.I.B.A. standard, and have had several years' experience.

This is a permanent and pensionable position, with opportunity to progress. Assistance with housing given if necessary. Removal expenses paid. Five-day week. Three weeks holiday.

Please write in confidence, giving full details of qualifications and experience to Mr. B. G. Tierney, Technical Personnel Officer, at the above address, quoting Ref. B/568/AJ. 3737



**ESTIMATOR** required. Experience in either industrial lighting engineering or building contracts essential. Age limit 50. Interesting work with excellent prospects. Bonus Scheme. Five-day week. Write Box 3701.

**ARCHITECTURAL ASSISTANT**, either sex, wanted by property company operating from a country house near Billingshurst, West Sussex. The work consists mainly of the conversion and restoration of old cottages. Qualifications immaterial. Car will be provided or running expenses paid. Salary £200. Write or ring, Managing Director, Park Properties (Walsborough) Ltd., The Park, Walsborough Green, Sussex. Tel. 403. 3711

**Do you wish your work was more interesting?** An experienced **DRAUGHTSMAN** is required by London Design Group for work on interiors, exhibition stands, industrial design, etc. Write or telephone Charles Kenrick Associates, 20, Fitzroy Square, W.1. HUS. 7116, 7369. 3784

**ARCHITECTURAL/DRAUGHTSMAN**, age up to 30 years, to specialise in tiles and mosaic for swimming pools. Must be able to meet clients and conduct correspondence. Write Box ZH 436, Deacon's Advertising, 36, Leadenhall Street, E.C.3. 3788

**DRAUGHTSMAN** up to Intermediate standard required for West End offices of national building contractors. Apply, stating salary required to Box 3720.

### Services Offered

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

**"DON" ARCHITECTURAL MODEL MAKERS.** We offer the highest grade work with speed and reliability.—Please Phone Woolwich 1360 or write 6, Pelham Crescent, Hastings. 1673

**TRANSLATIONS** from and into all languages, by technical, publicity and legal experts. Tenders, agreements, descriptions, conference papers, research articles, instruction manuals, publicity matter, Olympia Translation Service, 29 Russell Gardens, London, N.W.11. MEADWAY 2282. 3599

**SURVEYS.** Large or small, drawn to large scales, accuracy guaranteed. Structural sewerage, sewage disposal, sanitary plumbing and drainage design. The Site Survey Company, London, S.E.3. Telephone LEE Green 7444. 6088

**FULLY** experienced in all Building and Architectural work. I am available to undertake: Designs, Working Drawings, Details, Surveys, Specifications, Models, etc. Just telephone Wallington 9683 (near Croydon) and I will call anywhere and take your instructions. Box 624

**SURVEY OF LAND** or buildings also Specialisations, quantities and final accounts prepared for new or conversion work. LIV. 1939. 2354

**COMPREHENSIVE ARCHITECTURAL SERVICES**, including measured surveys offered by experienced London Architects. Tel. AMBassador 4641. 1877

**MODELS AND COLOUR PERSPECTIVES.** Charles Houthuesen offers work of the highest quality. 16, Thames Street, Sunbury-on-Thames, Middlesex. Sunbury 3728. 2339

**ARCHITECTURAL MODELS.**—Thomas R. Bartlett and Partners specialise in this work. 5 King's Ave., W.5. Phone Perivale 6283 6176

**MODELS FOR ARCHITECTS.** Charles Longbotham specialises in this work and offers first class personal service to architects in the London area. Northcroft Studio, Northcroft Road, West Ealing, W.13. Phone Ealing 7349. 1436

**"NAPIER Models."** Specialists in Architectural work. Stanley Studios, S.W.10. FLAXman 2118. 3551

**TEAM** of capable Assistants, experience leading offices, offer efficient ghosting service for all types of work. Box 3803.

**TWO LONDON ARCHITECTS** recently established in own practices are able to assist other firms with all types of work. Box No. 3817.

**SIEBER FOR**  
A 'T STAR' LOGICAL CLOTHROOM

- SAVES SPACE
- SAVES COST
- PRESERVES GARMENTS
- ENSURES HYGIENE
- AIRS AND DRIES WET CLOTHING
- REDUCES ABSENTEEISM
- MEETS NEW FACTORY ACT

Installed in Factories, Stores, Offices, Swimming Baths, etc. throughout the country.

**JAMES SIEBER**  
Equipment Co. Ltd.  
Arling House  
Ringside, London, W.C.2

### IT SAVES TIME & MONEY to specify

## FURSE

### STAGE EQUIPMENT

A very comprehensive design and advisory service is available to Architects for Schools, Public Halls and the like.

**W. J. FURSE & CO. LTD.**  
TRAFFIC ST., NOTTINGHAM — LONDON, MANCHESTER

### Golden Opportunity

## AGENTS URGENTLY REQUIRED in

LONDON, BIRMINGHAM, CARDIFF AND SCOTLAND.  
BY THE MANUFACTURERS OF  
**CEILON ACOUSTIC PANNELLING**

The company is expanding rapidly and offers a retainer and generous commission to first class salesmen of the highest calibre. Successful applicants should reside or be prepared to reside in the area, and own a car. Write in strict confidence giving full details of career and qualifications to:

**CEILON LTD.**  
242A STOCKPORT ROAD · CHEADLE · [CHESHIRE

**NOISY CISTERN SILENCED**

with the **CRAIG "SILENT" BALLCOCK**

By introducing the **CRAIG SILENT BALLCOCK** in W.C. cisterns and attic supply tanks, irritating CISTERN NOISE and WATER HAMMER is effectively removed. So constructed that back syphonage is impossible, the "CRAIG" fits any make of cistern and costs as little as £2.9.0.

INDISPENSABLE IN HOMES, HOSPITALS, HOTELS, OFFICES, CLUBS, ETC. Write for particulars to

**The SILENT BALLCOCK Co Ltd**  
MONIFIETH, DUNDEE, SCOTLAND

**GRUNDIG STENOIRETTE/MEMORETTE/7 in.** tapes transcribed promptly and accurately. Knowledge of building terms. A-Z Office Services, 31, Winchester Road, N.W.3. FRI. 3715. 3804

**SERVICES OFFERED**  
**FARNHAM-GUILDFORD** area. Architect offers freelance or personal part time assistance to members. F.R.I.B.A. with broad general experience. Box 3734.

**FOUNDATION STONES.** Sculptured Panels, Commemorative Tablets, etc., designed and executed by experienced sculptors and expert lettering craftsmen. Carved heraldry, bronze plaques. Sculptured Memorials, 67, Ebury Street, S.W.1. 1983

**NAMEPLATES, PLAQUES, CRESTS**, etc., in bronze, brass, and plastic; quotations and lay-outs submitted.—Abbey Craftsmen, Ltd., Abbey Works, 109a, Old Street, London, E.C.1. CLE 3846. 4166

**GROUP** of qualified Assistants—resident Newcastle upon Tyne—willing to undertake part time work of any size for members who require temporary assistance. Box 3781.

### Partnership and Financial

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

**SENIOR ARCHITECTURAL ASSISTANT**, competent and enthusiastic, to take charge of branch office at Surbiton, with opportunity for Junior Partnership. Broadway & Malyan, 34, Baker Street, Weybridge. Phone Weybridge 3551. 3800

### Premises To Let

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

**TO LET**, in Mayfair, London. Drawing Office, 230 sq. ft., and smaller Office, 130 sq. ft., with possibility of future expansion. 3796

### For Sale and Wanted

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

**FOR SALE**, small busy Country Practice; S. Midlands. £3,000 gross last year. Expanding area. Box 3318.

### Miscellaneous

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

**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.1. Canonbury 2061. 2883

**HANDMADE, CLAY TILES** available in many beautiful colours. The perfect roofing material with the longest life. Particulars, samples and brochure from G. Tucker & Son, Ltd., Loughborough, Leicestershire. Phones: Loughborough 2446/7. 1609

**CROGGON & CO. LTD.**—Chain Link Fencing and all types of Wrought Iron Fencing supplied and erected.—230, Upper Thames Street, London, E.C.4. Central 4382. 9489

### Educational Announcements

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

**R. I.B.A. and T.P.I. EXAMS.**—Stuart Stanley (Ex Tutor Sch. of Arch. Lon. Univ.), and G. A. Crockett, M.A./B.A., F.R.I.B.A., M./A.M.T.P.I., prepare Students by correspondence. 19, Adelaide Street, Strand, W.C.2. THM. 2563/4. 9953



## BROUGHTON MOOR

light sea green,  
olive green & blue



## SLATE

for Facings, Foundation Stones, Paving  
and Flooring, Steps, Cills, Shop  
Fronts, Surrounds, Pillasters, Fire-  
places and all architectural work.

Send for technical pamphlets:

1. Flooring 2. Facings 3. Coping
4. Cills 5. Riven Faced Slabs

THE  
**BROUGHTON MOOR**  
GREEN SLATE QUARRIES LTD.,  
Coniston, Lancashire

Telephone: Coniston 226/6  
Telegrams: Cann, Coniston

### FULL OR SUPPLEMENTARY TUITION

Provided by correspondence for R.I.B.A. examina-  
tions. Revision Courses also available in any subject.  
Descriptive brochure on application

### ELLIS SCHOOL OF ARCHITECTURE

Principal: A. B. Waters F.R.I.B.A., F.I.Arb.  
103B, Old Brompton Rd., London, S.W.7  
and at Albany House, Worcester.

## BROAD-ACHESON

BLOCKS for

unvarying quality

PRODUCTION OF ALL SIZES NOW  
CENTRALISED AT GREENWICH WORKS

BROAD & CO. LTD. PADDINGTON, W2

### VERMICULITE CLADDING LIMITED

Precast Fire Resisting Casings for  
R.S.J.'s and Stanchions.

LONDON ROAD, CHALFONT—ST. GILES

Telephone Nos. 45 & 46

## KIRKSTONE

GREEN SLATE FOR WALL  
CLADDING, CILLS,  
COPING, FLOORING, PAV-  
ING, ETC.

The slate from our quarries has  
been used for these purposes for  
over 50 years. Our accumulated  
experience is offered to Architects in  
the services of our Technical Staff  
and illustrated literature.

Service in Slate  
KIRKSTONE GREEN  
SLATE QUARRIES Ltd.  
Ambleside; Westmorland

Tel.: Amb. 3270



### D. & J. TULLIS LTD.

CLYDEBANK, SCOTLAND

Tel: Clydebank 1861

Branches also at London, Birmingham  
and Manchester

## HY-RIB

combined shuttering  
and reinforcement

long span metal lathing

HY-RIB DIVISION  
15-17 Lower Mark Lane, London E1  
Telephone: WATFORD 602

## today's slate WINCILATE

A NATURAL  
MATERIAL WITH  
A BIG PLACE  
IN MODERN  
ARCHITECTURE



Wincilate is a natural slate  
which has been specially  
selected and quarried in  
the Bow Slate & Enamel Co. Ltd.  
The Bow Slate & Enamel Co. Ltd.  
The Bow Slate & Enamel Co. Ltd.

## SANDLIME FACING

## BRICKS

TO B.S.S. 187 1/2

BRICKS FOR SPECIAL PURPOSES

WHITE - S.P.W. BRAND

COLOURED - M.E. BRAND

ALSO

CLASS 1st and CLASS 2nd

M. McCARTHY & SONS, LTD.

BULWELL

NOTTINGHAM

Telephone: BULWELL 27, 28, 29, 30

D.S.J. VARITYPING and  
I.B.M. ELECTRIC TYPING  
for Offset Litho reproduction.  
Also stencil cutting, etc.

MERCURY SERVICES

41/43 Wardour Street, W.1. GER 8757

## 'SYSTON' ROLLING SHUTTERS IN STEEL, WOOD AND ALUMINIUM 'SYSTON' SERVERY HATCHES

MANUFACTURED TO YOUR OWN SPECIFICATION  
AT COMPETITIVE PRICES WITH RAPID DELIVERY

J. TAYLOR (SYSTON) LTD. • SYSTON • LEICESTER

TEL: SYSTON 2133 • MANCHESTER: RINGWAY 3996

*Architects*  
Ask for Particulars  
and Quotations

In the Interest of your clients  
SPECIFY SHOT BLASTING before  
METAL SPRAYING and/or Priming

SHOT BLASTING & METAL SPRAYING CO. LTD. SILWOOD ST. LONDON S.E.16. Phone: BERNARDSLEY 1131

CUT ALONG THIS LINE

FIRST FOLD HERE

## AJ enquiry service

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.

Postage  
will be paid  
by  
Licensee

FOLD HERE

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

TO BE IN THIS END

## Alphabetical index to advertisers

	PAGE	CODE
A.B.C.D. (Raynes Park), Ltd.....	2	0002
A.E.I. Lamp & Lighting Co., Ltd.	10	0008
Adamite Co., Ltd., The.....	101	0006
Air Control Installations, Ltd., The .....	144	0010
Alcan Industries, Ltd.....	30, 31	0441
Allied Ironfounders, Ltd.....	13	1061
Allied Ironfounders, Ltd.....	27	1049
Antiference Installations, Ltd....	148	1032
Appleton, N. V., Ltd.....	43	0834
Architectural Press, Ltd.....	91	0026
Armstrong Cork Co., Ltd.....	57	0027
Atkins, W. G., & Partners.....	156	—
Austins of East Ham, Ltd.....	167	0777
Autotype Co., Ltd., The.....	144	0043
Avery, J., & Co., Ltd.....	123	0044
Banister, Walton & Co., Ltd.....	91	0047
Bath & Portland Stone Firms, Ltd., The.....	36	1147
Baxendale & Son, Ltd., Richard	111	0987
Bech Neale & Co., Ltd.....	17	1140
Beresford, James, & Sons, Ltd....	152	0059
Beves & Co., Ltd.....	106	0062
Bigwood Bros. (Birmingham), Ltd.	167	0064
Borough of Camberwell.....	161	0077
Booth, John, & Sons (Bolton), Ltd.....	137	0079
Boulton & Paul, Ltd.....	128	1065
Bow Slate & Enamel Co., Ltd., The .....	164	0083
Brady, G., & Co., Ltd.....	134	0085
Brightside Heating & Engineering Co., Ltd.....	3	0089
British Electrical Dev. Assoc.....	139	0095
British Industrial Engineering, Ltd.....	131	0096
British Insulated Callender's Cables, Ltd.....	46	0770
British Monorail, Ltd.....	89	0097
British Paints, Ltd.....	90	0099
British Plaster Board (Mnfr.), Ltd., The.....	69	0102
Broad & Co., Ltd.....	164	0111
Broughton Moor Green Slate Quarries, Ltd.....	113, 164	0115
Burgess Products Co., Ltd.....	46	0121
Cafferata, Ltd.....	47	0126
Camberwell Borough Council .....	161	—
Canadian Government .....	83	0191
Caselloid, Ltd.....	147	0784
Catebys, Ltd.....	103	0134
Celcon, Ltd.....	163	—
Central Electricity Generating Board .....	158	0842
Coal Utilisation Council, The.....	16	0147
Colvilles, Ltd.....	93	0962
Colt, W. H. (London), Ltd.....	65	0152
Confederation Life Association...	151	0820
Coseley Buildings, Ltd.....	94	0160
Crane, Ltd.....	67	0166
Crittall Mfr. Co., Ltd., The .....	44	0169
Crompton Parkinson, Ltd.....	97	0172
Cullam, Horace W., & Co., Ltd....	26	1131
Danks of Netherthorn, Ltd.....	124	0176
Delta Metal Co., Ltd., The.....	94	1063
Demolition & Construction Co., Ltd., The.....	107	0180
Dexion, Ltd.....	15	0179
Downing, G. H., & Co., Ltd.....	136	0187
Duraflex Housecrafts, Ltd.....	88	0819

	PAGE	CODE
Eastwoods Sales, Ltd.....	116	0198
Econa Modern Products, Ltd.....	53	0199
Ekco Plastics, Ltd.....	145	1042
Ellard Sliding Door Gears, Ltd....	2	0201
Ellis School of Architecture, The...	164	0202
Engert & Rolfe, Ltd.....	19	0204
Evered & Co., Ltd.....	162	0209
Evode, Ltd.....	5	0626
Expanded Metal Co., Ltd., The...	20	0211
F.E.B. (Great Britain), Ltd.....	23	0216
Flexaire, Ltd.....	85	0227
Fordham Pressings, Ltd.....	146	0232
Freeman, Joseph, & Sons, Ltd....	35	0236
Furse, W. J., & Co., Ltd.....	163	0241
G.F.N. Reinforcements, Ltd.....	168	0244
Gas Council, The.....	54, 55	0246
General Electric Co., Ltd., The ...	95	0229
General Electric Co., Ltd., The...	58	0250
Gliksten Doors, Ltd.....	138	0255
Goodlass, Wall & Co., Ltd.....	61	0256
Gothic Engineering Co., Ltd.....	9	0940
Greenwood's & Airvac Ventilating Co., Ltd.....	11	0263
Grundig (Gt. Britain), Ltd.....	21, 22	0790
Guest, Keen & Nettlefolds (Mid- lands), Ltd.....	104	0265
Gyproc Products, Ltd.....	127	0266
Gypsum Mines, Ltd.....	141	1062
Haden, G. N., & Sons, Ltd.....	6	0922
Halstead, James, Ltd.....	86	0744
Harvey, G. A., & Co. (London), Ltd.....	96	0284
Heal Contracts, Ltd.....	117	0286
Higgs & Hill, Ltd.....	81	—
Hill Bros. (Service), Ltd.....	151	0918
Hills Hoists (U.K.), Ltd.....	100	0983
Hills (West Bromwich), Ltd.....	41	0297
Home Fittings (Gt. Britain), Ltd.	150	0307
Hope, Henry, & Sons, Ltd.....	120	0309
Hope's Heating & Engineering Co., Ltd.....	130	0310
Horsley, Smith & Hewatson.....	135	0311
Humasco, Ltd.....	40	0941
Hume, Atkins & Co., Ltd.....	102	0840
Ideal Boilers & Radiators.....	25	1122
Ideal Boilers & Radiators.....	12	0315
Imperial Aluminium Co., Ltd.....	76	0919
Imperial Aluminium Co., Ltd.....	152	—
Imperial Chemical Industries, Ltd. (Plastics) .....	75	0319
J.R. Enterprises, Ltd.....	8	1146
Jablo Plastics Industries, Ltd.....	151	0328
James, W., & Co., Ltd.....	141	0330
Jones, T. C., & Co., Ltd.....	129	0333
Kay, William (Bolton), Ltd.....	146	0335
King, George W., Ltd.....	110	0342
Kirkstone Green Slate Quarries, Ltd.....	164	0739
Kleine Co., Ltd., The .....	196	1022
L. & G. Fire Appliance Co., Ltd....	144	0932
Lead Development Association 132,	133	0709
Linoleum Manufacturing Co., Ltd.	4	0798
Lockhead Hydraulic Brake Co., Ltd.....	158	—
Low, Archibald, & Sons, Ltd.....	24	0591
Luminated Ceilings, Ltd.....	72	0369
McCarthy, M., & Sons, Ltd.....	164	0374
Mander Bros., Ltd.....	92	0382
Marley Concrete, Ltd.....	148	0388
Mercury Service.....	164	—
Metal Sections, Ltd.....	79	0403

	PAGE	CODE
Metemicals (Cannon), Ltd.....	143	1159
Monk, A., & Co., Ltd.....	114	0420
Monsanto Chemicals, Ltd.....	105	0421
Morris, M. A., Ltd.....	78	0914
Nairn, Michael, & Co., Ltd.....	121	0427
National Federation of Clay Indus- tries, The.....	32	0430
Newman, William, & Sons, Ltd....	80	0435
Newton, Chambers & Co., Ltd....	125	0437
Normanton Engineers, Ltd.....	150	0439
Nuralite Co., Ltd., The.....	62	1113
Olsson, Martin (Fibreboards), Ltd.	63	0445
Omnia Constructions, Ltd.....	119	0447
Panel-Lastic Construction Co., Ltd.....	146	0973
Peglers, Ltd.....	64	0455
Pilkington Bros., Ltd.....	36	0472
Pochin (Manchester), Ltd.....	140	1044
Polybond, Ltd.....	100	0481
Prestwich, William, & Sons, Ltd.	148	0860
Quickset Water Sealers, Ltd.....	143	0795
Radiation Group Sales, Ltd.....	34	0496
Remploy, Ltd.....	142	0504
Reynolds, A., & Co., Ltd.....	53	0696
Ronuk, Ltd.....	2	0519
Rowe Industries (Kirkby), Ltd. ...	48	1158
Sanders & Forster, Ltd.....	70, 71	0533
Sankay, J. H., & Sons, Ltd.....	74	0535
Seaboard Lumber Sales Co., Ltd.	89	0542
Shell Chemical Co., Ltd.....	14	0964
Shepley Booth & Associates, Ltd.	142	1059
Shoreditch Borough Council .....	159	—
Shot Blasting & Metal Spraying Co., Ltd.....	164	1133
Sieber, James, Equipment Co., Ltd.....	163	0905
Sieglwart Floor Co., Ltd.....	51	0556
Silent Balcock Co., Ltd., The.....	163	0916
Sound Control, Ltd.....	66	0577
Stevenson, John, & Sons, Ltd.....	149	0599
Stramit Boards, Ltd.....	138	0604
Swiftplan, Ltd.....	29	0613
Tarmac Vinculum, Ltd.....	147	0618
Taylor, Robert, & Co., Ltd.....	42	0620
Taylor, John, Dunford & Co., Ltd.	164	0619
Templewood, Hawksley, Ltd.....	33	0625
Tentex Co., Ltd.....	98	0627
Thermacoust, Ltd.....	149	0629
Thermalite Ytong, Ltd.....	122	0630
Thompson, John, Beacon Win- dows, Ltd.....	16	0631
Thorn, J., & Sons, Ltd.....	73	0632
Timber Development Assoc., Ltd. .....	108, 109	0635
Timber Fireproofing Co., Ltd.....	110	0636
Tretol, Ltd.....	7	0638
Truscon, Ltd.....	118	1038
Truscon, Ltd.....	164	0645
Tunnel Portland Cement Co., Ltd., The .....	59	0647
Ulster Chipboard Co., Ltd., The...	77	1136
Venesta Plywood, Ltd.....	28	0658
Vermiculite Cladding, Ltd.....	164	0662
Versatile Fittings (W.H.S.), Ltd....	68	0663
Vigors Bros., Ltd.....	88	0665
Vitreous Enamel Dev. Council.....	99	0748
Walker, Crosswell & Co., Ltd. ...	49	0669
Walters, Austin & Son, Ltd.....	155	0941
Wandsworth Electrical Manuf. Co., Ltd., The.....	50	0674
Wanson Co., Ltd.....	56	0675
Ward & Co. (Letter), Ltd.....	158	0676
Watco (Sales), Ltd.....	141	0682
Wates, Ltd.....	87	0684
Wednesbury Tube Co., Ltd., The Welsh Tinplate & Metal Stamping Co., Ltd.....	100	0686
Wheatly & Co., Ltd.....	140	1128
Whidbore, J. E., Ltd.....	87	0689
Williamson, Jas., & Son, Ltd.....	153	1151
Yorkshire Imperial Metals, Ltd....	68	0697

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property and Land Sales, see 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163

Write in block letters, or type, your name, profession, and address below, and fold so that the post-paid address is on the outside.

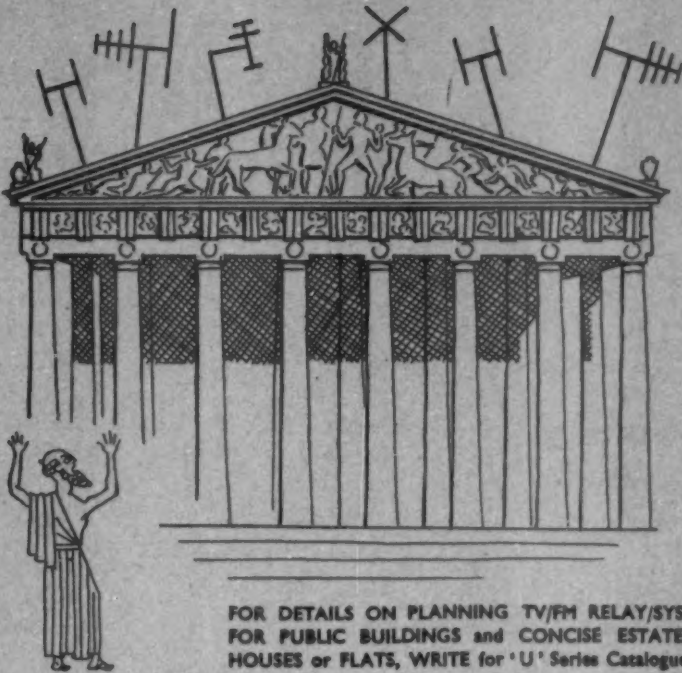
NAME

PROFESSION

ADDRESS



# THE GREEKS HAD A WORD FOR IT . . .



Had the birth of electronic communication coincided with the age of Greek classical architecture, some ancient outraged architect would quickly have said the word condemning the festooning of his masterpiece with a multiplicity of aerials.

Such an array of assorted antennae silhouetted on the skyline of modern buildings can easily be avoided if expert advice and assistance is sought before installing radio reception equipment.

Just say the word by letter or 'phone and we are at your service

AND THE WORD TODAY IS . . .



FOR DETAILS ON PLANNING TV/FM RELAY/SYSTEMS  
FOR PUBLIC BUILDINGS and CONCISE ESTATES OF  
HOUSES or FLATS, WRITE for 'U' Series Catalogue to—

## TELENG LIMITED

Teleng Works, Church Road, Harold Wood, Romford Essex

Ingrebourne 42976-7-8

## UPWARD OPENING DOOR

BY **Austins**  
with **Henderson** GEAR  
for less than £18-0-0



**LIGHT—PERFECT IN BALANCE  
OPENS AT A TOUCH  
OPERATES SILENTLY  
AND GENTLY**

AUSTINS OF EAST HAM LIMITED  
LONDON, E4 GRANGEWOOD 34449  
A.J.6



Contractors: Messrs. Wates Ltd. Flats on Wyndham Farm Estate, Birmingham.  
City Architect: A. G. Sheppard Fidler Esq., M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

## METALWORK

for the Building and Civil Engineering Industries

BALUSTRADES RAILINGS  
FIRE ESCAPES SPIRALS  
SPECIAL STAIRCASES  
BRIDGE BALUSTRADING

## BIGWOOD BROS.

(BIRMINGHAM) LTD

WOODFIELD ROAD • BALSALL HEATH • BIRMINGHAM, 11  
Established 1879 Phone: CALthorpe 3641/8  
London Offices: 66 VICTORIA STREET, LONDON, S.W.1

## Alphabetical index to advertisers

	PAGE	CODE
A.B.C.D. (Raynes Park), Ltd.	2	0002
A.E.I. Lamp & Lighting Co., Ltd.	10	0008
Adamite Co., Ltd., The	101	0006
Air Control Installations, Ltd., The	144	0010
Alcan Industries, Ltd.	30	0441
Allied Ironfounders, Ltd.	13	1061
Allied Ironfounders, Ltd.	27	1049
Antiference Installations, Ltd.	148	1032
Appleton, N. V., Ltd.	43	0834
Architectural Press, Ltd.	91	0026
Armstrong Cork Co., Ltd.	57	0027
Atkins, W. G., & Partners	156	—
Austins of East Ham, Ltd.	167	0777
Autotype Co., Ltd., The	144	0043
Avery, J., & Co., Ltd.	123	0044
Banister, Walton & Co., Ltd.	91	0047
Bath & Portland Stone Firms, Ltd., The	38	1147
Baxendale & Son, Ltd., Richard	111	0987
Bech Neale & Co., Ltd.	17	1140
Beresford, James, & Sons, Ltd.	153	0059
Beves & Co., Ltd.	106	0062
Bigwood Bros. (Birmingham), Ltd.	167	0064
Borough of Camberwell	161	0077
Booth, John, & Sons (Bolton), Ltd.	137	0079
Boulton & Paul, Ltd.	128	1065
Bow Slate & Enamel Co., Ltd., The	164	0083
Brady, G., & Co., Ltd.	134	0085
Brightside Heating & Engineering Co., Ltd.	3	0089
British Electrical Dev. Assoc.	139	0095
British Industrial Engineering, Ltd.	131	0096
British Insulated Callender's Cables, Ltd.	46	0770
British Monorail, Ltd.	82	0097
British Paints, Ltd.	90	0099
British Plaster Board (Mnfg.), Ltd., The	69	0102
Broad & Co., Ltd.	164	0111
Broughton Moor Green Slate Quarries, Ltd.	113	0115
Burgess Products Co., Ltd.	45	0121
Cafferata, Ltd.	47	0126
Camberwell Borough Council	161	—
Canadian Government	83	0191
Caselloid, Ltd.	147	0784
Catesbys, Ltd.	103	0134
Celcon, Ltd.	163	—
Central Electricity Generating Board	158	0842
Coal Utilisation Council, The	18	0147
Colvilles, Ltd.	93	0962
Colt, W. H. (London), Ltd.	65	0152
Confederation Life Association	151	0820
Coseley Buildings, Ltd.	94	0160
Crane, Ltd.	67	0166
Crittall Mfg. Co., Ltd., The	44	0169
Crompton Parkinson, Ltd.	97	0172
Cullam, Horace W., & Co., Ltd.	26	1131
Danks of Netherton, Ltd.	124	0176
Delta Metal Co., Ltd., The	84	1063
Demolition & Construction Co., Ltd., The	107	0180
Dexion, Ltd.	15	0179
Downing, G. H., & Co., Ltd.	136	0187
Duraflex Housecrafts, Ltd.	88	0819

	PAGE	CODE
Eastwoods Sales, Ltd.	116	0198
Econa Modern Products, Ltd.	52	0199
Ekco Plastics, Ltd.	145	1042
Ellard Sliding Door Gears, Ltd.	2	0201
Ellis School of Architecture, The	164	0202
Engert & Rolfe, Ltd.	19	0204
Evered & Co., Ltd.	152	0209
Evode, Ltd.	5	0626
Expanded Metal Co., Ltd., The	20	0211
F.E.B. (Great Britain), Ltd.	23	0216
Flexaire, Ltd.	85	0227
Fordham Pressings, Ltd.	145	0232
Freeman, Joseph, & Sons, Ltd.	35	0236
Furne, W. J., & Co., Ltd.	163	0241
G.F.N. Reinforcements, Ltd.	168	0244
Gas Council, The	54, 55	0246
General Electric Co., Ltd., The	95	0929
General Electric Co., Ltd., The	58	0250
Gilksden Doors, Ltd.	128	0255
Goodlass, Wall & Co., Ltd.	61	0256
Gothic Engineering Co., Ltd.	9	0940
Greenwood's & Airvac Ventilating Co., Ltd.	11	0263
Grundig (Gt. Britain), Ltd.	21, 22	0790
Guest, Keen & Nettlefolds (Mid- lands), Ltd.	104	0265
Gyproc Products, Ltd.	127	0266
Gypsum Mines, Ltd.	141	1062
Haden, G. N., & Sons, Ltd.	6	0922
Halstead, James, Ltd.	86	0744
Harvey, G. A., & Co. (London), Ltd.	96	0284
Heal Contracts, Ltd.	117	0286
Higgs & Hill, Ltd.	81	—
Hill Bros. (Service), Ltd.	151	0918
Hills Hoists (U.K.), Ltd.	100	0983
Hills (West Bromwich), Ltd.	41	0297
Home Fittings (Gt. Britain), Ltd.	150	0307
Hope, Henry, & Sons, Ltd.	120	0309
Hope's Heating & Engineering Co., Ltd.	130	0310
Horsley, Smith & Hewetson	135	0311
Humasco, Ltd.	40	0941
Hume, Atkins & Co., Ltd.	102	0840
Ideal Boilers & Radiators	25	1122
Ideal Boilers & Radiators	12	0315
Imperial Aluminium Co., Ltd.	76	0919
Imperial Aluminium Co., Ltd.	152	—
Imperial Chemical Industries, Ltd. (Plastics)	75	0319
J.R. Enterprises, Ltd.	8	1146
Jablo Plastics Industries, Ltd.	151	0328
James, W., & Co., Ltd.	141	0330
Jones, T. C., & Co., Ltd.	129	0333
Kay, William (Bolton), Ltd.	146	0335
King, George W., Ltd.	110	0342
Kirkstone Green Slate Quarries, Ltd.	164	0739
Kleine Co., Ltd., The	126	1022
L. & G. Fire Appliance Co., Ltd.	144	0932
Lead Development Association	132, 133	0709
Linoform Manufacturing Co., Ltd.	4	0798
Lockhead Hydraulic Brake Co., Ltd.	158	—
Low, Archibald, & Sons, Ltd.	24	0591
Luminated Ceilings, Ltd.	72	0369
McCarthy, M., & Sons, Ltd.	164	0374
Mander Bros., Ltd.	92	0382
Marley Concrete, Ltd.	148	0388
Mercury Service	164	—
Metal Sections, Ltd.	79	0403

	PAGE	CODE
Metemicals (Cannon), Ltd.	143	1159
Monk, A., & Co., Ltd.	114	0420
Monsanto Chemicals, Ltd.	105	0421
Morris, M. A., Ltd.	78	0914
Nairn, Michael, & Co., Ltd.	121	0427
National Federation of Clay Indus- tries, The	32	0430
Newman, William, & Sons, Ltd.	80	0435
Newton, Chambers & Co., Ltd.	125	0437
Normanton Engineers, Ltd.	150	0439
Nuralite Co., Ltd., The	62	1113
Olsson, Martin (Fibreboards), Ltd.	63	0445
Omnia Constructions, Ltd.	119	0447
Panel-Lastic Construction Co., Ltd.	146	0973
Peglers, Ltd.	64	0455
Pilkington Bros., Ltd.	36	0472
Pochin (Manchester), Ltd.	140	1044
Polybond, Ltd.	100	0481
Prestwich, William, & Sons, Ltd.	148	0860
Quickset Water Sealers, Ltd.	143	0795
Radiation Group Sales, Ltd.	34	0496
Remploy, Ltd.	142	0504
Reynolds, A., & Co., Ltd.	53	0696
Ronuk, Ltd.	2	0519
Rowe Industries (Kirkby), Ltd.	48	1158
Sanders & Forster, Ltd.	70, 71	0533
Sankey, J. H., & Sons, Ltd.	74	0535
Seaboard Lumber Sales Co., Ltd.	89	0542
Shell Chemical Co., Ltd.	14	0964
Shepley Booth & Associates, Ltd.	142	1059
Shoreditch Borough Council	159	—
Shot Blasting & Metal Spraying Co., Ltd.	164	1133
Sieber, James, Equipment Co., Ltd.	163	0905
Sieglwart Floor Co., Ltd.	51	0556
Silent Balcock Co., Ltd., The	163	0916
Sound Control, Ltd.	66	0577
Stevenson, John, & Sons, Ltd.	149	0599
Stramit Boards, Ltd.	138	0904
Swiftplan, Ltd.	39	0613
Tarmac Vinculum, Ltd.	147	0618
Taylor, Robert, & Co., Ltd.	42	0629
Taylor, John, Dunford & Co., Ltd.	164	0619
Templewood, Hawksley, Ltd.	33	0625
Tentest Co., Ltd.	98	0627
Thermacoust, Ltd.	149	0629
Thermalite Ylong, Ltd.	122	0630
Thompson, John, Beacon Win- dows, Ltd.	16	0631
Thorn, J., & Sons, Ltd.	73	0632
Timber Development Assoc., Ltd.	108, 109	0635
Timber Fireproofing Co., Ltd.	110	0636
Tretol, Ltd.	7	0638
Truscon, Ltd.	118	1038
Truscon, Ltd.	164	0645
Tunnel Portland Cement Co., Ltd., The	59	0647
Ulster Chipboard Co., Ltd., The	77	1136
Venesta Plywood, Ltd.	28	0658
Vermiculite Cladding, Ltd.	104	0662
Versatile Fittings (W.H.S.), Ltd.	88	0663
Vigers Bros., Ltd.	88	0665
Vitreous Enamel Dev. Council	99	0748
Walker, Crosweller & Co., Ltd.	49	0669
Walters, Austin & Son, Ltd.	155	0941
Wandsworth Electrical Manuf. Co., Ltd., The	50	0674
Wanson Co., Ltd.	56	0675
Ward & Co. (Letter), Ltd.	158	0676
Watco (Sales), Ltd.	141	0682
Wates, Ltd.	37	0684
Wednesbury Tube Co., Ltd., The	100	0686
Welsh Tintplate & Metal Stamping Co., Ltd.	140	1128
Wheatly & Co., Ltd.	87	0689
Wildbore, J. E., Ltd.	158	1151
Williamson, Jas., & Son, Ltd.	60	0697
Yorkshire Imperial Metals, Ltd.	39	0705

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property and Land Sales, see 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163

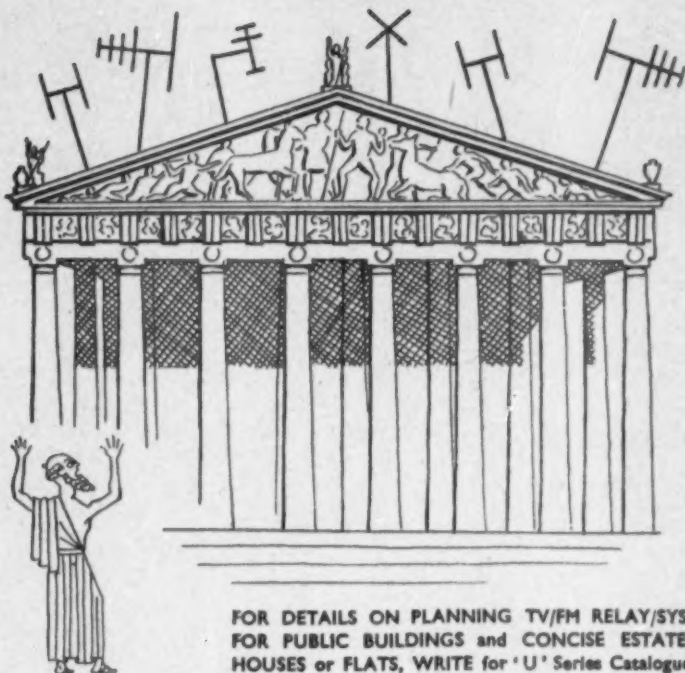
Write in block letters, or type, your name, profession, and address below, and fold so that the post-paid address is on the outside.

NAME

PROFESSION

ADDRESS

# THE GREEKS HAD A WORD FOR IT...



Had the birth of electronic communication coincided with the age of Greek classical architecture, some ancient outraged architect would quickly have said the word condemning the festooning of his masterpiece with a multiplicity of aerials.

Such an array of assorted antennae silhouetted on the skyline of modern buildings can easily be avoided if expert advice and assistance is sought before installing radio reception equipment.

Just say the word by letter or 'phone and we are at your service

AND THE WORD TODAY IS...



FOR DETAILS ON PLANNING TV/FM RELAY/SYSTEMS  
FOR PUBLIC BUILDINGS and CONCISE ESTATES OF  
HOUSES or FLATS, WRITE for 'U' Series Catalogue to—

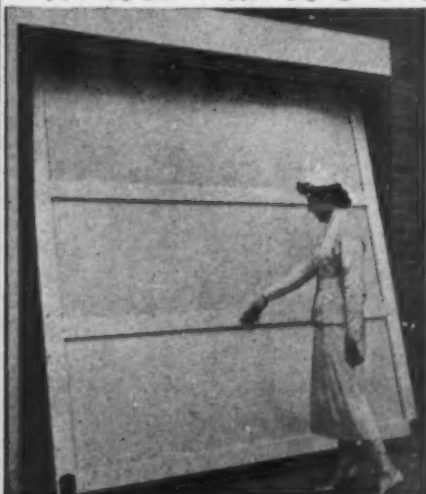
## TELENG LIMITED

Teleng Works, Church Road, Harold Wood, Romford Essex

Ingrebourne 42976-7-8

## UPWARD OPENING DOOR

BY **Austins**  
with **Henderson** GEAR  
for less than £18-0-0



**LIGHT—PERFECT IN BALANCE  
OPENS AT A TOUCH  
OPERATES SILENTLY  
AND GENTLY**

AUSTINS OF EAST HAM LIMITED  
LONDON, E.6 GRANGEWOOD 3444-9  
A.J.6



Contractors: Messrs. Waton Ltd. Flats on Wyckall Farm Estate, Birmingham.  
City Architect: A. G. Sheppard Fidler Esq., M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

## METALWORK

for the Building and Civil Engineering Industries

BALUSTRADES RAILINGS  
FIRE ESCAPES SPIRALS  
SPECIAL STAIRCASES  
BRIDGE BALUSTRADING

## BIGWOOD BROS.

(BIRMINGHAM) LTD

WOODFIELD ROAD • BALSALL HEATH • BIRMINGHAM, 19  
Established 1879 Phone: CALShorpe 3641/2  
London Offices: 68 VICTORIA STREET, LONDON, S.W.1



## DESIGNS IN CONCRETE

10



### WOLVERHAMPTON MARKET

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

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

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



*The Wolverhampton Market Scheme was designed under the direction of the Borough Engineer, H. Schofield, B.Sc (Eng.), A.M.I.C.E., M.I. Mun. E., A.M.T.P.I. and the Architects responsible were:*

*Deputy Borough Architect:*

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

*Chief Assistant Architect:*

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

*Architect In Charge:*

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

*Reinforced Concrete Designers:*

*G.K.N. REINFORCEMENTS LTD.*

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

If you want to put steel into concrete  
get in touch with

# G.K.N. Reinforcements Ltd.

FORMERLY TWISTEEL REINFORCEMENT LTD.

ALMA STREET, SMETHWICK 40, STAFFS. (SMETHWICK 1991)

MIDDLESBROUGH: (Middlesbrough 3943)

LONDON: (Kensington 6311)

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



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

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

Works: SMETHWICK, WIGAN & GLASGOW

