

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

Stragal's Notes and Topics

Letters

News

Diary

Societies and Institutions

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Working Details

Questions and Answers

Prices

The Industry

CURRENT BUILDING

Major Buildings described:

Details of Planning, Construction,

Finishes and Costs

Buildings in the News

Building Costs Analysed

Architectural Appointments

Wanted and Vacant

No. 3304]

[Vol. 127

THE ARCHITECTURAL PRESS

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

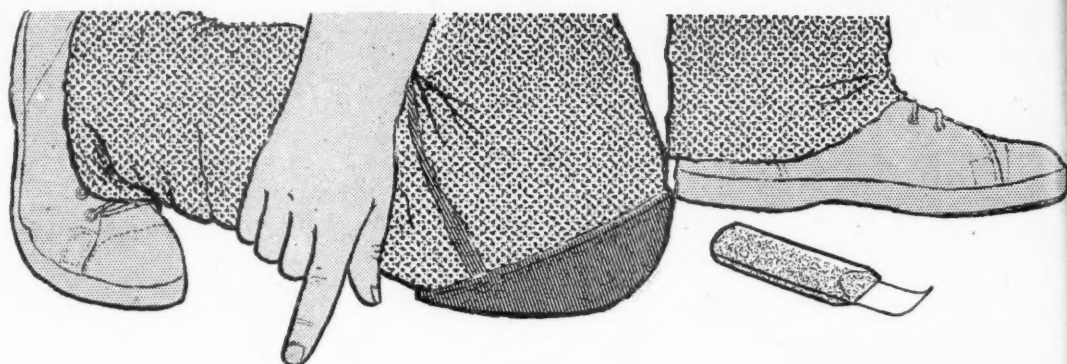
W.1. 'Phone: Whitehall 0611

Price 1s. 0d.

Registered as a Newspaper.

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

IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square. Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 100, Park Street, Grosvenor Square, W.1. Mayfair 7086
ILA	Institute of Landscape Architects. 2, Guilford Place, W.C.1. Holborn 0281
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1. Museum 7179
IQS	Institute of Quantity Surveyors. 98, Gloucester Place, W.1. Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128
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
LSPC	Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1. Trafalgar 7711
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1. Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300
MOLNS	Ministry of Labour and National Service. 8, St. James's Square, S.W.1. Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, W.C.2. Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council. 94/98, Petty France, S.W.1. Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619
NCBMP	National Council of Building Material Producers, 10, Storey's Gate, S.W.1. Abbey 5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry. 21, John Adam Street, Adelphi, W.C.2. Trafalgar 3927
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1. Whitehall 1693
NHBRC	National House Builders Registration Council. 58, Portland Place, W.1. Langham 0064/5
NPL	National Physical Laboratory. Head Office, Teddington. Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3. Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1. Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Fountainbridge 7631
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 5322/9242
RFAC	Royal Fine Art Commission. 5, Old Palace Yard, S.W.1. Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1. Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1. Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House 3921
SIA	Society of Industrial Artists. 7, Woburn Square, London, W.C.1. Langham 1984/5
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen
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 663



When you get down to the floor

Architects are saving much of their valuable time for creative work by calling in the specialists, HASKEL ROBERTSON, to handle the flooring specification.

For HASKEL ROBERTSON not only supply and lay flooring of all kinds, but can offer expert advice on the basis of their extensive experience.

Call in the **specialists . . .**

Thermoplastic tiles
Synthanite screed
Stair nosings
Vinyl/Asbestos tiles
Crestaline (PVC)
Latex/cement screeds
Resinoid

Linooleum
Cork
Rubber
Duromit
Asphalte
PVC tiles
Bulgomme

Haskel Robertson

HASKEL ROBERTSON LTD
Specialist Flooring Consultants and Contractors
19 Queen Street, Mayfair W.1 Telephone: GROsvenor 8764



RAWLINGS BROS.

LIMITED

ENQUIRIES INVITED FOR

Conversions. Decorations
Electrical Installations

RAWLINGS BROS LTD. 85 GLOUCESTER ROAD, LONDON, S.W.7. Telephone: FRE 8161

ESTABLISHED 1887



on

R



2



*The Kemsley Power Plant, Bowater Paper Corporation.
Architects: Farmer & Dark.*

Consulting Engineers: Ewbank & Partners Limited.

Colt Equipment: 32 S.R.C.3080 Ventilators.

Just as the squat, smoke-belching power houses of the industrial revolution have given way to power plants of such orderly austerity as those that serve the Bowater Organisation, so has the demand for more positive control over the ventilation of these buildings grown stronger. The provision of effective, controllable ventilation called for a revolution in ventilator design. The precise, aero-dynamic lines of the Colt SR Extractor, shown above, epitomise the achievements of that revolution.

In this photograph of the Bowater Power Plant at Kemsley near Sittingbourne in Kent, 32 Colt S.R.C.3080 Controllable Natural Extractors are utilising to the full the free power of the wind and thermal currents to change the air in the building 10 times in each hour. The effect of this is to ensure the maintenance of temperate, fume-free conditions demanded by modern industry, and without which maximum output can never be achieved.

The careful attention to detail that went to the formulation of this, and of the other similar systems at the Bowater Mills in Northfleet and Ellesmere Port, is common to every ventilation scheme, large and small, that Colt undertake. The technical service of the Advisory Staff is always available without charge or obligation. Let Colt solve YOUR problem.



Send for Free Manual on Colt Ventilation to Dept. L21/6B

VENTILATION



COLT VENTILATION LTD · SURBITON · SURREY

TELEPHONE: ELMBRIDGE 6511 (10 lines)

U.S.A. Subsidiary: Colt Ventilation of America, Inc., Los Angeles.

Branches at: Birmingham, Bradford, Bridgend (Glam), Bristol, Dublin, Glasgow, Leamington Spa, Liverpool, London, Manchester, Newcastle-upon-Tyne, and Sheffield. • Agents in: Australia, Belgian Congo, Belgium, Burma, Canada, Cyprus, India, Indonesia, Madagascar, Malaya, Mauritius, New Zealand, Pakistan, Portugal, Rhodesia and Nyasaland, South Africa, and West Indies.

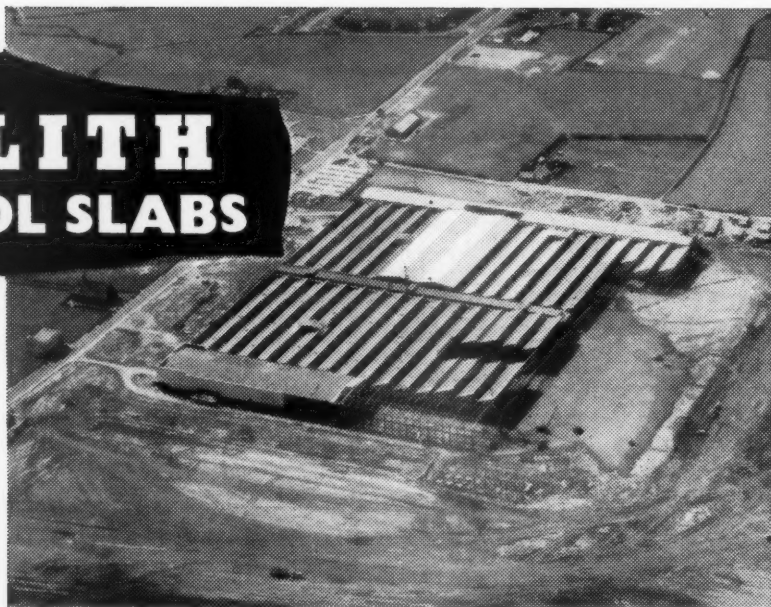
G885

GYPROC supplied the

fire-resisting, thermal insulating slabs

for this factory roof

**GYPKLITH
WOOD WOOL SLABS**



GYPKLITH wood wool slabs are light in weight and have great structural strength and durability. They have exceptional fire protective properties, being virtually incombustible, with Class I surfaces (B.S. 476). As a thermal insulator **GYPKLITH** is excellent—a one inch slab of **GYPKLITH** is equivalent in thermal insulation to twenty-one inches of stone. These are only a few of the features worth studying. Write for leaflet A P358 which gives you complete information.

60,000 sq. yards of Gypklith Wood Wool Slabs at
the Caterpillar Tractor Co. Ltd. Factory at Tannochside, Lanarkshire.
Architects: Wilson, Hamilton & Wilson, F./A.R.I.B.A.
Roofing Contractors: Wm. Briggs & Sons Ltd.

GYPROC PRODUCTS LIMITED

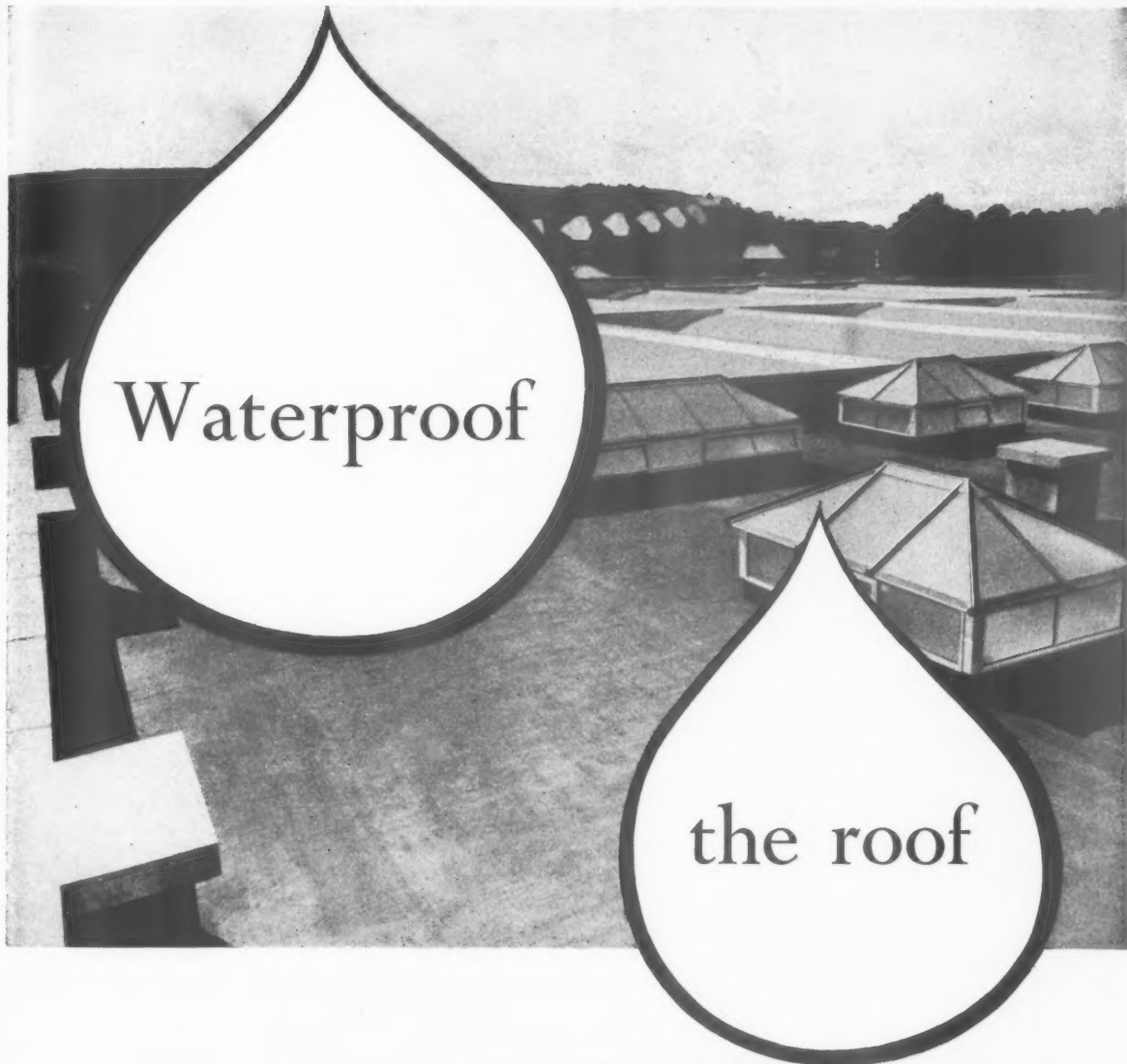
Head Office: Singlewell Road, Gravesend, Kent. Gravesend 4251/4.

Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow S.W.1. Govan 2141/3.

Midland Sales Office: 11 Musters Road, West Bridgford, Nottingham. Nottingham 82101.

London Office: Bata House, 82 Piccadilly, London W.1. Grosvenor 4617/9.

S/GM2



with

EVODE

ROOF WATERPROOFING SYSTEM

* Foreman Demonstrators are available to assist your own work people or, if you prefer, our contracts department can undertake the work for you.

* Any roof can be treated
* Permanent waterproofing
for large or small roofs

* Applied cold without any
preliminary treatment

* Used and proved for 25 years

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

* **SEND FOR LITERATURE** EVODE LTD. (BUILDING CHEMICALS DIVISION) STAFFORD. Phone: 2241
London Office: 1 VICTORIA STREET, S.W.1. Telephone: ABBey 4622

M-W.65



Good flush doors speak for themselves...

There is no mistaking the outstanding high quality of Leaderflush flush doors wherever they are seen—it is a quality born of many years' experience in specialised manufacture—a quality which speaks for itself.

STOCKISTS:—LEADERFLUSH DOORS can be obtained immediately ex stock from the following officially appointed distributors for the areas stated:—

BIRMINGHAM & W. MIDLANDS
British Door Marketing Co. Ltd.,
Burton-on-Trent.

BRISTOL & SOMERSET
Iron & Marble Co. Ltd., Bristol.

DEVON & CORNWALL
Jewsons Ltd., Plymouth.

ABERDEEN & N. SCOTLAND
George Gordon & Co. Ltd.,
Aberdeen.

DURHAM, NORTHUMBERLAND & N. RIDING of YORKSHIRE
J. M. & J. Bartlett Ltd., Newcastle-on-Tyne.

SOUTH WALES

H. R. Paul & Son Ltd., Barry.

ANGLESEY & CAERNARVONSHIRE
Wm. Roberts & Co. Ltd., Menai
Bridge.

**GLOUCS., WORCS.,
HEREFORDSHIRE**

Sharpe & Fisher Ltd., Cheltenham.

CUMBERLAND & WESTMORLAND
Wm. Coulthard & Co. Ltd., Carlisle.

"DELIVERY ON TIME" To all parts of Great Britain and the world is the recognised policy of LEADERFLUSH.

LITERATURE—giving full specification of LEADERFLUSH doors will be gladly sent on request.

Leaderflush

BRITAIN'S FINEST FLUSH DOORS

LEADERFLUSH (DOORS) LTD., TROWELL, NOTTINGHAM.
Tel: ILKESTON 623 (5 lines). Telegrams: LEADAFLUSH, ILKESTON, NOTTINGHAM.



THERE ARE OVER 2,000,000 LEADERFLUSH DOORS IN USE TODAY.



What's the compressive strength?

WITH the increasing use of air entraining agents in office blocks and multi-storey flats, many architects have asked for further data on the compressive strength of mortars incorporating plasticisers in place of lime.

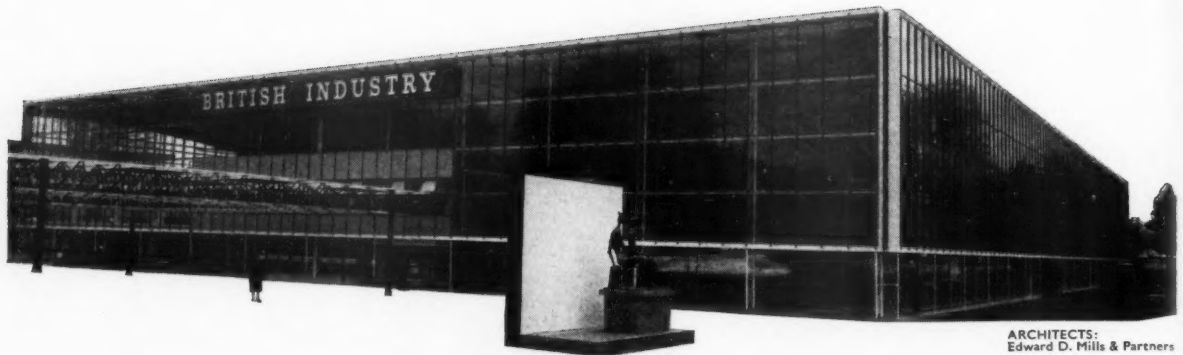
To confirm our own findings, we commissioned the R.H. Harry Stanger Laboratories to carry out independent tests on mortars incorporating TRETOL MORTA-MIX. The Stanger report on these tests confirms that

the performance of the plasticised mortar under a progressively increased crushing load makes it eminently suitable for load-bearing brickwork. Added to this are the other considerable advantages to be gained from the use of TRETOL MORTA-MIX—increased workability, reduced material costs and simplified storage.

We shall be glad to send you a copy of the Stanger report, together with a set of Specification Sheets on the uses of plasticisers in mortars and concrete.

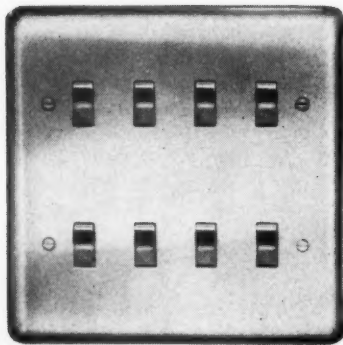
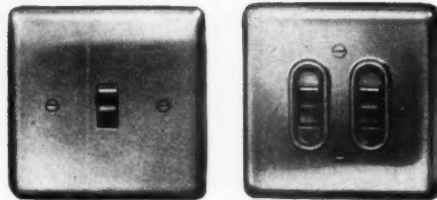
TRETOL LTD., Makers of Building Products and Paints, THE HYDE, LONDON, N.W.9. Telephone: Colindale 7223

MK152
D11B



ARCHITECTS:
Edward D. Mills & Partners

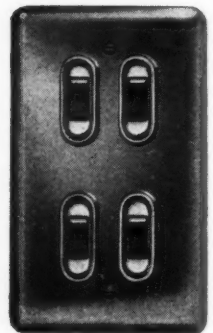
Gridswitches at Brussels



MK Gridswitches and 13 ampere switchsocket-outlets and socket-outlets were selected by the Electrical Engineering Contractors, Messrs James Kilpatrick & Son Limited, for exclusive use within the various buildings in the British Industry section at the Brussels Exhibition. MK accessories are also installed in the Offices, Sub-stations Nos. 1 and 2, the Britannia Inn, the Fox and Hounds, the Cinema, the Self-Service Shop, and on Exhibition Stands.



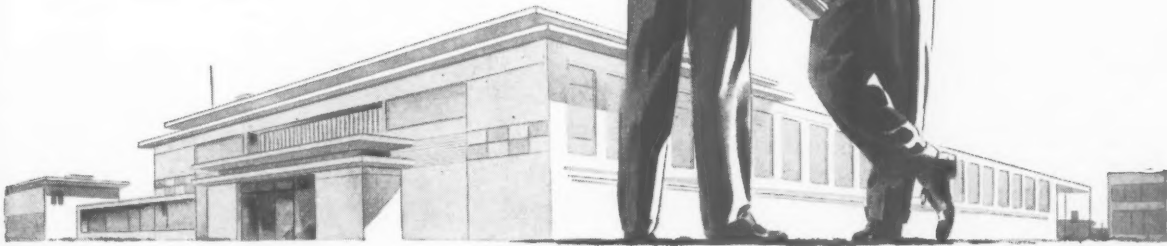
... the mark of leadership



M. K. Electric Limited, Wakefield Street, London N.18 Edmonton 5151

An increasing number of queries regarding the application of Sprayed 'Limpet' Asbestos as a functional element of Architectural Design is being received from Architects.

In this announcement we present the following elementary information to provide a firm platform for further detailed enquiries.



an architect asks questions about Sprayed 'Limpet' Asbestos by NEWALLS

REGD.



"What do you consider is the major advantage of Sprayed 'Limpet' Asbestos?"

Probably the most important element is that the 'Limpet' process gives intimate surface contact, sealing all joints, covering rivets, irregularities and protrusions in a continuous coat that entirely eliminates air spaces—a significant factor in itself.



"It seems too versatile for words. It's a Thermal and Acoustic Insulant, rotproof and verminproof, fire-resistant, prevents condensation, resists vibration . . . anything else?"

Well. It has been used extensively purely as an anti-corrosion measure on metals subject to severe corrosive conditions, but we'd have to know the particular application you had in mind to give our full recommendations.



"I understand that Sprayed 'Limpet' Asbestos has two insulating properties?"

Correct. In addition to providing a high degree of thermal insulation, it is an excellent material for absorbing sound. Indeed, many firms have specified the process for correcting acoustic distortions alone.



"Naturally. And if we did want Thermal and Acoustic Insulation—and Fire protection in one coating—I suppose it would cost the earth?"

Frankly—no. You see, the erection of timber grounds is not necessary. In application there is no cutting to waste, and the density and thickness is controllable to a very fine degree by highly efficient operators. It compares favourably with conventional insulation methods and materials.



"Being largely Asbestos, I suppose the process gives a measure of fire protection?"

Most certainly! Again, it is often used solely because of its fireproofing properties. In fact, this method was the first to be approved for Class A fireproofing of ships under the 1948 Convention.



"Being porous, isn't the treatment liable to premature rotting where condensation exists?"

On the contrary. Asbestos is chemically inert. It is rotproof, verminproof and undamaged by water. Condensation is diffused preventing dripping and allowing for speedy re-evaporation to the atmosphere from the warm surface of the coating.

Newalls

NEWALLS INSULATION CO. LTD.

HEAD OFFICE: WASHINGTON, CO. DURHAM

A member of the TURNER & NEWALL ORGANISATION

Offices and Depots at LONDON, GLASGOW, MANCHESTER, NEWCASTLE UPON TYNE, BIRMINGHAM, BELFAST, BRISTOL & CARDIFF.



BY APPOINTMENT
TO HER MAJESTY THE QUEEN
MANUFACTURERS OF PAINT
THE WALPAMUR CO LTD
DARWEN LANC

WALPAMUR QUALITY PAINTS

The best that money can buy — are used with conspicuous success throughout the country. Best known are Walpamur Water Paint, in interior and exterior qualities, Duradio, the easy-to-apply, quick-to-dry Enamel Paint for inside or outside use and Muromatte Flat Oil Paint, guaranteed leadless and infinitely washable. The full range includes paints, enamels and varnishes of superb quality for every conceivable need.



THE WALPAMUR CO LTD • DARWEN & LONDON

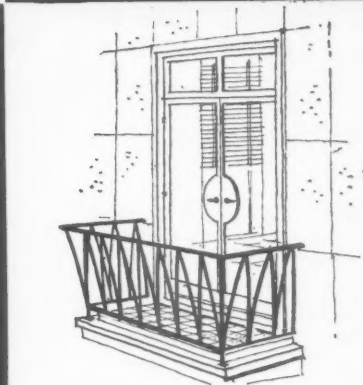
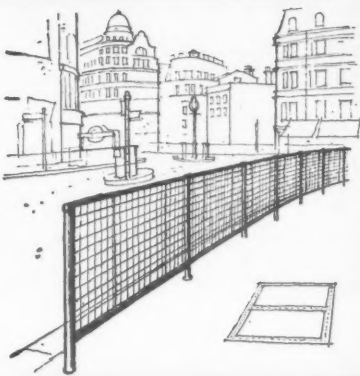
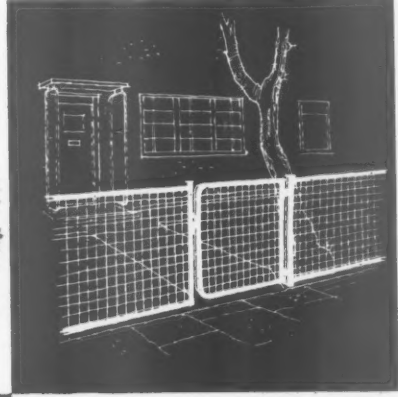
Paints, Enamels and Varnishes for every conceivable need.

Fencing and Gates of every description

including bridge parapet railing, as well as balustrades for balconies and stairways, are made to standard designs or to meet special requirements by

BAYLISS, JONES & BAYLISS LIMITED

Makers of fencing and gates for over a century



BAYLISS, JONES & BAYLISS LIMITED

HEAD OFFICE: VICTORIA WORKS • WOLVERHAMPTON • TELEPHONE: WOLVERHAMPTON 20441
LONDON OFFICE: 139 CANNON STREET • LONDON E.C.4 • TELEPHONE: MANSION HOUSE 8524





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.

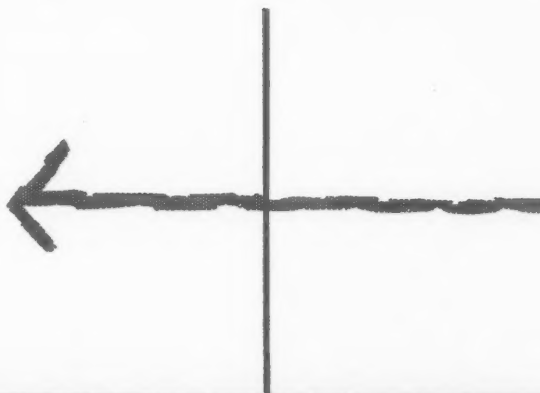
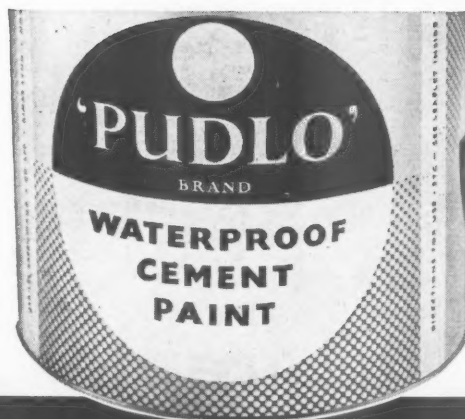
We can give you expert advice, based on sixty years' experience in the design, supply and erection of expanded metal backgrounds for plaster.



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

THE EXPANDED METAL CO. LIMITED BURWOOD HOUSE, CAXTON STREET, LONDON, S.W.1. TEL: ABBEY 7766
ALSO AT: ABERDEEN • BELFAST • BIRMINGHAM • CARDIFF • DUBLIN • EXETER • GLASGOW • LEEDS • MANCHESTER • PETERBOROUGH • WEST HARTLEPOOL

Expamet



'PUDLO' WATERPROOF CEMENT PAINT

for complete protection and durability

'PUDLO' Cement Paint contains the famous 'PUDLO' Brand Waterproofing Powder, and guarantees the protection of outside surfaces against all weather conditions. It also incorporates a surface active agent which ensures spread, evenness and good bonding to the surface.

'PUDLO' Cement Paint is in powder form, and the mix requires no other process than adding water and stirring; it is then ready for use at once. When dry it forms a hard, durable surface which can be washed without danger of flaking or peeling.

'PUDLO' Cement Paint is available in an attractive range of colours, and is entirely suitable for the protection of all types of buildings including factories, public buildings, flats, houses, farm buildings, hospitals, hotels, etc.

**WHEN YOU USE
'PUDLO' CEMENT PAINT
YOU GET THE MAXIMUM
WATERPROOFING PROTECTION**

Get full particulars of 'PUDLO' Cement Paint NOW—they are available on request.



OTHER 'PUDLO' BRAND PRODUCTS INCLUDE:

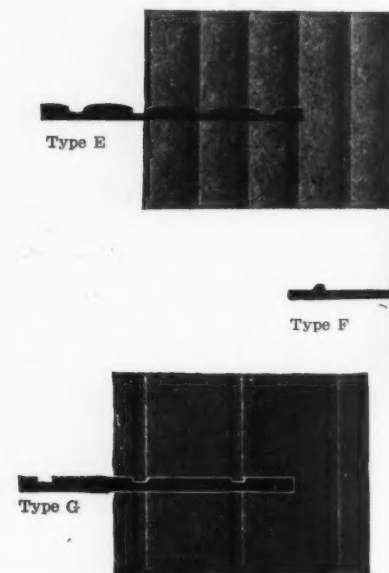
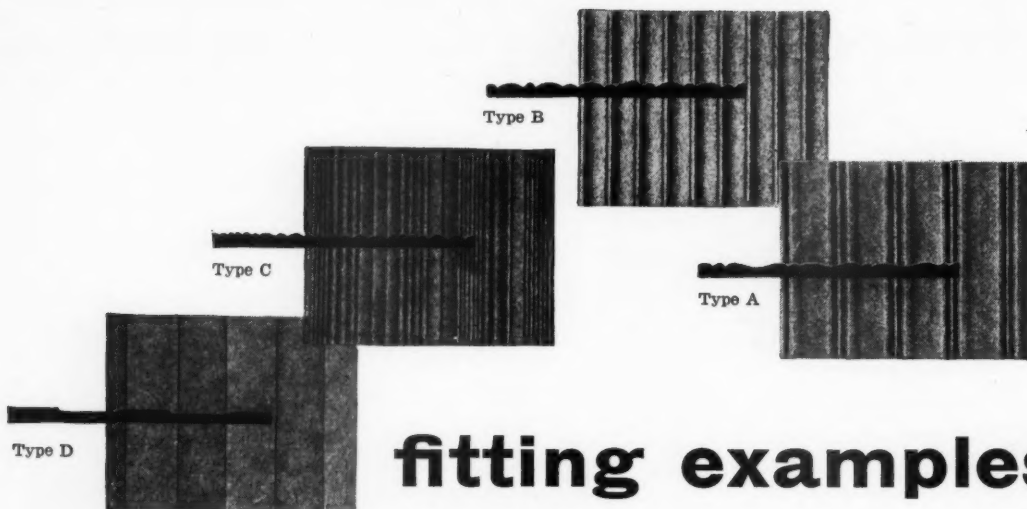
Cement Paint Primer
Cement Waterproofing Powder
External Water Repellent
Cement Bonder
Plaster Bonder
Mortar Plasticiser
Liquid Cement Additive and
Feusol Fire Cement

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

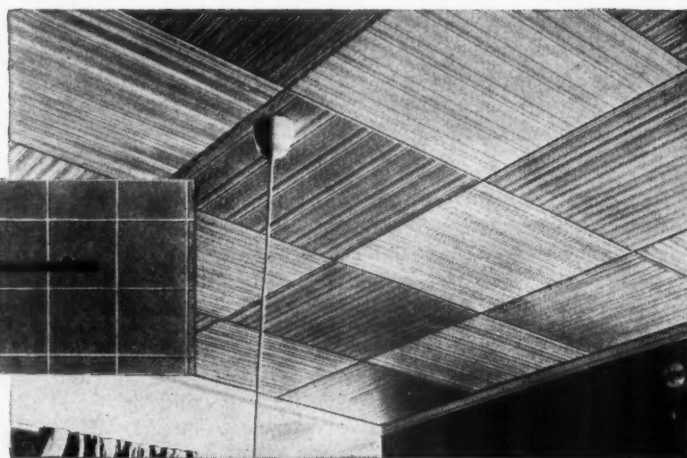
KERNER-GREENWOOD & COMPANY LTD.
KING'S LYNN • NORFOLK



H.P.5445



fitting examples...



An attractive effect can be achieved by using squares of Moulded Hardboard for ceiling panelling. In this photograph Type 'C' has been used.

Moulded Hardboards open up new fields in interior decorating and fitting. They have all the advantages of L.W. Swedish Hardboard, but with the added attraction of DESIGN.

Seven patterns from which to choose . . . seven ways of enhancing the appearance of lounge or lobby, shop or exhibition, home or office. Only imagination sets the limit to the many uses of Moulded Hardboards!



MOULDED HARDBOARDS

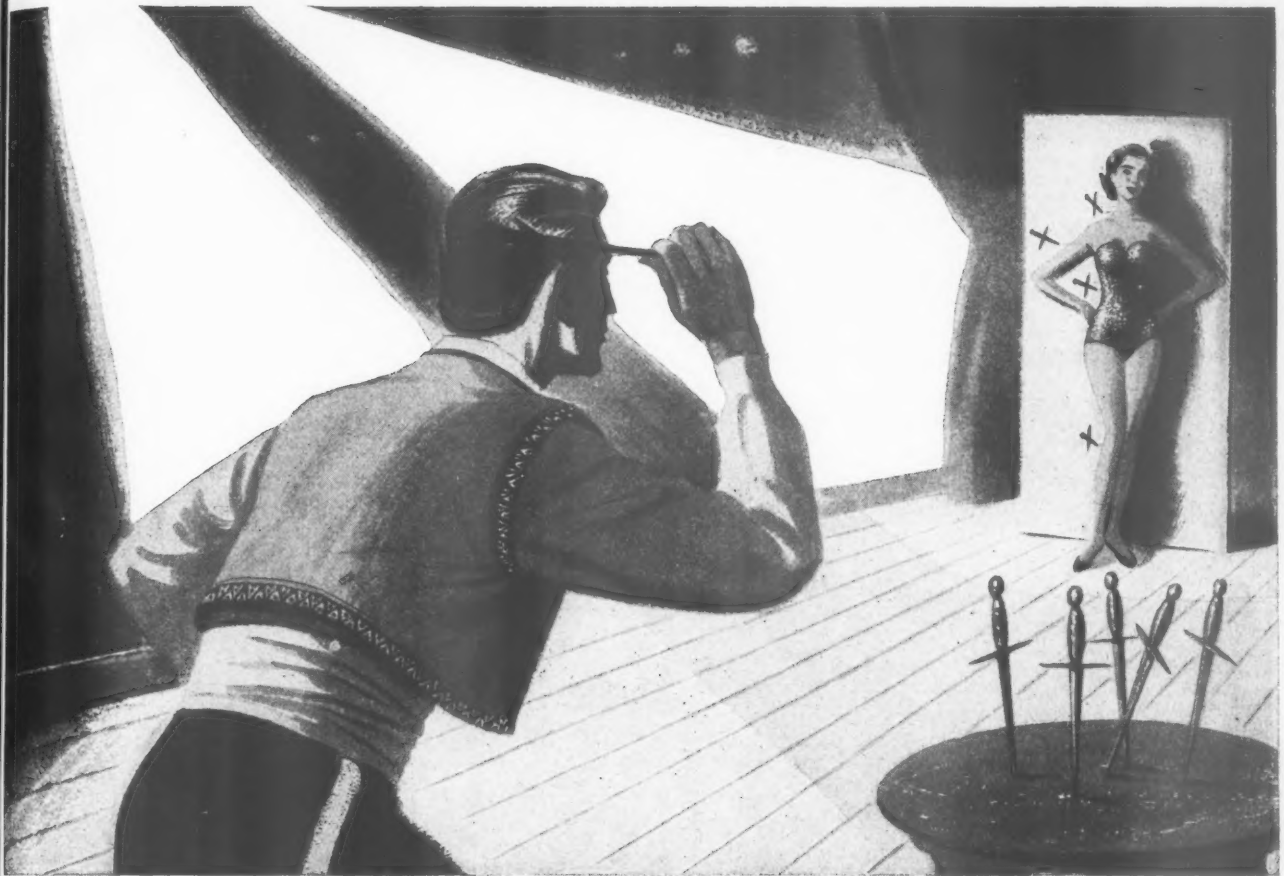
Available in standard 4' x 9' sheets, 1/2" thick, both the standard and oil tempered quality are effective either in their rich natural colours, or painted. Type 'A' Linenfold. Type 'B' Reed & Bead. Type 'C' Striated. Type 'D' Slatted. Type 'E' Close Slatted. Type 'F' Tiled (4" Tiles). Type 'G' Wide Slatted.

Manufactured by: **MESSRS. LJUSNE—WOXNA A.B. LJUSNE, SWEDEN**

Write for full details today to: Sole Agents for U.K. (excluding Northern Ireland)

MESSRS. MARTIN OLSSON & SONS LTD., MELBOURNE HOUSE, ALDWYCH, LONDON, W.C.2

Smee's



CONFIDENCE...

**MONTGOMERIE'S
FINISHES FOR ALL
DECORATIVE AND
INDUSTRIAL PURPOSES**
manufacturers of:-

**PUROVAR ENAMEL,
ARTESCO EMULSION
COATING.**

**Rustration Calcium Plum-
bate Anti-Corrosive
Primer.**

**Emeskote Chemical Resist-
ing Enamel—Air Drying
Epikote Resin Based
Coating.**

**Petrifoid 'S' Water Repel-
lent—Solution Based on
'Dri-sil' Silicone.**

the basis of the artists superb performance . . . the essential when you are specifying materials or **PAINT** for that new important assignment.

If it's **PAINT**, and if it's produced by **montgomerie stobo**—then you can have all the confidence in the world in recommending it for quality, durability, colour fastness and 'rightness for the job'—nothing is left to chance in its manufacture, which probably accounts for the number of new projects on which it is being used to-day!

★ Technical Advisory Ser-
vice for specifications and
colour schemes.

★ All shades to B.S.S. 2660.
1955 Colour Classifica-
tion.

★ On Site Technical Service
available to architect and
builder.

montgomerie, stobo & CO LTD

Deeside, Saltney, Nr. Chester.
Telephone Chester 23128 (3 lines)
Telegrams 'Turpentine' Chester.

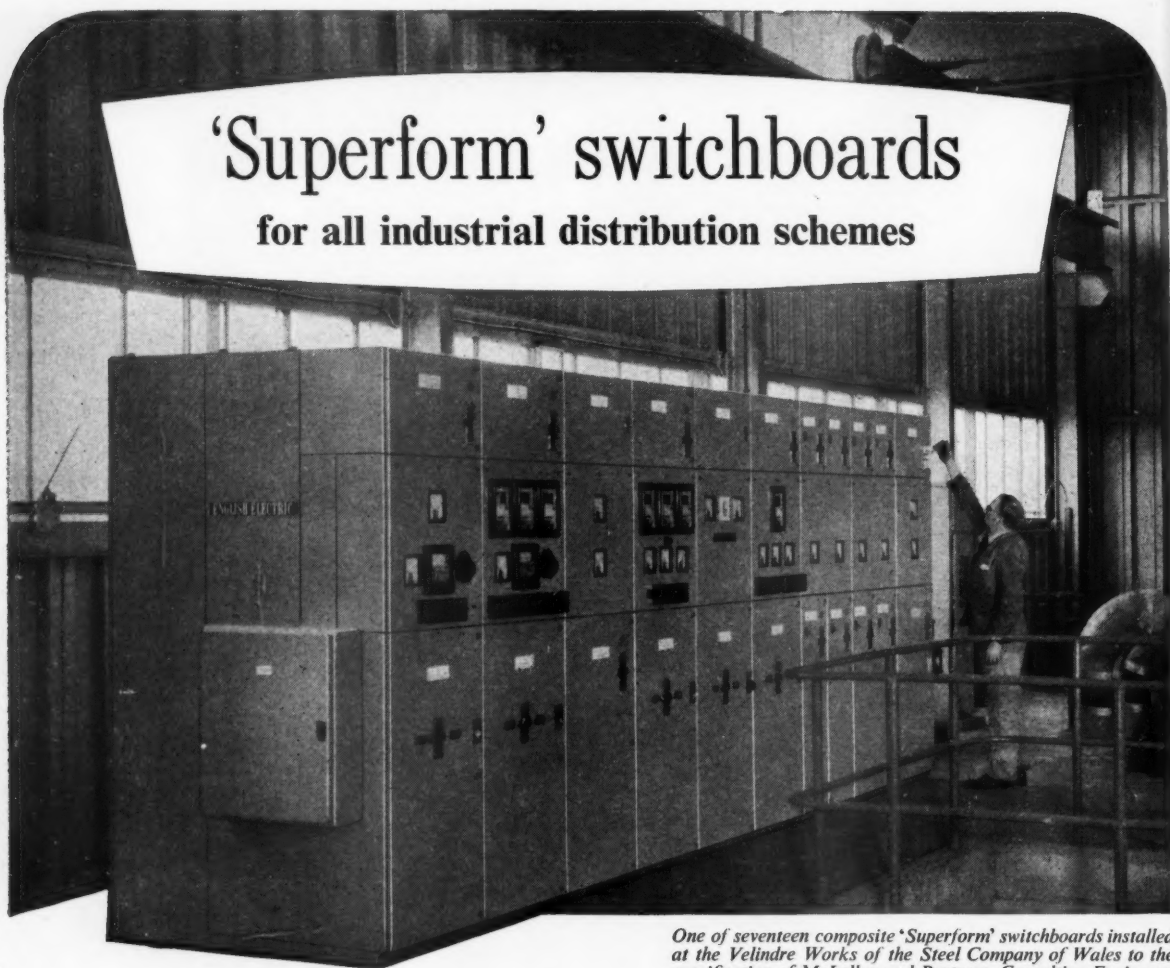
136/154 Stranmillis Road, Belfast.
Telephone Belfast 67978.
Telegrams 'Turpentine' Belfast.

52-72 Rogart Street, Glasgow, S.E.
Telephone Bridgeton 1005/6/7.
Telegrams 'Turpentine' Glasgow.

Also at Slough



'Superform' switchboards for all industrial distribution schemes



One of seventeen composite 'Superform' switchboards installed at the Velindre Works of the Steel Company of Wales to the specification of McLellan and Partners, Consulting Engineers.

Composite boards can be supplied covering all the requirements of modern M.V. systems, the range of equipment including:—

- ★ Air circuit-breakers up to 3000 amps.
- ★ Off-load isolators up to 3000 amps.
- ★ Fuse-switches up to 750 amps.
- ★ Contactor gear for motor starting or other duty
- ★ Distribution fuseboards
- ★ Instruments, meters and relays of all types



- ★ Modern styling and pleasing appearance
- ★ Unique design features giving increased safety to operating personnel
- ★ Easy access for cabling and maintenance
- ★ Fault making capacities up to 50 MVA at 440 volts
- ★ Complete short-circuit protection

'ENGLISH ELECTRIC'

fusegear

THE ENGLISH ELECTRIC COMPANY LIMITED, MARCONI HOUSE, STRAND, LONDON, W.C.2

Fusegear Division, East Lancashire Road, Liverpool, 10

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

FG.32 D8

led
the
rs.

a new and exciting note



in store



and shop décors...

More and more department, chain and other types of store are featuring RYDURA in the decor of their new branches, and in their re-decoration plans for existing shops. RYDURA is shown here as a decoration for the pillars and walls of the Crawley Branch of Boot's Pure Drug Co. (left) (Photo by courtesy of C. St. G. Oakes Esq., Chief Architect); and as a wall decoration at the Darlington branch of Jackson The Tailor (below). RYDURA was used in this store for the entrance, stairs, ground floor and lower ground floor walls.

OUTSTANDING MODERN DESIGNS AND COLOURS

ATTRACTIVE APPEARANCE

DURABLE AND HYGIENIC

HAS DIRT AND STAIN RESISTING PROPERTIES

EASY TO KEEP CLEAN

VIRTUALLY UNSTAINABLE

CHAIR UPHOLSTERY, CABINET AND TABLE DECORATION AND, OF COURSE, FOR WALLS

Full details on request to:—

RYJACK PRODUCTIONS LIMITED

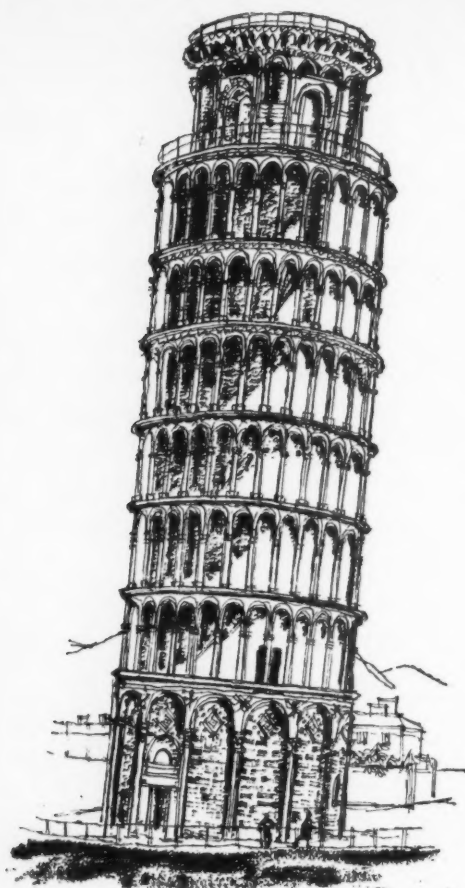
(Prop. The Calico Printers' Association Limited)

89 Oxford Street Manchester 1

Tel. Manchester Central 0020

Rydura

THE VERSATILE FABRIC WITH THE 'PROFILM' FINISH



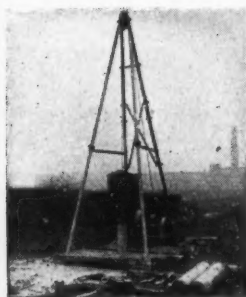
This couldn't have happened with a **DOUGLAS** site investigation!

A weak foundation brought world fame to the Campanile Tower of Pisa which now leans 14ft. out of upright.

Such a condition should not happen to-day, now that scientific research into the nature and characteristics of a building site is possible.

Be sure that you build on a sound foundation by calling in The Douglas Foundation Engineering Department first. They have laboratory and field equipment to test and design for any type of foundation, check earth movements and the stability of slopes and cuttings and overcome ground water and soft clay to mention but a few typical problems.

The DOUGLAS Organisation in action



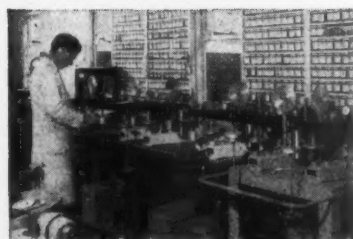
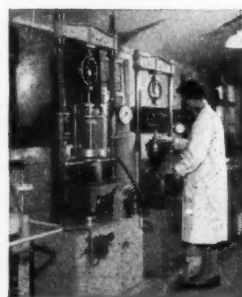
SOIL BORING AND SAMPLING

Here careful extraction of disturbed and undisturbed soil samples is of utmost importance. Specially trained boring crews carry out this work on site.



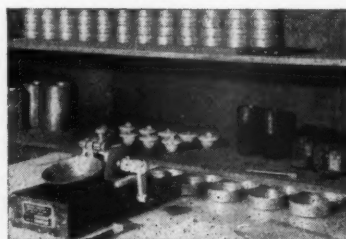
TRIAxIAL COMPRESSION TEST

This test accurately measures the shear strength of soils under known stress conditions. On this information can depend the whole foundation design.



CONSOLIDATION TEST

This apparatus is used to estimate the amount of settlement of a structure on clay soils.



INDEX PROPERTIES OF SOILS

The illustration shows apparatus used to provide information on the state of materials in the field and to assess their probable behaviour under various conditions. Another vital factor when considering foundation engineering.

DOUGLAS

SOIL MECHANICS & FOUNDATION ENGINEERING DEPARTMENT

ROBERT M. DOUGLAS (CONTRACTORS) LIMITED. 395, GEORGE ROAD, ERDINGTON, BIRMINGHAM, 23.
Telephone: BIRchfields 5261 (15 lines). : : : London * Swansea * Liverpool * Darlington.

B.B.C. TELEVISION CENTRE

WOOD LANE, W.12

Second Stage Development

DEVELOPMENT OF THE NEW B.B.C. TELEVISION CENTRE IS BEING CARRIED OUT UNDER THE DIRECTION OF
GRAHAM DAWBARN, ESQ., C.B.E. (NORMAN & DAWBARN), ARCHITECT

in association with

M. T. TUDSBERY, ESQ., C.B.E. (THE CONSULTING CIVIL ENGINEER TO THE B.B.C.)

GENERAL CONTRACTORS — MESSRS. HIGGS & HILL LTD.

Steelwork Fabricated and Erected by

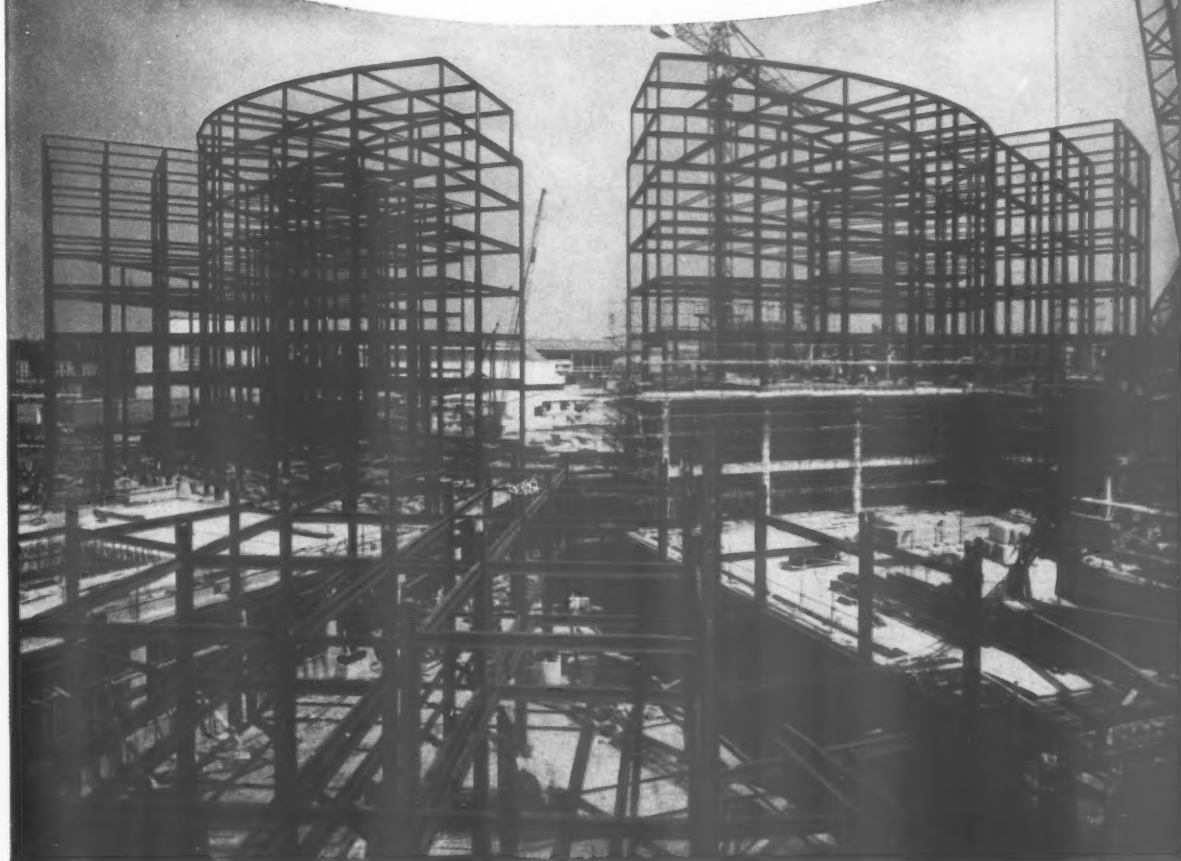
T. C. JONES
AND COMPANY LIMITED

Head Office
Wood Lane, London, W.12
Tel: SHEphers Bush 2020



South Wales Office
Bute Street, Cardiff
Tel: Cardiff 28786

Works: Shepherds Bush, London.
Neasden, Middx. Treorchy, Glam.



Suited . . .

TO OPEN INVITINGLY



For further information on
'ARMOURPLATE' and 'ARMOURCAST'
Glass Doors consult the Technical
Sales and Service Dept.,
Pilkington Brothers Ltd.,
St. Helens, Lancs. (St. Helens
4001) or Selwyn House,
Cleveland Row, St. James's,
S.W.1. (WHitehall 5672-6.)

PILKINGTON'S

"ARMOURPLATE" Glass Doors for interiors

Doc
ava
'AR
'AR
reg
ma
Bro
Sup
thro
tra

... to all occasions
TO CLOSE DISCREETLY



Door check and closer
available for both doors.
'ARMOURPLATE' and
'ARMOURCAST' are
registered trade
marks of Pilkington
Brothers Limited.
Supplies are available
through the usual
trade channels.

PILKINGTON'S
"ARMOURCAST" Glass Doors for interiors

Lightweight ventilation



Typical Pitched Roof
Unit to suit Corrugated
Asbestos Sheeting.

BROOKS

MOULDED GLASS-FIBRE FAN-POWERED VENTILATION UNITS

POLYESTER RESIN BONDED • FIRE RESISTANT • NON - CORROSIVE

for

- TURNERS COMBINED SHEETING • TURNERS BIG-SIX • CORROPLAST
- DECKINGS — ASBESTOS — METAL — WOODWOOL SLAB • GLAZING MOUNTING
- FLAT ROOFS — CONCRETE — TIMBER • PITCHED SLATED AND BOARDED

also

- CHEMICAL FUME UNITS WITH POLYTHENE COATED FANS

and

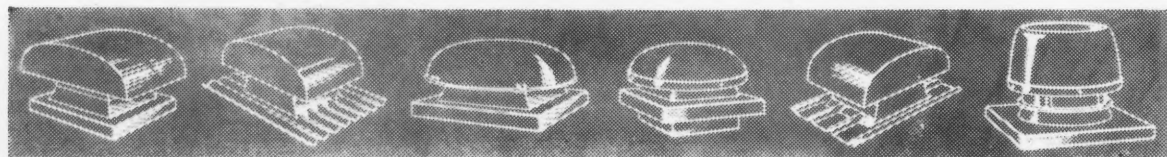
- SMALL CAPACITY LOW PRICED GENERAL PURPOSE UNITS
THE NELSON (400 cfm) — THE TRAFALGAR (750) cfm)

For further details please write to:

BROOKS VENTILATION UNITS LIMITED

TRAFALGAR HOUSE • GREAT NEWPORT STREET • LONDON • W.C.2. • Telephone: COVent Garden 1355-1356

BRITAIN'S WIDEST RANGE OF POWERED VENTILATION UNITS



B.17.

D

1356



B.12.

W
ro
a
b
a
d
m

Bi



and a

BILSTON

ATLANTA

... what more could we ask!



When buyers are considering a new home, the bathroom can often be the deciding factor! A Bilston Atlanta appeals instantly because of its distinctive line and brilliant finish. Made for lasting beauty, Bilston baths are in White, or the exact colour required for any decorative scheme. Specify the Atlanta—it costs no more than an ordinary bath.

*Bilston Baths
for lasting beauty*

Atlanta •
Magna •
Cresta •
Marina •
Mermaid •
Bermuda •

THE VERSATILE ATLANTA

The Atlanta can be specified for any bathroom, large or small! As well as the 66", the Atlanta comes in 54", 60", 61" (available in two widths), and 72" lengths.

The Atlanta 54, 60 and 61 must be preferred to any other baths of these sizes because they are exact replicas of the full size bath, scaled down to small proportions.

Atlanta flat bottom helps to prevent slipping—ensures comfort.

Atlanta shallow step is safe for young and old. The Atlanta can be fitted to give an overall height of only 16".

Taps can be fitted in three different positions to meet all possible requirements.

Corner tap mounting facilitates installation and maintenance.

The Atlanta is supplied with or without overflow—with or without handgrip.



BILSTON FOUNDRIES LTD • BILSTON • STAFFORDSHIRE • Illustrated literature is available on request.

5d^{*}
per sq. ft.
for a
double
feature

* Approximate price of
Insulating Plasterboard

THERMAL INSULATION of a high order is provided by Insulating Gypsum Plasterboard. Aluminium foil applied to one face of the board, plus an air space, ensures structural U values comparable with any other lining material even remotely similar in price.

HIGH FIRE RESISTANCE is another principal feature of Insulating Plasterboard. The core of all plasterboard is gypsum, and gypsum contains about 20% combined water — an inherent protection in the event of fire. Plasterboard conforms, on both faces, to B.S.476, Class I, *without requiring any additional treatment.*

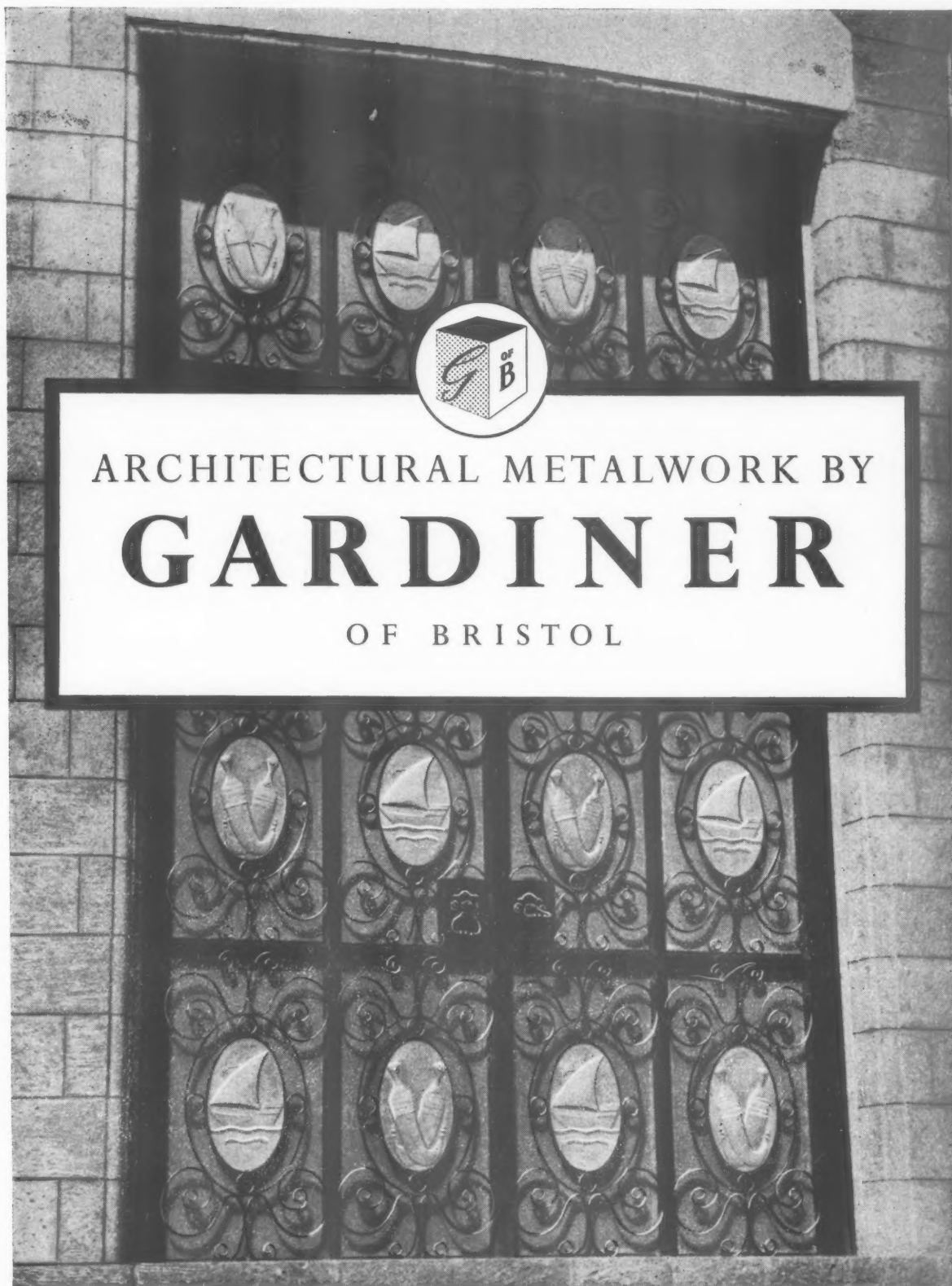
It's the core that counts . . .

THE INCOMBUSTIBLE GYPSUM CORE OF PLASTERBOARD

FOR THE FACTS write today for free illustrated brochure to
THE GYPSUM PLASTERBOARD DEVELOPMENT ASSOCIATION, G.P.O. BOX 321, LONDON W.1



GPA.1

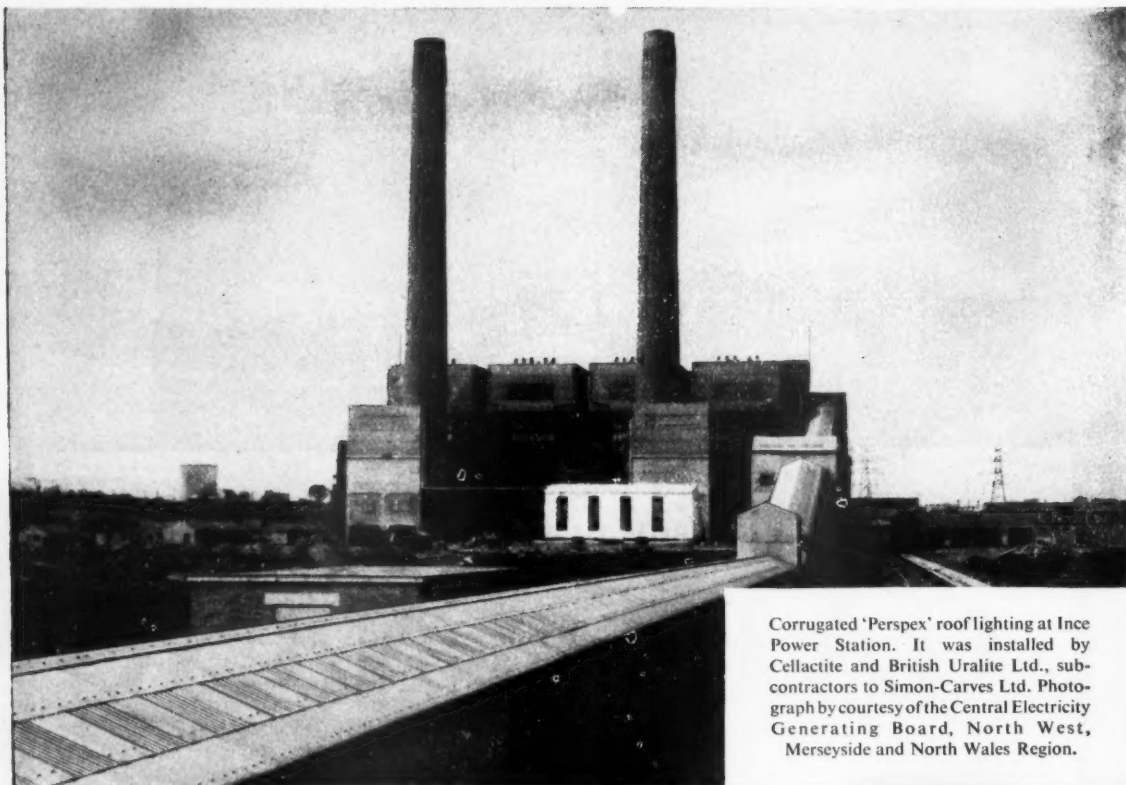


Designed by the Architect's Branch, Public Works Department, Aden

Our Technical Advisory Department is always available, write, phone or call :

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

M-W. 124



Corrugated 'Perspex' roof lighting at Ince Power Station. It was installed by Cellactite and British Uralite Ltd., sub-contractors to Simon-Carves Ltd. Photograph by courtesy of the Central Electricity Generating Board, North West, Merseyside and North Wales Region.

Corrugated 'Perspex' makes the most of available daylight at Ince Power Station



Factories and plants all over Britain have found that Corrugated 'Perspex' acrylic sheet is the finest material for roof lighting. No other roof lighting material transmits more daylight. 'Perspex' is tough, light in weight and gives long-lasting satisfactory service. The good daylighting from Corrugated 'Perspex' means higher morale and better work from factory workers.

Corrugated 'Perspex' fits directly into corrugated

roofings, so that it is easy and economical to install. (It can also be used on flat or curved roofs). It reduces costs on artificial lighting. It will withstand weather conditions in any part of the world and is completely unaffected by the atmosphere of most industrial areas.

If diffused daylight is required, Opal Corrugated 'Perspex' is available.



It's as clear as daylight—it must be

CORRUGATED 'PERSPEX'

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

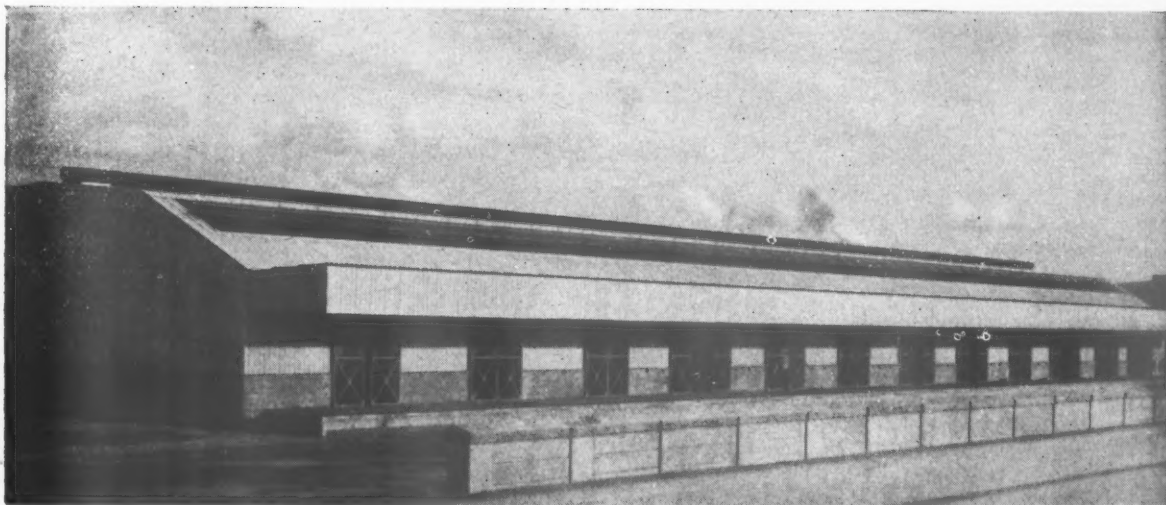
IMPERIAL CHEMICAL INDUSTRIES LIMITED • LONDON • S.W.1



Specify Ventilation by

ROBERTSON THAIN

Specialists in Ventilation Schemes for more than 30 years



*If you have
not already
received your
copy of the
Robertson
Ventilation
Data Book—
write to us
today.*

Robertsonridge ventilators are designed to provide a long and continuous exhaust area at the ridge of a roof and are capable of removing rapidly large volumes of smoke and heat.

They are unobtrusive extractors which blend well with modern building lines and the standard range offers sizes from 6 in. to 48 in. throat width supplied with, or without, damper control.

Dampers can be operated manually at floor level by means of a hand winch or can be electrically actuated. When electrically operated the dampers may be thermostatically controlled to open, or close, automatically in the event of fire. Robertsonridge ventilators are mounted on the highest point of a building to obtain maximum benefit from "stack action" and their exhaust capacity is unimpaired by wind blowing from any direction.

Robertsonridge ventilators are fitted easily and ECONOMICALLY to ridge purlins and on any type of roof covering; no additional supporting framework or flashing is necessary.

Robertsonridge ventilators are manufactured from Protected Metal which ensures long service, free from maintenance, under all conditions.

THERE IS A ROBERTSON VENTILATOR FOR EVERY REQUIREMENT

ROBERTSON THAIN LIMITED

ELLESMERE PORT • WIRRAL • CHESHIRE

Telephone: Ellesmere Port 3622-7

Telegrams: "Robertroof"

Sales Offices: BELFAST • BIRMINGHAM • CARDIFF • EXMOUTH • GLASGOW • LIVERPOOL • LONDON • MANCHESTER • NEWCASTLE • SHEFFIELD

Associated Companies or Agents in most countries throughout the world



NEW DEPARTMENT FOR JAS. PASCALL LIMITED, MITCHAM
9" x 4½" x 11" Best Red Quarries laid and jointed in special acid and alkali resisting cement
Specified by : Gooch & Wagstaff, Chartered Surveyors. Supplied by : Prodorite Ltd.

WHEATLY



triton

CLEAN, HARDWEARING

ACID AND ALKALI

RESISTANT FLOORING

Specimens of Wheatly burnt clay products may be seen at the Building Centre, London. They include Single-lap Roofing Tiles, Ridge Tiles (blue and red), Floor Quarries, Air Bricks and Briquette Fireplaces.

Send for full details of Wheatly Triton Flooring Quarries and fittings, Plain or Non-slip

WHEATLY & COMPANY LIMITED

SPRINGFIELD TILERIES · TRENT VALE · STOKE-ON-TRENT
Telephone: NEWCASTLE (Staffs) 66251 Telegrams: WHEATLY, TRENTVALE

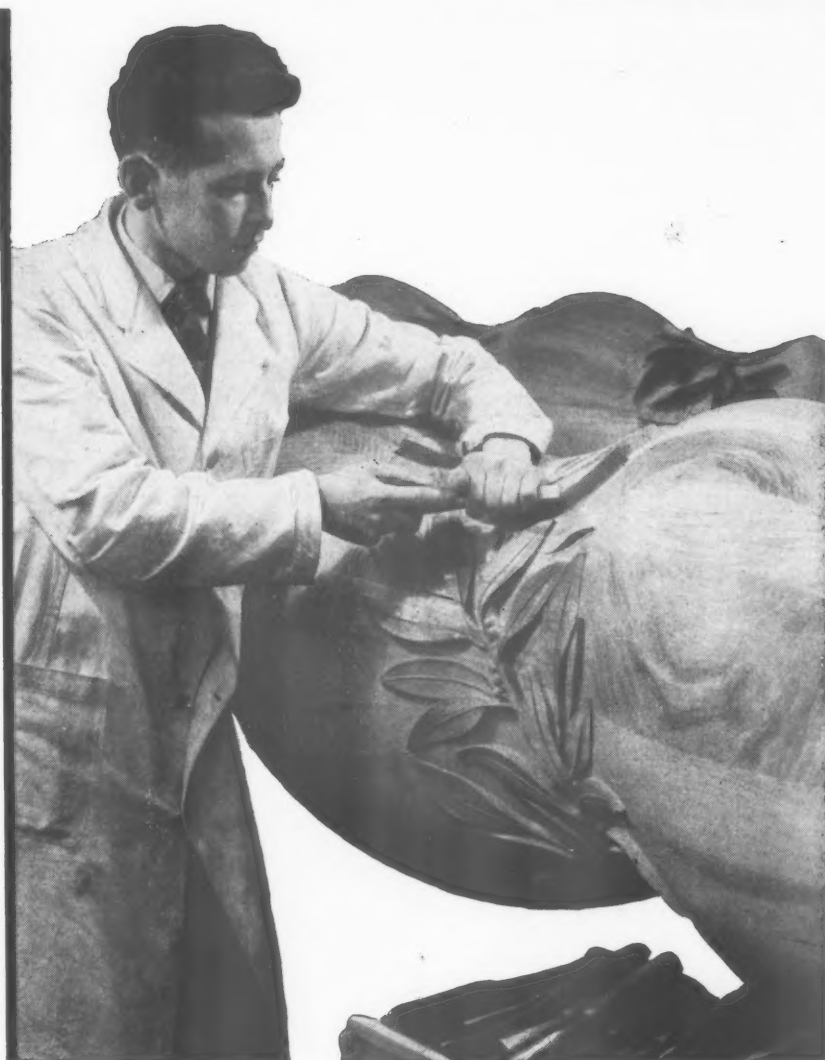
Trees aren't big enough

*Wood carving of a column
for the new altar canopy of
St. Paul's Cathedral.*

Architects:

*S. E. Dykes Bower, M.A.,
F.R.I.B.A., and Godfrey Allen,
M.A., F.R.I.B.A.*

*Contractors for the woodwork:
Rattee & Kett Ltd., Cambridge.*



Solid timber is rarely obtainable in the dimensions needed for work such as this—the carved columns for the new altar canopy of St. Paul's Cathedral. But it does not matter, because Aerolite resin glue is used to glue the wood sections permanently into a homogeneous whole, so that the material can be worked upon just as if it were solid timber.

There are four of these columns supporting the new altar canopy, each 15 ft long, and the glue had to withstand all stresses imposed by turning, cutting the spirals and carving. And now that the canopy is finished, Aerolite forms an integral part of the columns and of most of the decorative woodwork, withstanding if need be any moisture and bacteriological attack that might arise throughout the years.

Aerolite is used wherever wood is employed, for miniature modelling, boat-building, furniture, flush doors and joinery, chip-board and the largest timber structures.

If you use wood you will want to know more about Aerolite. Write today for technical bulletins and other literature on Aerolite glues for wood.

Aerolite

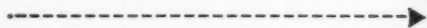
glues for wood

Aerolite is a registered trade name

AERO RESEARCH LIMITED A CIBA COMPANY DUXFORD, CAMBRIDGE, TEL: SAWSTON 2121
AP435



Pre-cast cladding for giant Roehampton Estate . . .



THE
MODULAR CONCRETE
COMPANY LIMITED

The giant multi-storey Roehampton housing scheme for the L.C.C. represents a milestone in the history of THE MODULAR CONCRETE CO. LTD.—the pre-cast concrete specialists—for it is probably the largest of its kind in the country in which pre-cast cladding has been used. The contract included the supply of all the pre-cast stair-flights, landings, and cladding in exposed aggregate for fifteen 12-storey point blocks, and five 11-storey maisonette blocks.

THE MODULAR CONCRETE CO. LTD. *Pre-cast Concrete Specialists*
STAINES ROAD • BEDFONT • MIDDLESEX. Telephone: Ashford (Middlesex) 5601-2
One of the Wates group of Companies

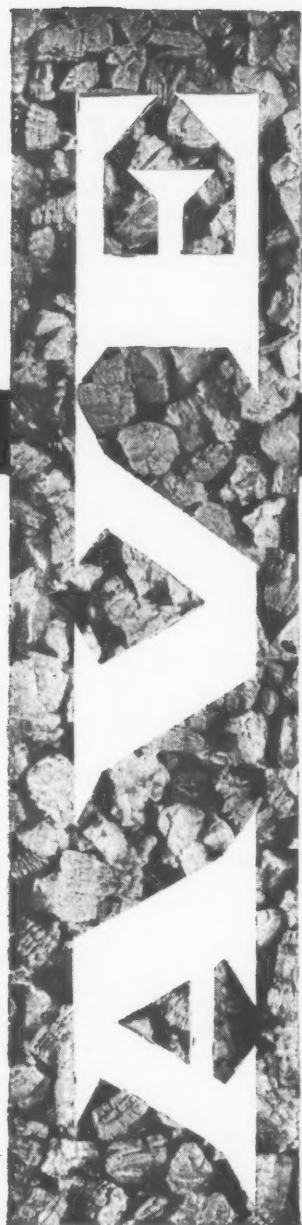
good thermal insulation calls for

VERMICULITE

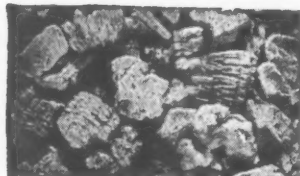
No other material gives such good thermal insulation efficiency—at the same cost—as vermiculite. In lightweight concrete and plaster, or as a loosefill, vermiculite is being used more and more widely in modern building construction.

By constant research into the development of vermiculite and its application to modern building methods, the A.V.E. is making an important contribution to the advancement of general building design and construction.

Results have proved that this permanent, fire-proof, lightweight aggregate provides better thermal insulation efficiency—for no extra cost—than any other material.



Specify one of these
branded A.V.E. Vermiculites.



Full technical information
from

J. M. & J. Bartlett Ltd.
Lombard House
Warwick Street
NEWCASTLE UPON TYNE 2

Cape Building Products Ltd
114-116 Park Street
LONDON W1
Cowley Bridge Works
UXBRIDGE Middlesex

A. R. & W. Cleaver Ltd
Advance Works
Wood Street
NORTHAMPTON

Dupre Vermiculite Ltd
39-41 New Broad Street
LONDON EC2
23b Broadwater Road
WELWYN GARDEN CITY Herts

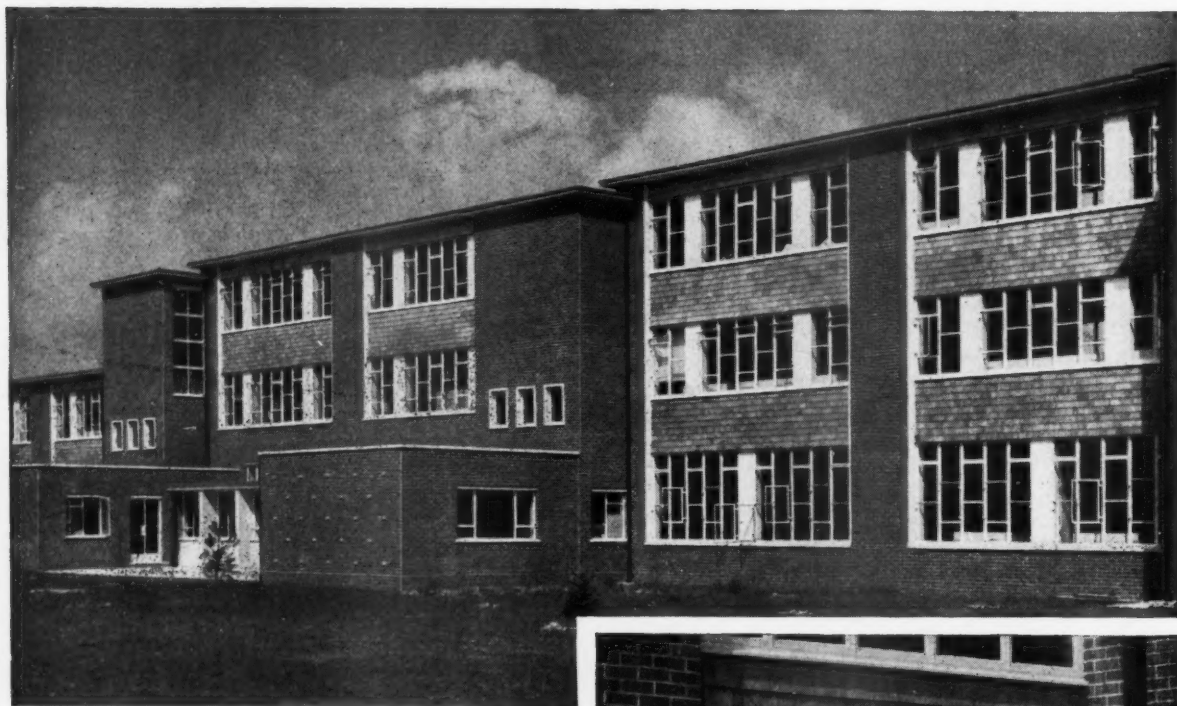
The Iron & Marble Company Ltd.
33-35 Victoria Street
BRISTOL

William Kenyon & Sons (MetaMica) Ltd
DUKINFIELD Cheshire
140 West George Street GLASGOW C2
50 Bloomsbury Street
Bedford Square LONDON WC1

L. Slack & Son Ltd
Courthouse Street
Pontypridd
SOUTH WALES

Issued in the interest of better insulation by the Association of Vermiculite Exfoliators 51-55 Strand, London W.C.2

COLT *Canadian Cedar Wood* SHINGLES



Southern Grammar School for Boys, Baffins, Portsmouth.
City Architect, Frank Mellor, F.R.I.B.A.

NEW STYLE WALLS with an old and well tried method. Weathering to a pleasant silver grey, Shingles are a most attractive method of providing a distinctive elevation. Nailed to battens on brick, breeze or timber studding, the construction is most economical and is completely weatherproof.

The high thermal insulation of Western Red Cedar makes Shingles a valuable addition to the Architect's vocabulary of modern cladding materials.

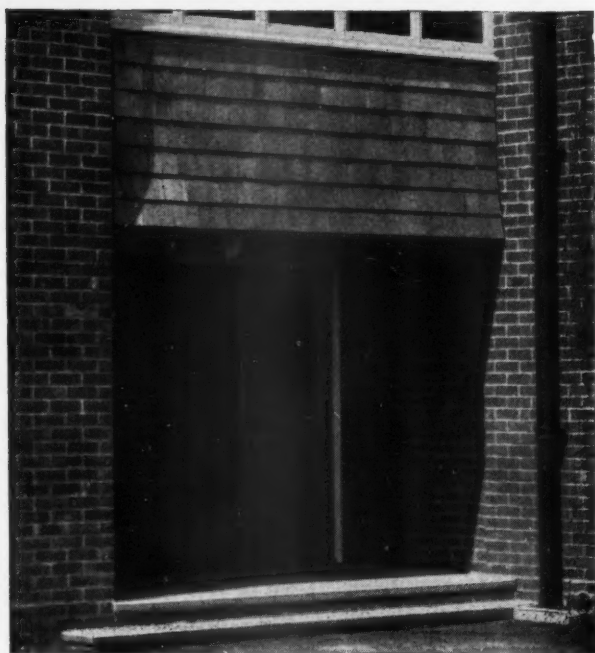


Send for full details to Dept LI3²/6

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

Telephone: ELMbridge 6511 (10 lines)

Fixing can also be undertaken if required



G.124

COMMERCIAL FLUORESCENT



Luveline IS EFFICIENT

Luveline is 88.4% efficient.

GLAREFREE

The light is completely diffused giving a soft, restful and almost shadowless illumination.

EASILY INSTALLED

There are only three basic components.

EASILY CLEANED

The simple hingeing device makes relamping and cleaning a matter of minutes.

VERSATILE

It can be used as individual fittings or in continuous lines.

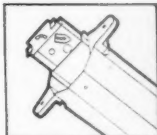
PERFECTLY ALIGNED

Unsightly "dog legs" in continuous lines of fittings are a thing of the past.

EVENLY LUMINOUS

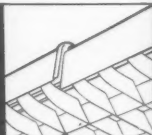
The special lapping of diffuser elements gives a continuous luminous surface throughout its length, even where lamps are butted end to end.

*ITS SUCCESS IN CANADA AND THE USA GUARANTEES IT FOR GREAT BRITAIN * ONLY Luveline HAS THESE EXCLUSIVE "WILSON" FEATURES:*



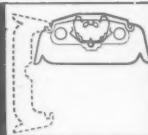
ALIGNMENT

Special mounting brackets give positive alignment of channels and simplify installation.



LAP-JOINT

Good design and accurate moulding give a "no light-leak" join for continuous row mounting.



MAINTENANCE

A simple hingeing device allows the one-piece shielding to swing down or to be removed altogether for cleaning.

Luveline

THE BEST OF BOTH WORLDS



HARRIS & SHELDON (ELECTRICAL) LTD.

RYDER STREET, BIRMINGHAM 4. Telephone: CENTral 6272

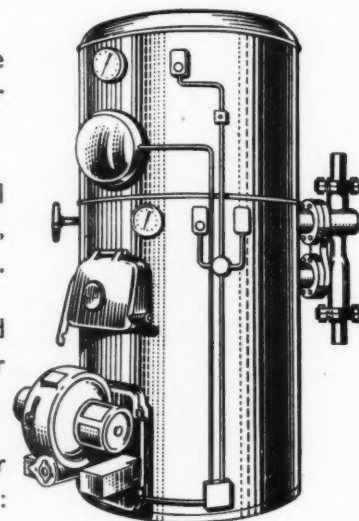
London Office: 46 GT. MARLBOROUGH STREET, W.1. Telephone: GERrard 0869

Complete Lighting Specialists and Manufacturers of Lighting Fittings and Control Gear

DHB/7122

the most efficient **CENTRAL HEATING and** **DOMESTIC** **HOT WATER BOILER—** ***in one unit***

- ▶ The Boiler is a self-contained unit with a built-in Calorifier, and is fully insulated and thermostatically controlled for both services. Capacities: 60,000 to 800,000 B.t.u's/h.
- ▶ Equally suitable for oil or solid fuel firing, the change to either fuel can be made easily and quickly.
- ▶ The Mixing Valve regulates the flow temperature for Central Heating, yet ensures maximum water temperature for domestic hot water.
- ▶ The Boiler output can be devoted wholly to Central Heating or to Domestic Hot Water production at will, or both services can be in operation simultaneously.
- ▶ Consistent room temperature at the level you need it, and really hot water at any time of the day or night is always available.
- ▶ Full particulars and complete descriptive literature, for Home and Export enquiries, can be obtained from:



HOVAL BOILERS

Sole licensees and manufacturers in Great Britain and Eire:



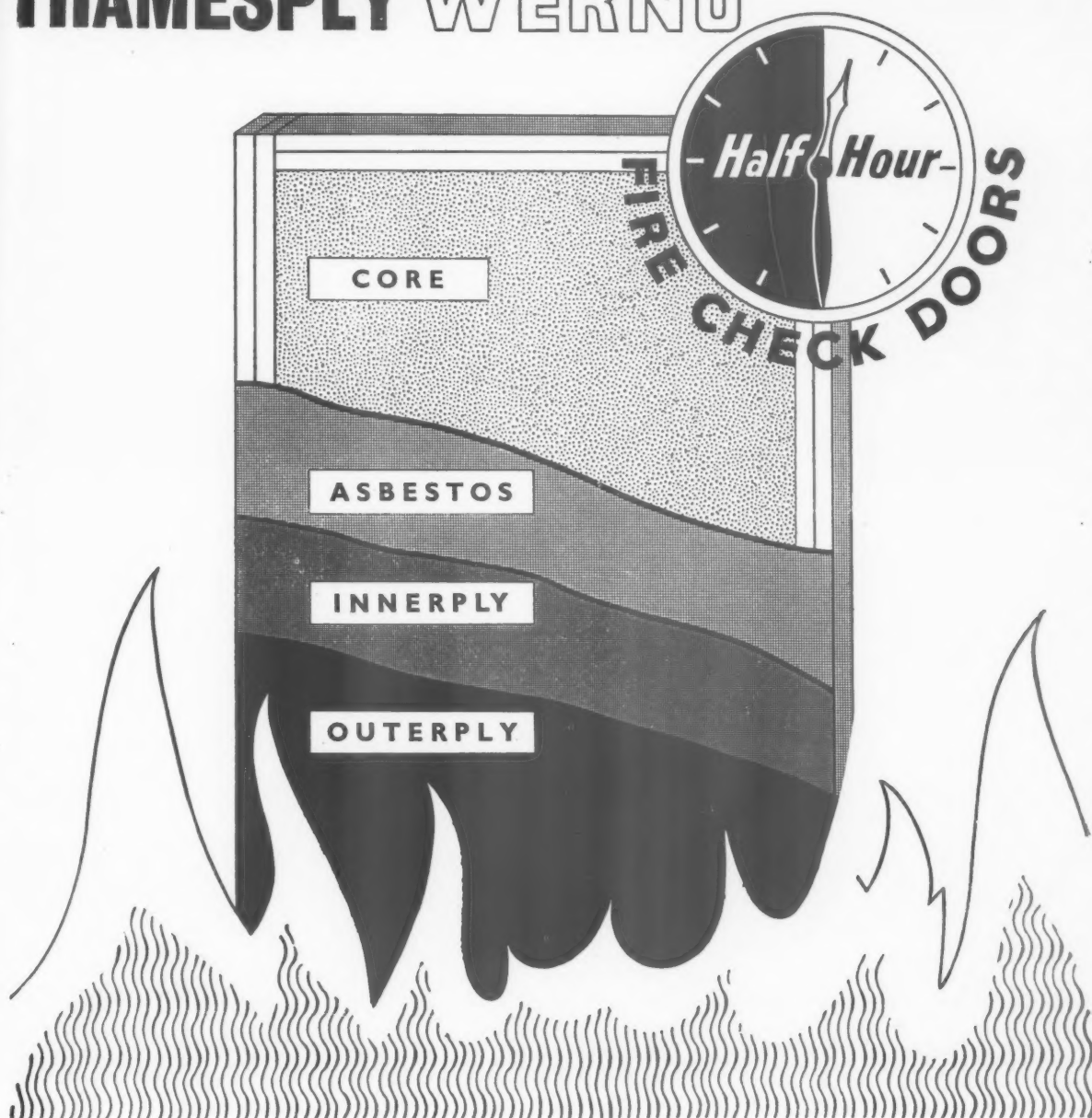
A. J. RILEY & SON LIMITED

DEPT. 321, VICTORIA WORKS, BATLEY, YORKSHIRE.

TELEPHONE: 657 (3 LINES)

Visit us on
STAND No. 10—ROW D
Chemical & Petroleum
Exhibition,
Grand Hall Annexe,
Olympia, London,
18-28 June

THAMESPLY WERNO



- Full half-hour protection
- Good thermal and acoustic insulation
- Guaranteed against defective workmanship or materials
- 1½" finished thickness with 4 mm. ply faces both sides
- All components British made

Tested and passed by the Department of Scientific and Industrial Research and the Fire Offices Committee of the Joint Fire Research Organisation.



Supplied only through the usual trade channels. Write for details to

THAMES PLYWOOD MANUFACTURERS LIMITED

Harts Lane, Barking, Essex. Telephone: Rippleway 5511 Telegrams: Thamesply Easphone London.



It will never be photographed like this again

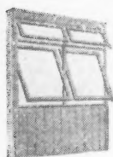
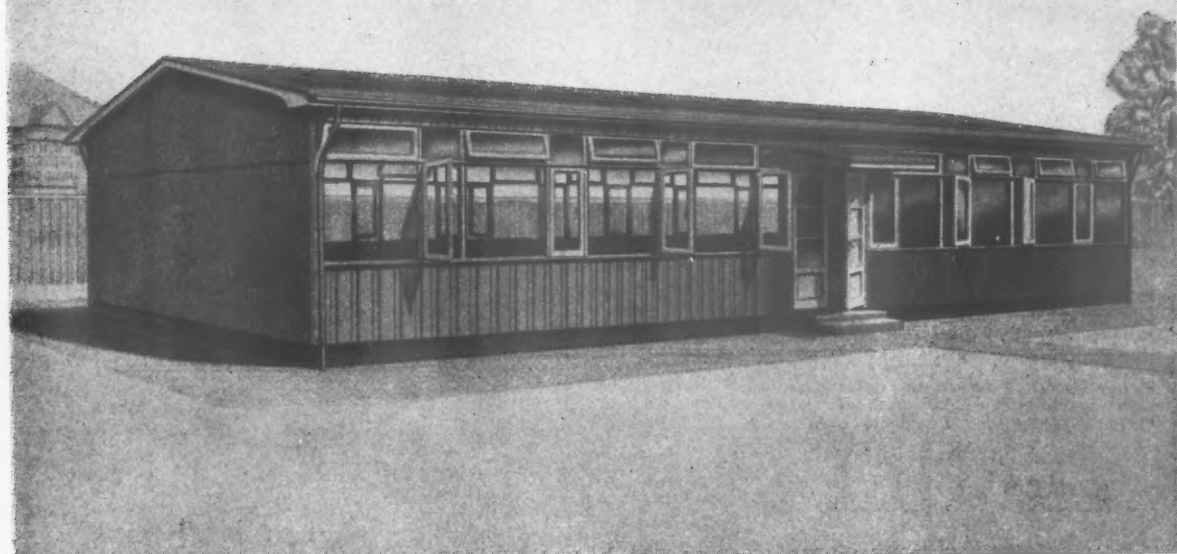
Wednesbury Copper Tubing owes its down-to-earth reliability to the most precise control of quality at every stage of manufacture. Take this Spectrograph test for example. From every casting of copper a tiny sample of metal is taken and vaporised in a powerful electric arc. The light from it is broken up by prisms into a spectrum and photographed. If any impurity is present the spectrum will vary from the pure copper standard the scientists compare it with. So next time you buy or specify BSS domestic copper tubing think of the best and . . .

choose WEDNESBURY TUBE

Obtainable from your local stockist or builder's merchant. Manufactured by

THE WEDNESBURY TUBE CO. LTD., BILSTON, STAFFS

COULD THIS *
BE YOUR
ANSWER?



FOR ONE REASON OR ANOTHER, tomorrow may find you face to face with a complex building problem. Perhaps the situation demands an urgent solution . . . or funds will not permit the expense of a traditional brick structure; whichever it is, YOU are expected to find a speedy, efficient, yet simple answer.

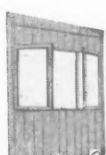
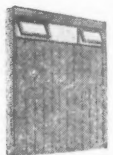
This new contemporary design may provide just such an answer. Made in three widths and two

heights, with interchangeable wall sections of various kinds, it lends itself to a multitude of adaptations. It is especially suitable for Temporary Schools, Offices, Pavilions, Canteens, Club Rooms, Hospital Annexes, and Light Industrial purposes.

Multiple lengths of 6'. Eaves height 8' 6" and 9' 6". Widths of 18', 24' and 30'.

Built-up bitumen or asbestos roofing.

Illustrated below are some of the interchangeable sections.

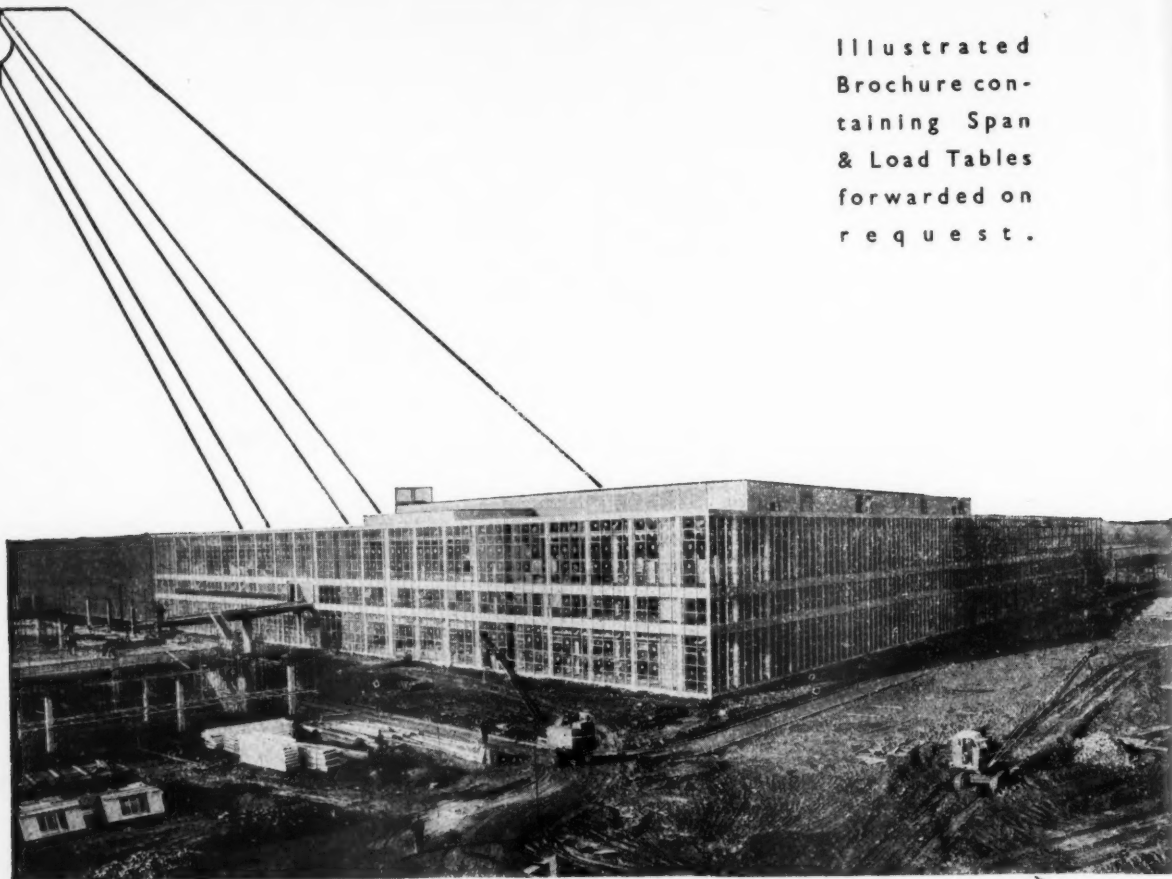


get ^{your} a quotation from **THORNS**

J. THORN & SONS LTD. (Dept. 188) BRAMPTON ROAD, BEXLEYHEATH, KENT

BD938

Illustrated
Brochure con-
taining Span
& Load Tables
forwarded on
request.



PIERHEAD

PRESTRESSED CONCRETE

26,000 square yards of Pierhead Floor and Roof construction were supplied to the Can factory Main Production building and Employees' Services building at the new factory for Messrs. H. J. Heinz Co. Ltd., Kitt Green, Wigan.

Architects: J. Douglass Mathews & Partners, in conjunction with Skidmore, Owings & Merrill, New York, U.S.A.

Main Contractors: Messrs. A. Monk & Co. Ltd., Padgate, Warrington.

**THE HOVERINGHAM CONCRETE COMPANY
LIMITED**

HOVERINGHAM · NOTTS

Telephone: BLEASBY 381



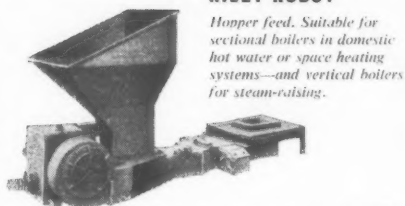
PIERHEAD LIMITED

SPEKE BOULEVARD
LIVERPOOL 24

LONDON FACTORY
FAGGS LANE FELTHAM,
MIDDX.

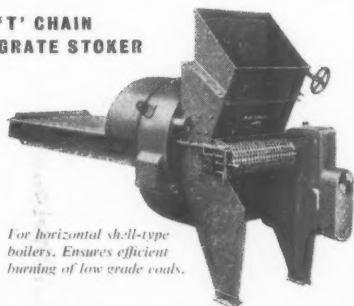
Telephone: Hunts Cross 1311-2-3 Telephone: Feltham 3631

RILEY ROBOT



Hopper feed. Suitable for sectional boilers in domestic hot water or space heating systems—and vertical boilers for steam-raising.

'T' CHAIN GRATE STOKER

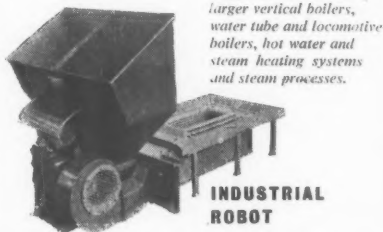


For horizontal shell-type boilers. Ensures efficient burning of low grade coals.



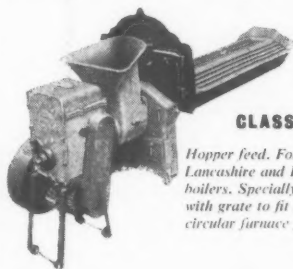
DIREKTO

Bunker feed. For sectional boilers in domestic hot water and space heating systems. Also for vertical boilers used in steam-raising. Feeds direct from bunker to boiler below floor level.



Hopper feed. For the larger vertical boilers, water tube and locomotive boilers, hot water and steam heating systems and steam processes.

INDUSTRIAL ROBOT



CLASS 'B'

Hopper feed. For Cornish, Lancashire and Economic boilers. Specially designed with grate to fit into circular furnace flues.

IT IS AN OFFENCE TO EMIT DARK SMOKE

Under the Clean Air Act it is now an offence to emit dark smoke. The problem of ensuring smokeless combustion within the meaning of the Act without costly conversions can be solved by the installation of Riley Chain Grate or Under-feed Mechanical Stokers. Write for full technical information.

all these
RILEY STOKERS
provide smokeless
combustion
from small
bituminous coal

RILEY (IC) PRODUCTS LIMITED

Mechanical Stokers • Syntron Electric Vibratory Equipment

A member of the International Combustion Organisation

NINETEEN WOBURN PLACE • LONDON WC1 • TERMINUS 2622

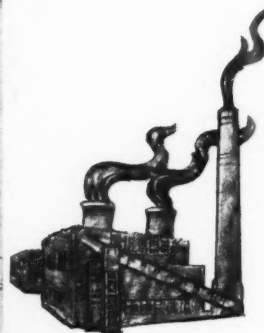
Architectural Metalwork

by MORRIS SINGER



*National Union of General
& Municipal Workers,
4 Endsleigh Gardens,
London, W.C.1.*

*Architect.
Hubert Lidbetter,
F.R.I.B.A*



Balustrading to the ground floor area and first floor balconies, together with the gates to the goods entrance, are constructed from solid bronze sections in which the chevron pattern predominates. The main Cast Bronze Entrance Doors, designed by the Architect, have low relief panels modelled by C. Edmond Burton. These depict the original and new headquarters and the progress of the industries with which the Union is associated.

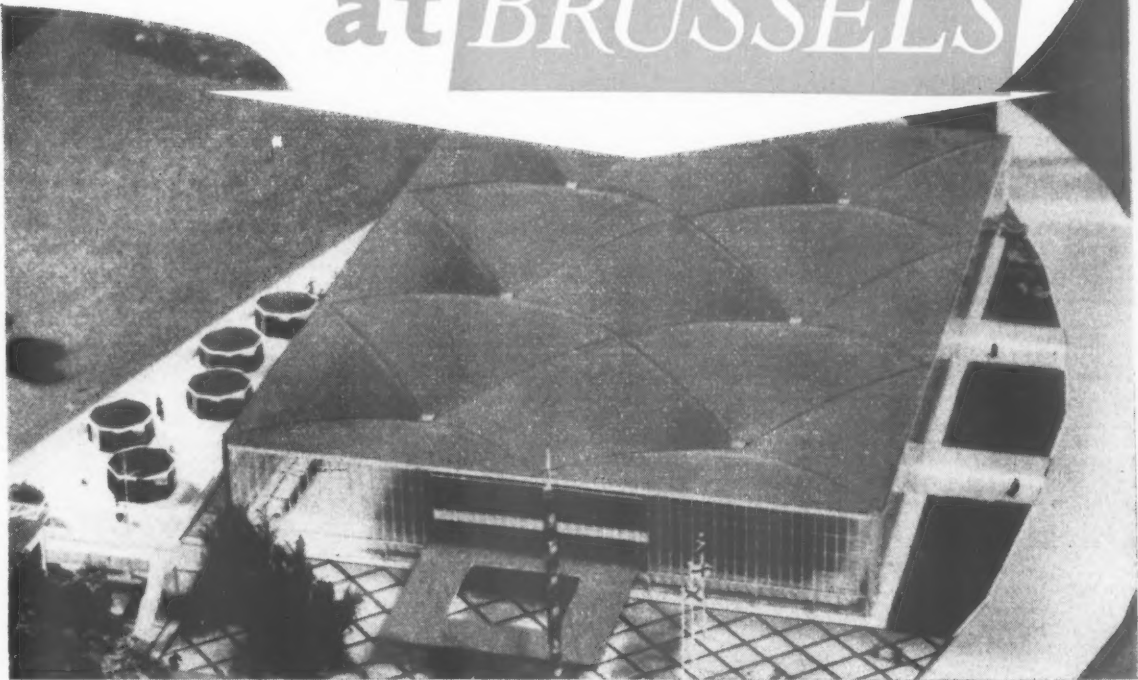
THE MORRIS SINGER COMPANY LTD.

FERRY LANE WORKS FOREST ROAD

WALTHAMSTOW E17 Larkwood 1055



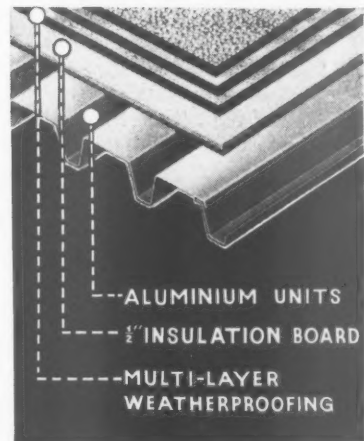
BITUMETAL on Top at BRUSSELS



BRITISH INDUSTRIES PAVILION

Architects: EDWARD D. MILLS & PARTNERS, LONDON
Contractors: RICHARD COSTAIN LIMITED, LONDON

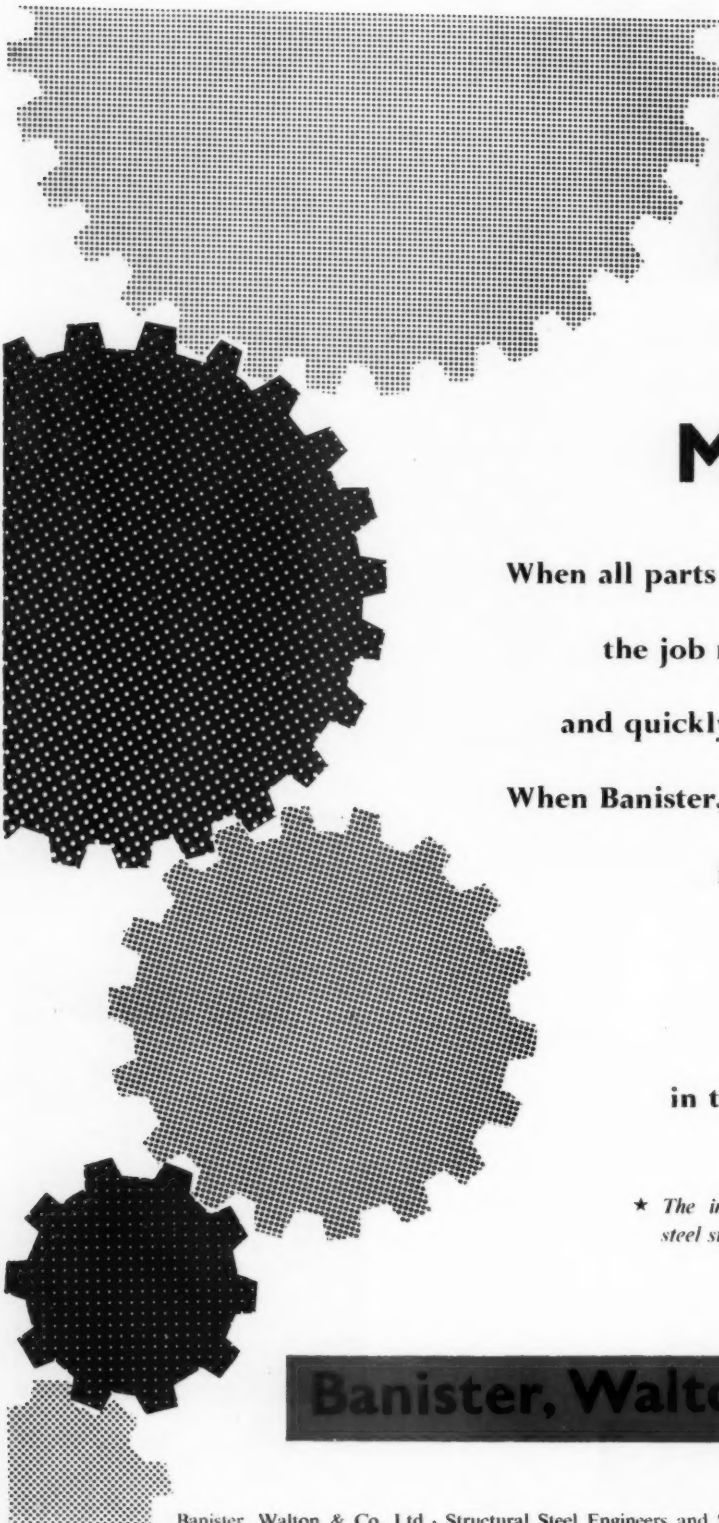
HERE at Brussels Exhibition for the world to see are gathered many of Britain's finest products under one roof; a roof which itself testifies to the integrity of British Industrial skill. "Bitumetal" provides in one unit, roof plus ceiling plus insulation, and additional advantages are economy and quick erection with virtually no maintenance. Full details from any of the undernoted area offices.



WILLIAM **BRIGGS** & SONS LIMITED

VAUXHALL GROVE, LONDON S.W.8 • REGD. OFFICE: DUNDEE

OFFICES AND DEPOTS ALSO AT ABERDEEN • BELFAST • BRADFORD • CARDIFF • DUBLIN
BRISTOL • EDINBURGH • GLASGOW • LEICESTER • LIVERPOOL • NORWICH



Meshing

When all parts are in mesh
the job runs sweetly
and quickly.

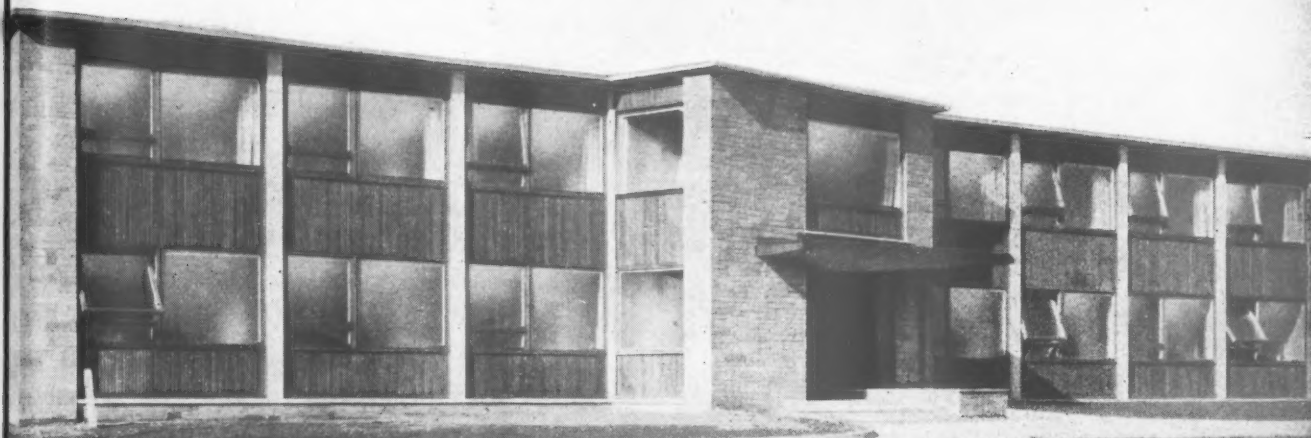
When Banister, Walton are responsible
for the steel framework
every activity is in mesh.
The result—economy
in time and in cost.

★ *The immediate availability of ample
steel stocks ensures speedy completion.*

MCN 3355

Banister, Walton build in steel

Banister, Walton & Co. Ltd • Structural Steel Engineers and Stockholders • MANCHESTER • LONDON • BIRMINGHAM



TOMO

DOUBLE GLAZED
WINDOWS

and the
B.R.S. TESTS

FOR UTMOST EFFICIENCY IN
THERMAL INSULATION AND SOUND REDUCTION
— SPECIFY

TOMO WINDOWS

—purpose-made in finest timbers to Architect's
own design and finish



**HAVE YOU HAD
YOUR FREE COPY OF
THE NEW EDITION
OF THIS HELPFUL
BROCHURE?**

Fully illustrated and packed with
information, this 24-page brochure
shows many examples of TOMO
WINDOWS in use throughout the
country. Please complete and post
this coupon for your copy.

Each of these TOMO WINDOW units, installed for the Sheffield Twist Drill Co. Ltd., consists of a horizontal-pivot-hung light and two fixed lights.

Architects: Ogden and Raine, A.R.I.B.A.

WHEN a standard-production TOMO WINDOW Wall-Unit (8 ft. x 8 ft.) was tested at the Building Research Station, Garston, the mean thermal transmittance of the complete unit was found to be 0.31 B.Th.U./sq. ft./h/°F. This is equal to the thermal transmittance of a traditional, 11-in. cavity brick wall! This impressive result was further improved to 0.29 when the TOMO pleated blinds, fitted between the panes, were lowered.

The U-value of the window-area only was found to be 0.38 which, with TOMO pleated blinds down, became 0.35. At 0.38, TOMO double-glazed WINDOWS are substantially (29%) better than the U-value of 0.47 quoted for conventional double windows in the I.H.V.E. Guide to Current Practice, 1955.

In addition to their excellent thermal-efficiency values, TOMO double-glazed WINDOWS have remarkable sound-reduction properties and are specially recommended for offices, schools, flats, etc., in busy streets or near to airports. The amount of reduction in sound level depends on the thickness of glass and the space between panes—thirty-two ounce glass spaced at 1½ in. gives a reduction of approximately 40 decibels.

These high-quality windows afford all the advantages of finely-controlled ventilation and total indoor window-cleaning. They are suitable for inward or outward opening and can be top-hung, bottom-hung, side-hung or pivot-hung.

**To: TOMO TRADING CO. LTD., COWLEY PEACHEY,
UXBRIDGE, MIDDLESEX (Tel: West Drayton 3751)**

Please send me a copy of your revised TOMO WINDOWS brochure

Name

Address

For the attention of.....

A/T/H

So now you know us!



Charles Ambrose Devereux Harman, Chairman.



Regd.

THOMAS SMITH & SON LTD. 238/240 Whitechapel Road, London, E.1. Telephone: BISHopsgate 3717/8/9

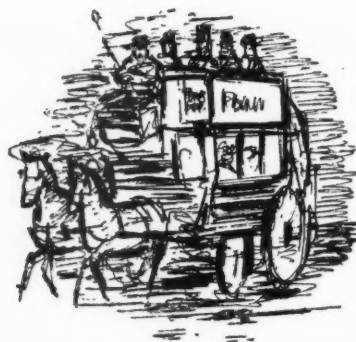
DHB/7454

In these pages, during the past eighteen months, I have introduced you to just a few of the long-service members of the firm of Thomas Smith & Son Ltd. I hope you have enjoyed meeting them. They and all the others would always be pleased to meet you if you care to call on us any time.

There is one particular aspect of ourselves that I am anxious you should understand. We are, in a real sense, a firm with a family spirit. This may well be because we are able to maintain personal contacts, not only internally but also with our customers. And we are able to do this by specialising in the manufacture of one product—PAINT.

We are indeed immensely proud of the finished product that goes into SMITHSON cans. Over the years, our clientele has progressively increased. More and more Architects, Surveyors, Estates and Industrial as well as private house owners are learning what SMITHSON Service can mean to them.

If top-quality paint, real personal attention and a highly competent Technical Advisory Service are in line with your ideas of what you should expect from your paint suppliers, why not specify our paints on your next contract. We'll be glad to hear from you.



Makers of Fine Paints and Varnishes since 1790

A private, entirely independent Company devoted to good paint-making and really personal service.

What am I looking for in Emergency Lighting?

More help a bit earlier on!

SAYS THE ARCHITECT

The earlier the better! The right time to start planning emergency lighting installation is early on in the planning of any building likely to need it. And that is the time we'd choose, ourselves, for giving a helping hand: which is something we gladly do for any architect and—to cast modesty to the winds—are well qualified to do. There are more than 5,500 of our Keepalite units in service up and down the country, and we helped in the installation planning of most of them. You probably know our Keepalite emergency lighting system. Automatic in action—and automatically trickle charged at all other times. Can even be said to plan its own installation—if you ask us for the advisory services of our electrical engineers!



AUTOMATIC EMERGENCY LIGHTING EQUIPMENT

For Cinemas, Factories, Banks, Shops
and Public Buildings

A PRODUCT OF CHLORIDE BATTERIES LIMITED

Exide Works, Clifton Junction, Swinton, Manchester, and
Grosvenor Gardens House, Grosvenor Gardens, SW1
Offices at Belfast, Birmingham, Bristol, Glasgow and Leeds



S.78

Bowater T/A* Panel

* Thermal/Acoustic

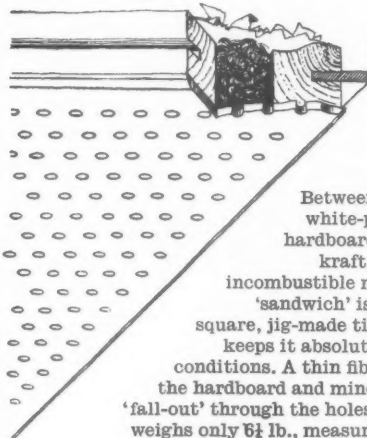
**MAKES
BUILDING
NEWS!**



However you look at it—structure, appearance, performance—this new Bowater dual-purpose panel is the greatest development in both thermal and acoustic insulation for years. And we know from experience that it's exactly what many architects and builders have been wanting for a long time. Here's a quick summary of its most important points . . .



IT'S MADE LIKE A SANDWICH



Between a facing sheet of white-painted perforated hardboard and a backing of kraft, there's a layer of incombustible mineral wool. This 'sandwich' is set in a perfectly square, jig-made timber frame which keeps it absolutely rigid under all conditions. A thin fibrous skin between the hardboard and mineral wool prevents 'fall-out' through the holes. The entire panel weighs only 6½ lb., measures 2 ft. square and is 1 in. thick. Hardboard splines are provided to slot the panels together.

EFFICIENCY?

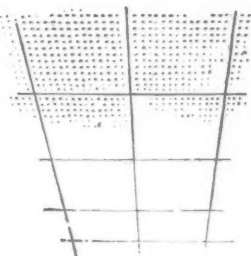
Here are the Vital Statistics

Sound Frequency (c.p.s.)	250	320	400	500	640	800	1000	1250
Sound Absorption Coefficient	.64	.59	.71	.77	.80	.87	.86	.87

These figures clearly show that, in its Acoustic capacity, the new Bowater panel is way ahead. Its performance is particularly good in the lower frequencies where noise in industry and in ordinary daily life is most common—and most dangerous. In Thermal insulation, too, the panel sets an exceptionally high standard—the thermal conductance (C value) is as low as 0.22.

A dual-purpose panel indeed!

HIGH, WIDE AND HANDSOME

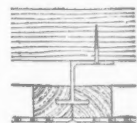


Ceilings of Bowater T/A Panels are a fine sight—walls and partitions, too. A perfectly flat surface is ensured by the rigid construction of every panel and by the hardboard splines which connect them.

EASE OF FIXING

Fitting up Bowater T/A Panels is simplicity itself. There are three ways of doing it:

- 1 Special Concealed Securing Clips—screwed to the existing structure—hold the panels secure with an air-gap above which adds to their already outstanding thermal efficiency.
- 2 For suspended ceilings, specially designed Bowater Metal Fixing Systems are available.
- 3 Finally, panels can be simply nailed up through the appropriate outer perforations—and thus the frame—using two inch galvanized lost-head nails.

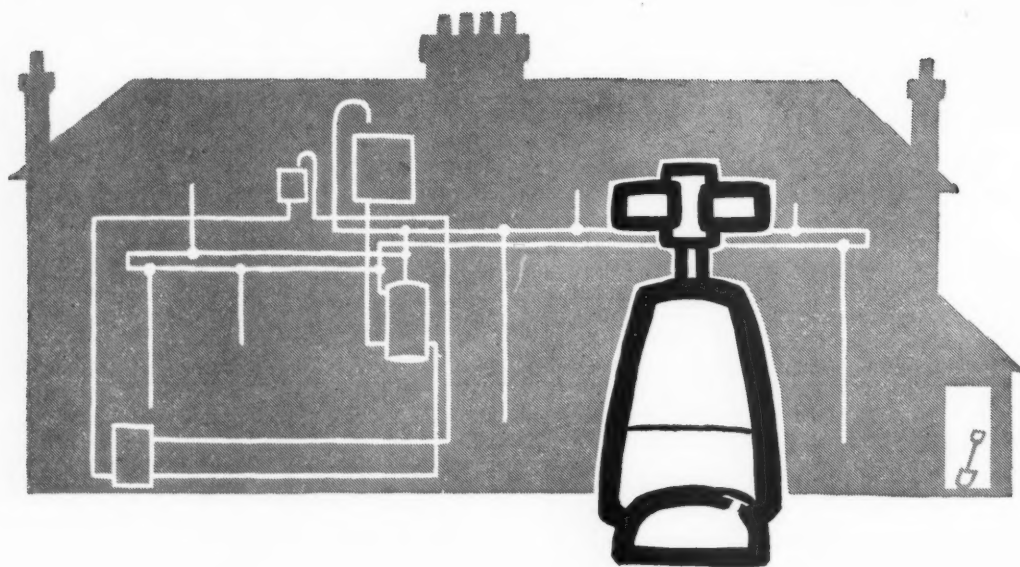


Drop us a line for further information and the name of your nearest distributor.

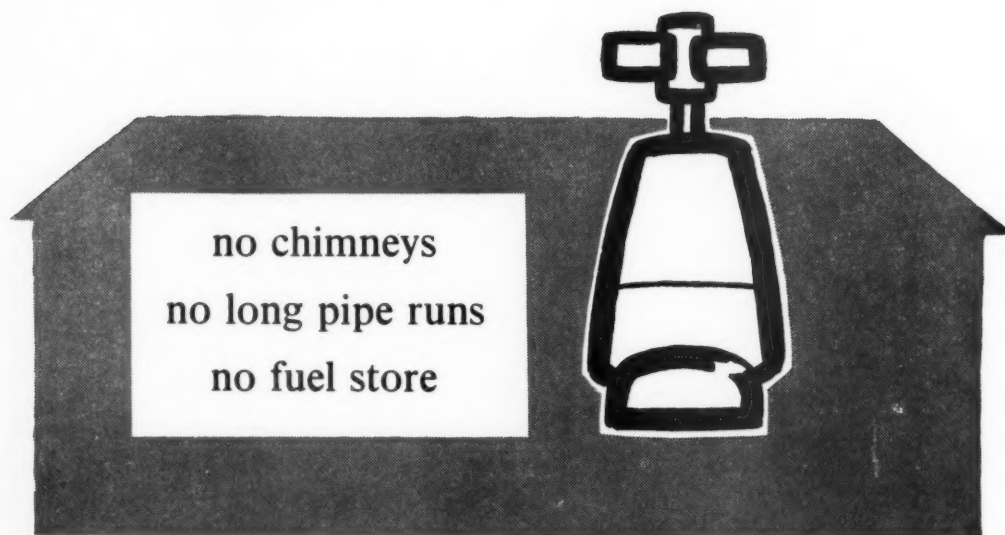
Bowater T/A Panels

BUILDING BOARDS DIVISION, BOWATERS SALES COMPANY LIMITED,
BOWATER HOUSE, STRATTON STREET, LONDON, W.1. Tel: MAYfair 8080

CRC TAI



Electric Water Heating cuts building costs



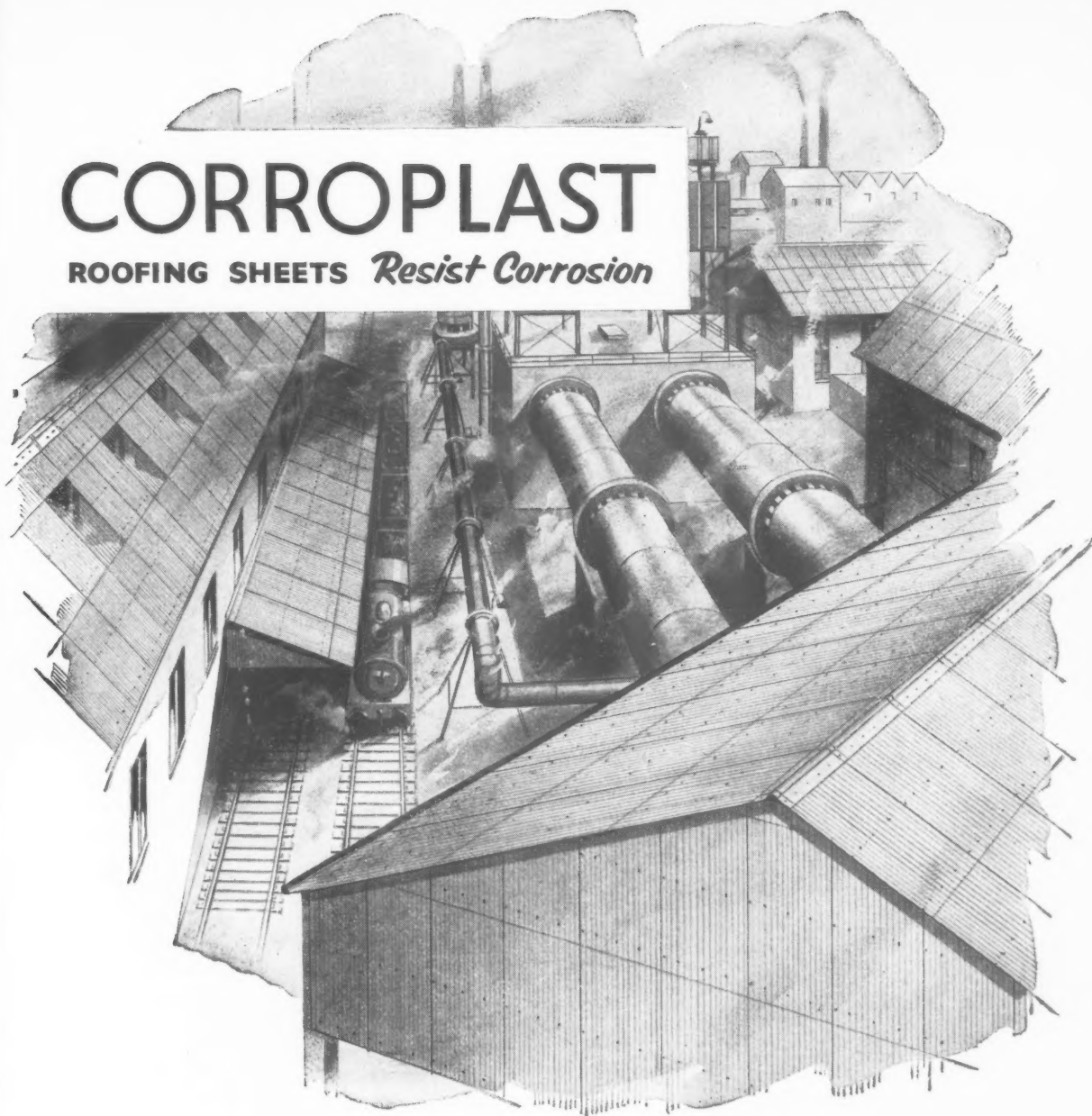
The modern way of water heating is electric!



Issued by the Electrical Development Association, 2 Savoy Hill, London, W.C.2.

CORROPLAST

ROOFING SHEETS *Resist Corrosion*



Wherever there is corrosion in the atmosphere, Corroplast laminated plastic sheets are essential for roofing and side cladding. Corroplast is highly resistant to corrosion and is maintenance free, light and easy to erect. This long lasting roofing material is available in 3 integral colours—Brunswick Green, Natural Brown and Terracotta. For re-roofing and new buildings, specify Corroplast every time; it pays in the long run.



Write for further details to Dept. 204

HOLOPLAST LIMITED Sales Office: 116 VICTORIA STREET, LONDON, S.W.1 Tel: VICTORIA 9354/7



Sound control is our business

Sound Control Limited, with their expert, highly experienced team of acoustic engineers, will analyse, diagnose and cure most problems in sound. Their successes range from the suppression of obstinate echoes or resonances in concert halls and cinemas to reducing general noise level in offices and factories. Full details of this service will gladly be sent on request.

THE CONSULTING DIVISION acts in a consultative capacity to architects, Government departments and industry generally on all acoustic problems. This service is available at moderate fees and includes advice on the design of new structures as well as the means of overcoming existing noise troubles. Expert supervision of your own contractors' work can also be undertaken.

THE CONTRACTING DIVISION exists to carry out all work needed to effect a cure. *The Division is under no obligation to use particular proprietary products.* The sole test applied is that the material used is up to the mark acoustically—irrespective of its source.



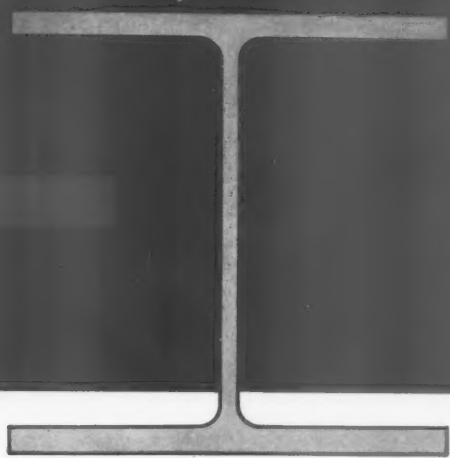
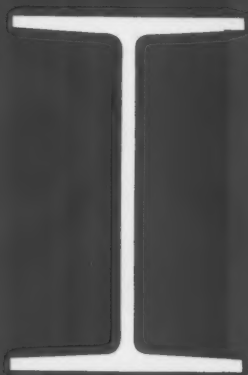
SOUND CONTROL LIMITED

A MEMBER OF THE THERMOTANK GROUP OF COMPANIES

Consultants and Contractors in Architectural Acoustics

COLNESIDE WORKS: WEST DRAYTON, MIDDLESEX. TEL: WEST DRAYTON 3685/9
SCOTTISH OFFICE: 10 BOTHWELL STREET, GLASGOW C.2. CENTRAL 6571/2

ED



'UNIVERSATILITY' OF OUR NEW UNIVERSAL BEAM MILL

With this mill we can now roll 'H' and 'I' sections from 6 inches deep by 6 inches wide up to 36 inches deep by $16\frac{1}{2}$ inches.

Further, this versatile mill can roll all these sections in different thicknesses, so that constructional engineers will no longer need to build up their columns and girders, except for the heaviest work.

Whole 'families' of simple columns can be rolled, in suitably related sections, for multi-storey buildings: beams can be produced (some of them the largest in Europe) with extra flange thickness to carry exceptional loads. In all these cases the

laborious riveting-on of extra flange-plates will be abolished; a simple rolled section will do the job better, saving steel and labour, and resulting in neater steelwork.

Universal beams open a new field for steelwork designers, offering far-reaching economies and increasing the efficiency of the structure.

Steelwork will become neater and of good appearance.

The variation in the flange and web thickness of the new sections is carried out by adjusting, not changing, the rolls. The small diagram shows the arrangement; the adjustment does not appreciably alter the surfaces shaded in red.

B.S. STANDARD BEAMS, CHANNELS AND
ANGLES WILL STILL BE AVAILABLE



DORMAN LONG

Hygienic....

Fired at a much higher temperature than ordinary ware, Vitreous China is a dense and non-absorbent material which remains steadfastly hygienic.* And it does not depend on its glaze to make it watertight. It is non-porous and non-crazing. Germs cannot lodge and breed in it. "Standard" Sanitary Ware made of Vitreous China guarantees hygiene for the lifetime of whatever building it serves.

Durable....

Vitreous China has given 'durable' a new meaning, and because all "Standard" Sanitary Appliances are made of Vitreous China, it takes a lifetime to discover just how durable they are. With Vitreous China comes a higher resistance to harsh treatment than with ordinary ware. Much higher. And because "Standard" Sanitary Ware lasts and lasts, its cost for each year of service is much lower.

Vitreous

** In many countries it is officially required that Sanitary Appliances be made of Vitreous China. Many British architects, doctors, and Public Health Authorities would like to see similar legislation in Britain and so, not unnaturally, would the makers of "Standard" Sanitary Appliances.*

Beautiful...

The clean, fresh beauty of "Standard" Sanitary Appliances made of Vitreous China is a joy to behold. A brilliant, practical beauty. A modern beauty that has been achieved by years of planning, styling, shaping and re-shaping. And below the surface there is the beauty of a superb craftsmanship. Inside and out, this Vitreous China ware is really beautiful.

eous China

Hygiene. Durability. Beauty. Economy. These are the characteristics of "STANDARD" SANITARY APPLIANCES made of VITREOUS CHINA which appeal to the house owner and builder no less than to the doctor and the architect.



IDEAL BOILERS & RADIATORS LTD., IDEAL WORKS, HULL



At Versailles

*"Harefield" Rubber Flooring laid
in a luxurious
restaurant at Versailles*

The long-wearing properties and wide choice of beautiful colours available in "Harefield" Rubber Flooring make it the unhesitating choice wherever quiet dignity and a complete integration with the interior decor are required.

In all parts of the world, the luxury and adaptability of "Harefield" Rubber Flooring are leading to its ever increasing use.
May we send you further details and sample.

"Harefield"

RUBBER FLOORING



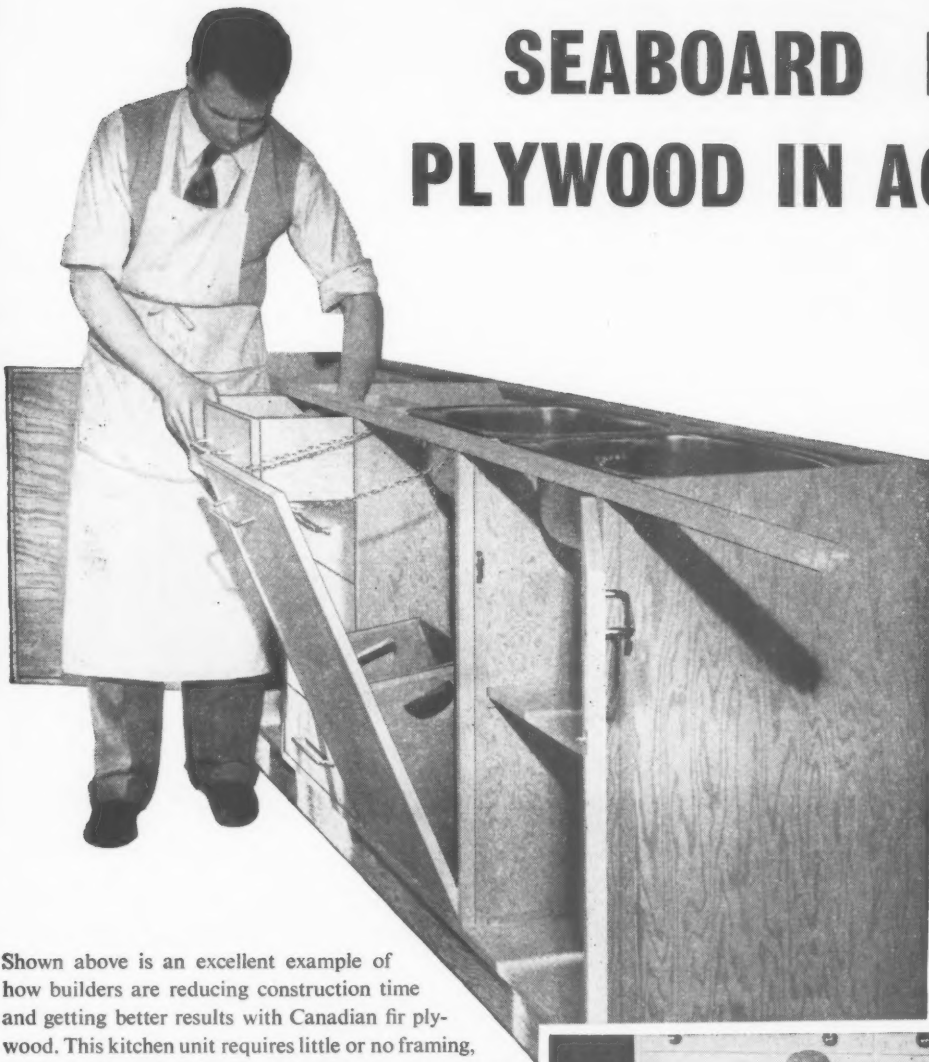
RUBBERWARE LIMITED · CONTRACTS DEPARTMENT

20-23 HOLBORN · LONDON E C 1 · TELEPHONE CHAncery 7741 · HEAD OFFICE AND WORKS HAREFIELD · MIDDLESEX

g laid

OLESEX

SEABOARD FIR PLYWOOD IN ACTION



Shown above is an excellent example of how builders are reducing construction time and getting better results with Canadian fir plywood. This kitchen unit requires little or no framing, yet is strong and rigid. The smooth, one-piece doors are easily cleaned and maintained.

Canadian fir plywood in low-cost sheathing grades is being used also as a foundation for various types of floor coverings, providing an even base for carpeting, tiles and any other material requiring a uniform underlay.

THE CANADA TREND HOUSE, a timber frame house designed for the British Isles, takes full advantage of Canadian fir plywood for kitchen and storage fitments, as well as floor underlay

Seaboard Lumber Sales Company Limited, Seaboard House, Vancouver 1, Canada



SEABOARD

CANADIAN DOUGLAS FIR

PLYWOOD

MAIL THIS COUPON

N.R.M. Morison, Esq., 1-3 Regent Street, London, SW1

Please send me free copy of Seaboard Plywood Handbook (L-11) describing full selection of Douglas fir plywood.

NAME

ADDRESS

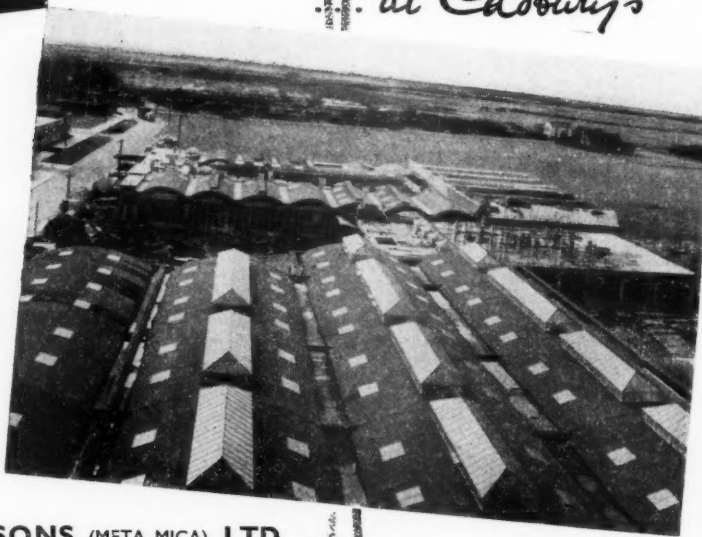
UK/57/18/15

KENYON

ROOF SCREEDS

at Cadbury's

The screeds, consisting of a simple mix of MetaMica Vermiculite and cement, have exceptional thermal insulating properties. Heat loss through the roof is greatly reduced and expansion and contraction in buildings is minimised. The photograph shows Kenyon roof screeds on the roof of Cadbury's factory at Moreton, for which A. Monk & Co. Ltd. and J. Gerrard & Sons Ltd. are the main contractors. Architect: C. J. Wilkinson, L.R.I.B.A.



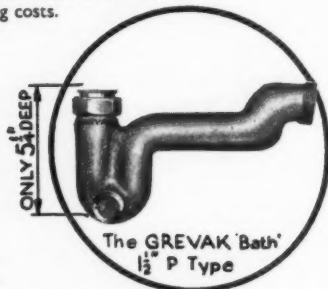
WILLIAM KENYON & SONS (META MICA) LTD
DUKINFIELD Ashton-under-Lyne 1614-7 and 3673-6 **CHESHIRE**

(MM2

GREVAK

ANTI-SIPHON TRAPS

In these flats at Alice Gilliatt Court, part of the Star Road (Fane Street) Redevelopment Area, Fulham—a major requirement of the plumbing was resistance to self and induced siphonage. To obtain the highest standards of efficiency GREVAK Traps were extensively used. GREVAK have all the essentials of the perfect hygienic trap—smooth, even bore throughout, fully cleansing discharge, etc. The elimination of anti-siphon pipes reduces plumbing costs.



Borough Architect & Director of Housing J. Pritchard Lovell, Esq., F.R.I.B.A., F.I., Arb. P.P.I. Hsg. Contractor : Messrs. John Laing & Son Ltd.



Reports on efficiency tests carried out by independent engineers are available on request, together with fully illustrated literature and prices of the full range of GREVAK traps.

GREVAK ANTI-SIPHON TRAPS MAINTAIN THEIR SEAL

REGD. TRADE MARK

GREENWOOD AND HUGHES LIMITED · CARLISLE HOUSE · 8 SOUTHAMPTON ROW · LONDON · W.C.1
 CHANCERY 9377 (3 LINES) · TELEGRAMS: ANTIVACU WESTCENT, LONDON





the new toughened wall coating

Give those outside walls a new look with Ruccomat Toughened Wall Coating

—a new protective paint based on a most durable synthetic resin to give maximum protection for all kinds of exterior masonry, even glazed brickwork.

The abnormally tough qualities of the resin make Ruccomat much more resistant to extremes of weather or atmosphere—it has greater adhesion and lasts longer. Easy to apply, it dries quickly with a beautiful flat finish that has excellent dirt resistant qualities. Available in a wide range of fashionable shades.

Write or phone for special leaflet giving the full Ruccomat story.

Ruccomat WILL LAST FOR YEARS

PILCHERS LIMITED · FAMOUS FOR PAINTS SINCE 1770

6 CHESTERFIELD GARDENS, CURZON STREET, LONDON, W.1. TELEPHONE GROSVENOR 1603/5

RIPPERS STANDARD WINDOWS

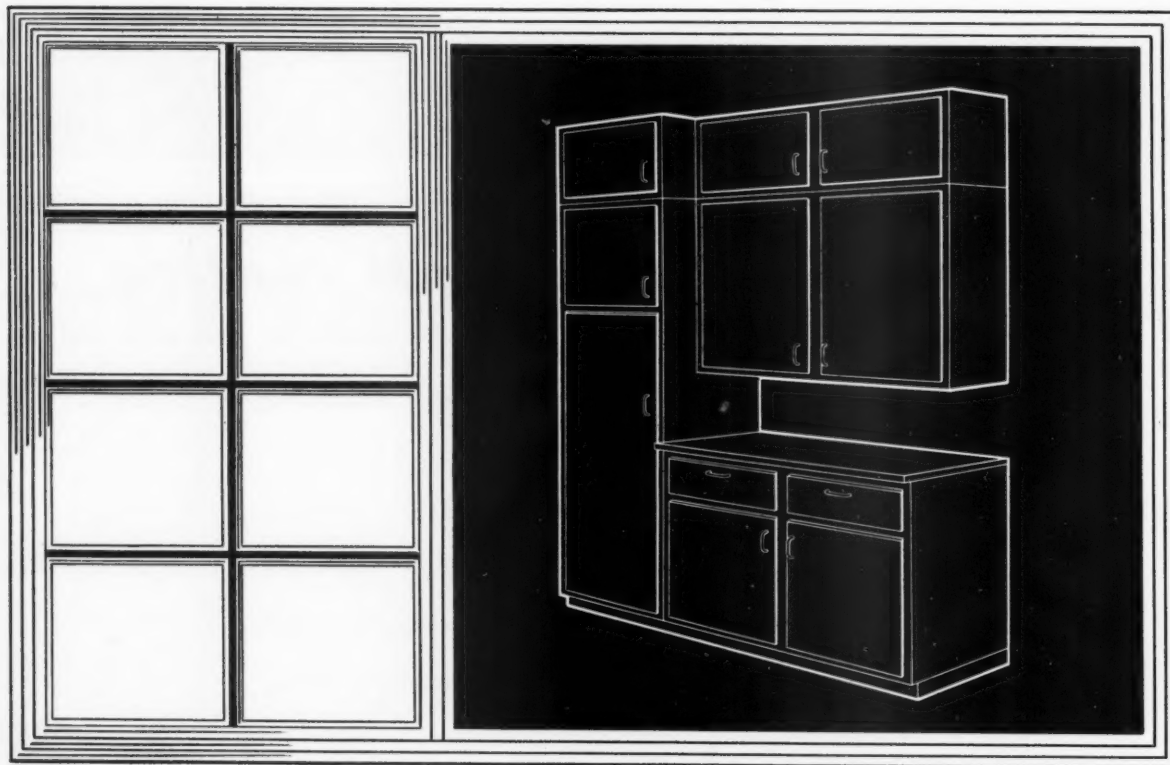
When you order windows, external door frames, internal door frames or kitchen units, make sure you buy Rippers—the finest standard joinery obtainable.

Over sixty years experience is behind Rippers quality—

‘the best in the business’

Write to-day for our free Catalogue : it describes over three hundred designs from which endless window combinations can be arranged, and includes descriptions of all our products.

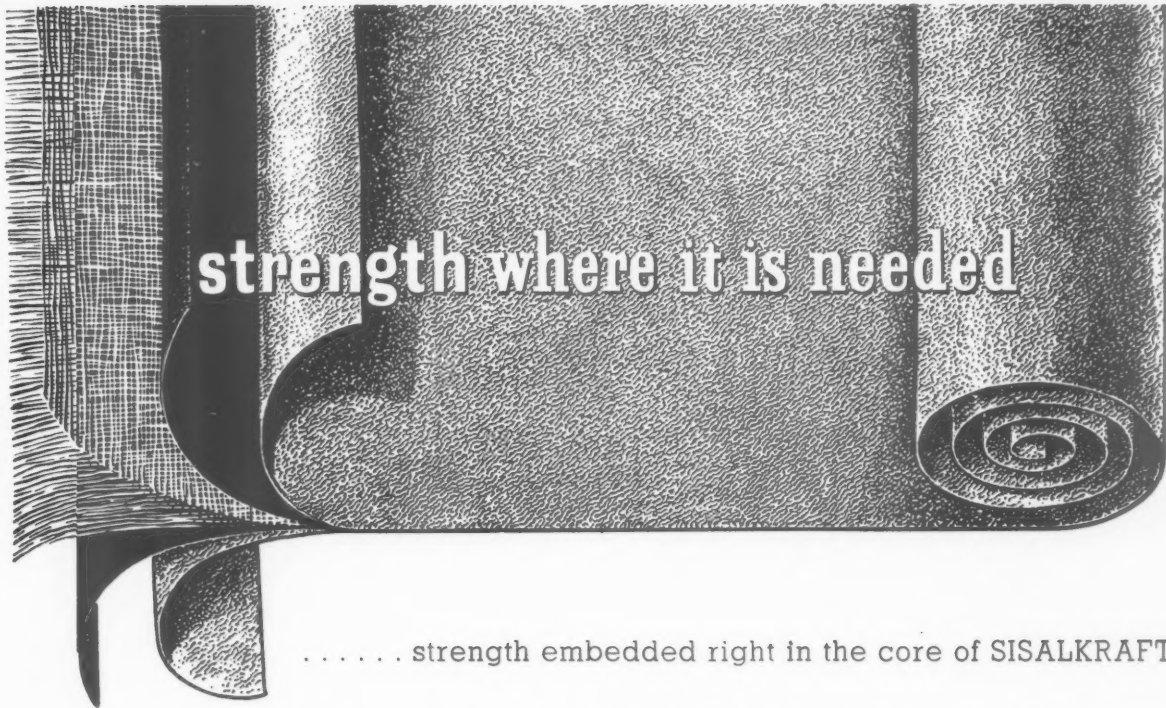
Apply for your free catalogue to Dept. A.J. 26/6.



**RIPPER
WOODWORK**

“you’ll be glad you chose WOOD windows”
RIPPERS LIMITED

CASTLE HEDINGHAM, HALSTEAD, ESSEX
TELEPHONE : 191 HEDINGHAM (4 lines). TELEGRAMS : RIPPERS, CASTLE HEDINGHAM
LONDON OFFICE :
9, SOUTHAMPTON PLACE, LONDON, W.C.1. TELEPHONE : CHANCERY 8306/7.



..... strength embedded right in the core of SISALKRAFT by the unique reinforcement of tough, nonhygroscopic, unspun sisal fibres that are laid in both directions and sealed in two layers of high grade bitumen and covered by outer sheets of stout kraft paper. This 6 ply construction gives the tough, supple strength of SISALKRAFT, making it easy to handle yet exceptionally tear resistant and proof against moisture and damp.



the supreme building paper

A PRODUCT OF BRITISH SISALKRAFT LIMITED

Please write for information and samples to the **SOLE DISTRIBUTORS:**

ESTABLISHED OVER A CENTURY

J.H. SANKEY & SON LTD

ESSEX WORKS · RIPPLE ROAD · BARKING · ESSEX

PHONE:
RIPpleway 3855

GRAMS:
BRICKWORK · BARKING



Besides the importation of timber from all sources, we specialise in its use for engineering purposes. Thus we make, deliver (and, if required, erect on site) prefabricated Timber Trusses and Structures to meet any stated functional requirements. They are often cheaper in first cost than those of competitive materials, whilst on ease and expense of maintenance they win hands down. As Approved Manufacturers we work in close co-operation with the Design Service of the Timber Development Association. Details on request.

BEVES & CO LTD *Timber Importers*

**TIMBER STRUCTURES · FLOORING CONTRACTORS · PLYWOOD · DOORS
SOFT & HARDWOOD IMPORTERS · JOINERY MANUFACTURERS · FORMICA**

Head Office:

Kingston Wharf, Shoreham-by-Sea
Telephone: Southwick 2285



London Office:

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

CVS 16



...for that matter, what makes good electric cable?

A test bowler could not tell you how he co-ordinates speed, spin, trajectory, wicket-surface — and batsman's psychology: that is something his right or left hand knows.

In much the same way, engineering is often cleverer than it fully understands. In any firm with a long history the answers to many thousands of small technical problems have been absorbed so completely into normal manufacturing procedure that they

have become a matter of course.

So, at least, we have found at Crompton Parkinson. We are reminded of it occasionally by a visitor exclaiming: 'So that's how it's done!' when he sees something we have come to take for granted. And, when you think of it, it is exactly this kind of knowledge that makes the difference between first-class electric cable and cable that meets the same specification.



Crompton



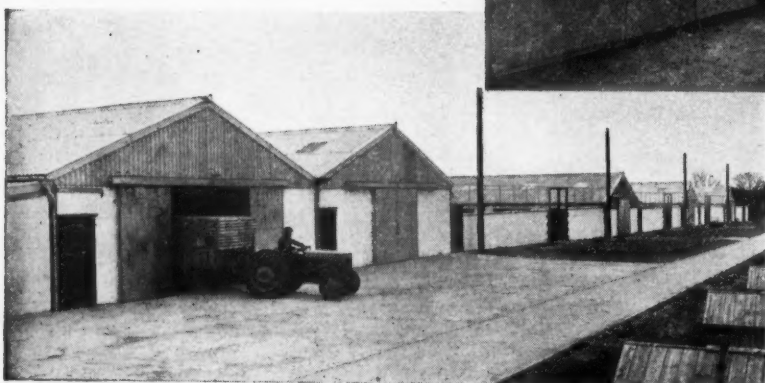
A GOOD NAME FOR ELECTRIC CABLE

Made to the registered specifications of the Cable Makers Association

MADE BY CROMPTON PARKINSON LTD., CROMPTON HOUSE, ALDWYCH, LONDON, W.C.2

TELEGRAMS: CROMPARK ESTRAND LONDON. CABLE WORKS: ALFRETON ROAD, DERBY. TELEPHONE: DERBY 45431

STANDARD STEEL FRAMED BUILDINGS FOR INDUSTRY OR AGRICULTURE



We supply and erect steel framed structures also sheeting and glazing for cladding the frame.

Our advice is freely offered upon receipt of general details of your requirements, backed up by a very long experience of problems met with in supplying and erecting steel framed structures of all kinds.

Foundations, flooring, and builder's work are carried out by the appointed General Contractors.

CROGGON & CO. LTD.
ESTABLISHED 1835

Croggon

Constructional Engineers, Galvanised Tank and Cistern Makers. Sheetmetal Workers. Woven Wire and Fencing Manufacturers.

Poyle Steelworks, Coinbrook, Nr. Slough. Coinbrook 2501 · 230 Upper Thames Street, London, E.C.4. CENTral 4383 · 8 Cornhill, Liverpool. Royal 3868 · 7 John Street, Glasgow. Bell 2983

PLAN

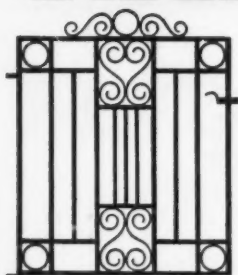


Specify

...TO CONTAIN COSTS & MAINTAIN QUALITY!

RANALAH

ORNAMENTAL IRON



- OVER 100 DESIGNS OF SINGLE DOUBLE AND ARCHWAY GATES, RAILINGS, BALUSTRADES, STAIRWAYS ETC.

- IDEAL FOR ESTATES AND COMPETITIVE BUILDING

- SPECIAL PRICES FOR CONTRACT ORDERS

- STOCKED BY LEADING BUILDERS MERCHANTS THROUGHOUT THE U.K.

GATES

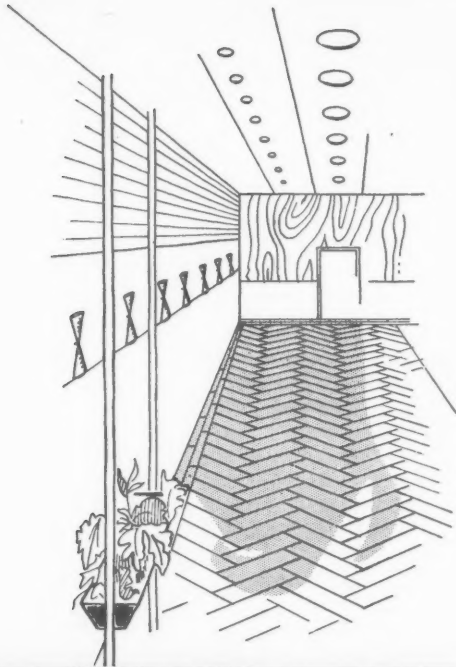
from
39/6 RETAIL PRICE

PRESTON
Overall Height 3' 3"
Retail Prices
3' 0" Opening £4 13 6
3' 4" " £5 1 9
Double Gates £12 5 0

PHONE BRIGHTON 62216-7-8-9 OR WRITE FOR CATALOGUES TO

RANALAH GATES LTD LOWER BEVENDEAN BRIGHTON

ctures
ng the
ript of
acked
blems
steel
work
eneral



HOLLIS FLOORS

of

WEST AFRICAN OPEPE
(SARCOCEPHALUS DIDERRICHII)

Opepe is without doubt, one of the outstanding hardwoods for flooring imported from the African Continent. Remarkably trouble free due to its natural stability, giving long and even service in wear, it also provides a floor of most attractive appearance by virtue of its beautiful grain, the colour toning to a rich golden brown.

Contracts on hand or recently executed with OPEPE include:—

CONTRACTS

University of Birmingham, Mechanical and Electrical Engineering Departments.
University College of Leicester, "N" Block Extension, Common Room and College Hall Extension.
University of Sheffield, New Engineering Block.
University College of Leicester, The Percy Gee Building.
Easingwold Grammar School.
College of Further Education, Doncaster.
Grammar School, Wath-on-Deerne.
Canon Slade Grammar School, Bolton.
New Science Building, Grammar School, Ashby-de-la-Zouch.
Notre-Dame High School, Eccleston.
St. Mary's College, Blackburn.
Teachers' Training College, Coventry.
Drawing Offices, De-Haviland Aircraft Co. Ltd., Hatfield.

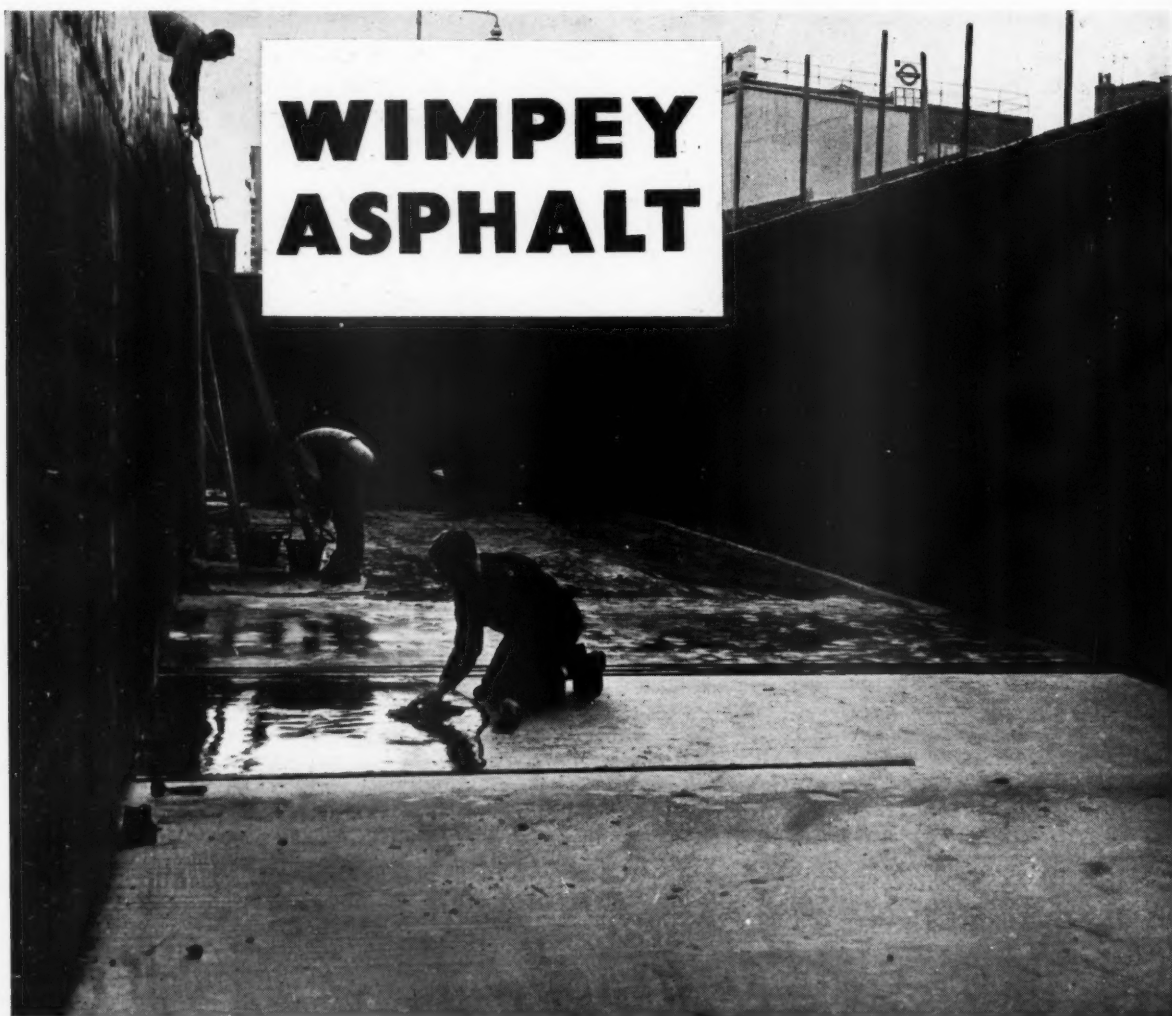
ARCHITECTS

Messrs. Peacock & Bewlay, Birmingham.
University College of Leicester.
Messrs. J. W. Beaumont & Son, Sheffield.
Messrs. Thos. Worthington & Sons, Manchester.
Messrs. Gollins, Melvin Ward & Partners, London.
Borough Architect, Doncaster.
Messrs. Taylor & Young, Manchester.
Messrs. Pick, Everard, Keay & Gimson, Leicester.
Messrs. Wm. and J. B. Ellis, St. Helens.
Messrs. W. S. Hattrell & Partners, Coventry.
Messrs. J. M. Monro & Son, Watford.

In addition to the above, OPEPE has been used in over 50 Primary, Junior and Secondary Schools, also in Industrial Premises, Offices, Churches, etc.

HOLLIS BROS. LTD.

LEICESTER • HULL • LONDON • BIRMINGHAM



J. Rawlinson, C.B.E., M.Eng., M.I.C.E., M.I.Mech.E., M.I.Mun.E.,
CHIEF ENGINEER & SURVEYOR.

Main Contractors:
J. Murphy & Sons Ltd.

A standard example of three coat Mastic Asphalt Tanking to B.S.S. 1097 being laid to Pedestrian Subways at the Elephant & Castle for the London County Council. WIMPEY ASPHALT offers a service to all Contractors, Architects, Local Authorities, Industry, etc., for the construction of ASPHALT FLOORING and Felt and Asphalt Roofing, as well as for Tanking. Enquiries and requests for advice should be made to any WIMPEY ASPHALT office.

**WIMPEY
ASPHALT**

HAMMERSMITH GROVE, LONDON, W.6
CHESTER ROAD, BIRMINGHAM, 24
240 OXFORD STREET, SWANSEA
GREEN LANE, HEYWOOD, LANCS.
NARBOROUGH, NORFOLK.

RIVerside 2000
Castle Bromwich 3621
Swansea 50045
Heywood 69513
Narborough 277

A DEPARTMENT OF GEORGE WIMPEY & CO., LTD.

Phone
Phoenix
for
Softwood

RAINHAM 33II & 336I

these New Facts

PROVE

ARBOSEAL

outdates all other Sealing Strips!

- Based on a *polythene* plasticised medium it supersedes traditional Vegetable oil based mastics and sealing strips.
- Completely inert and impervious to water and ultra-violet light.
- Provides a resilient seal or gasket with great powers of recovery under thermal movement.
- Joints and seals almost all building materials.
- Never hardens or dries out.
- Easily removed from the reel.
- Available in flat and round sections.

No paint protection required.

Send for descriptive leaflet.



ARBOSEAL

mastic strip with
Polythene base

sole manufacturer:

Adshead Ratcliffe & Co. Ltd.

Belper, Derby. Tel.: Belper 351/2

lay any surface with safety

VENTROT

prevents
rising dampness

through solid sub-floors

VENTROT conforms to the requirements of the Building Research Station Digests, No. 1—'THE DESIGN OF TIMBER FLOORS TO PREVENT DRY ROT' and No. 86—'DAMP-PROOF TREATMENT FOR SOLID FLOORS', and is specified widely by County and Municipal Authorities throughout the country.

specify

VENTROT

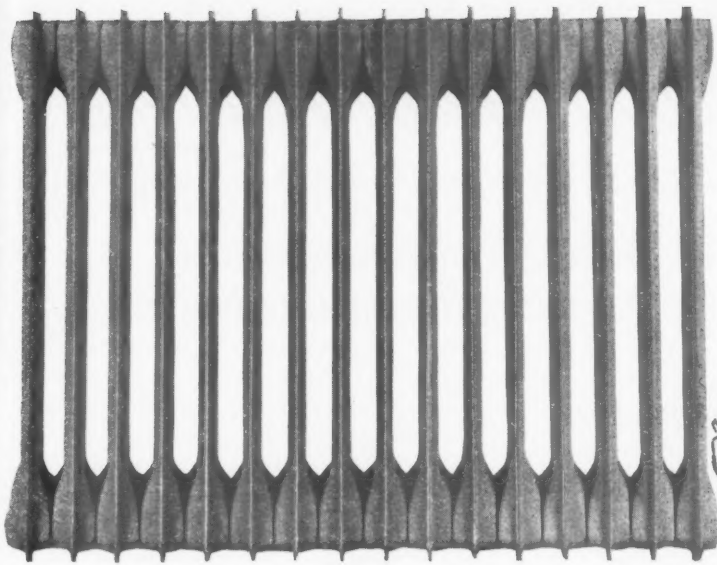
membrane D.P.C

For further details write to



British Bitumen Emulsions Ltd.

Dundee Road, Trading Estate, Slough, Bucks. Tel: Slough 21261/6
20 Maukinfauld Road, Glasgow, E.2. Tel: Bridgeton 2791
Deeside, Saltney, Nr. Chester. Tel: Chester 23128
91a Lower Ashley Road, Bristol 2. Tel: Bristol 51380

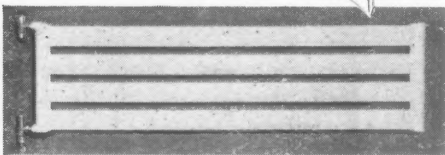
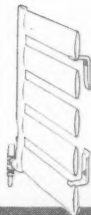


Light

**support only
required**

**THE WASHINGTON
WALL RADIATOR**

Design permits quick, thorough cleaning, merges tastefully with modern architecture.



About three times lighter than the cast iron article, a Washington Steel Radiator is safely supported by even thin dividing walls. Weight restrictions virtually removed means a freer hand for the architect considering new buildings, large or small. Excellent heat emission, easier cleaning and painting, rigidity and great strength—these features of Washington Steel Radiators are the results of scientific design and construction and the use of finest quality pressed steel. Slim and attractive in appearance, Washington Steel Radiators are made to meet the needs of today in every way.

WASHINGTON *the word for* **MODERN STEEL RADIATORS**

Send for illustrated literature to:

WASHINGTON ENGINEERING LIMITED



P.O. BOX No. 4, WASHINGTON, Co. DURHAM
Telephone: Washington 2362-3
Telegrams: Wearco, Washington Station

Dept. (A) Washington Engineering Ltd., P.O. Box No. 4, Washington, Co. Durham. Please forward illustrated literature and full details of Washington COLUMN and WALL Radiators.

Name.....
Address.....

Sole Agents: MESSRS. BROWN & TAWSE TUBES LTD., Branches at: DUNDEE, GLASGOW, LONDON, MANCHESTER & BIRMINGHAM,



Stelrads in the library of
a L.C.C. School

Everybody Knows a Stelrad

**Ye canna get more economical
heating for the wee bairns**



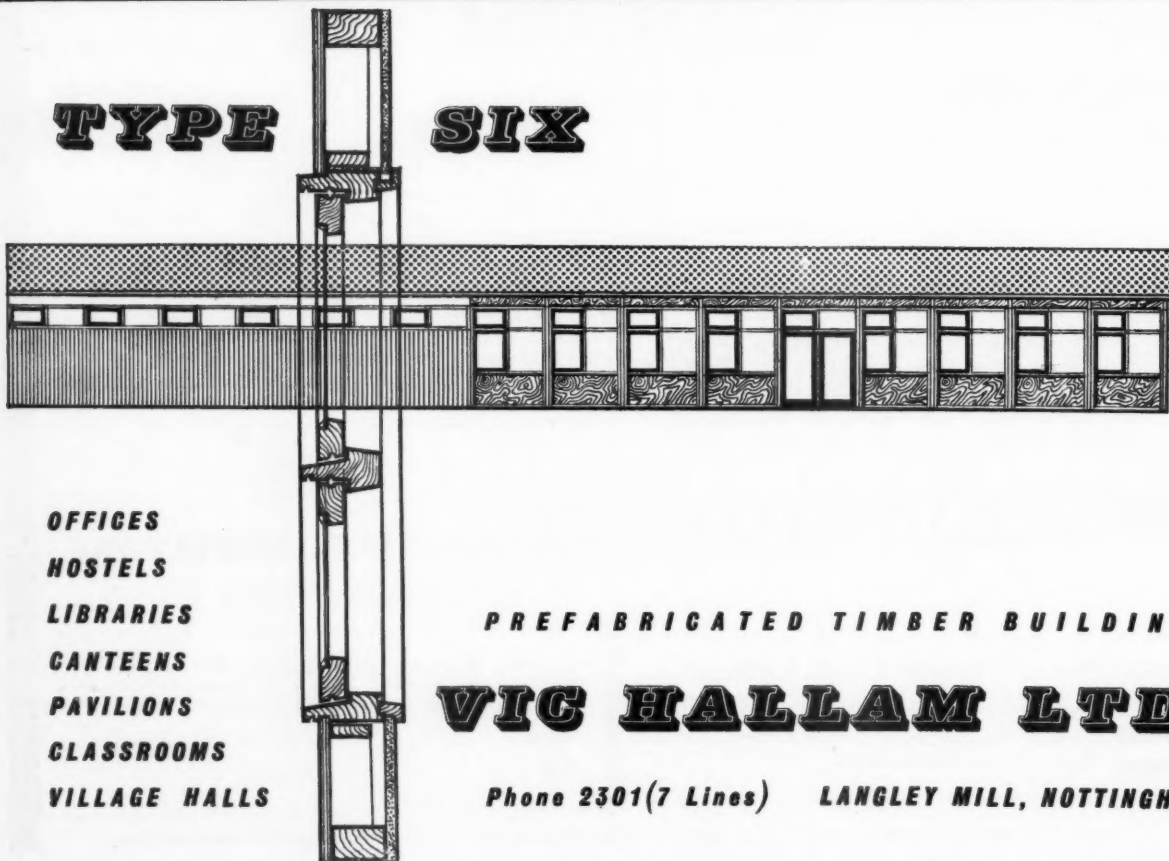
Aye! It's true friends. You cannot get more economical heating than central heating, and you cannot get a better central heating radiator than a Stelrad. A Stelrad is a brawny radiator—made of steel, oxy-acetylene welded for greater strength. Aye! and will ye no remember the Stelrad range?

It's complete with two, three, four and six column types, wall, Easy Clean, angled wall, double, and triple banked wall, each available in many heights and to almost any length. And do ye ken the many Stelrad installations like the one above, and do ye ken the Stelrad Catalogue? Ye should send for that mon—it's free.

STEEL RADIATORS LIMITED

BRIDGE ROAD · SOUTHALL · MIDDLESEX
Telephone: Southall 2603

TYPE SIX



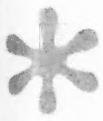
**OFFICES
HOSTELS
LIBRARIES
CANTEENS
PAVILIONS
CLASSROOMS
VILLAGE HALLS**

PREFABRICATED TIMBER BUILDINGS

VIC HALLAM LTD.

Phone 2301(7 Lines) **LANGLEY MILL, NOTTINGHAM**

Design for today



WITH QUICKTHO 'WINDOWALL' CURTAIN WALLING

The Quicktho 'Windowall' System greatly simplifies walling design in framed buildings and gives flexibility in positioning of windows and ventilators. Constant research and development have brought the system to the highest standards of efficiency. Inaccuracies in erection are allowed for—generous tolerances are provided at every junction. Condensation can be collected and drained at any desired transome or sill level. All Quicktho sections are high corrosion resisting aluminium alloy extrusions.

Cole Green Lane S. M. School
County Architect,
Herts County Council.



HORIZONTAL SLIDING WINDOWS



incorporated into
Oak Park Secondary School, Havant.
(Architects: Messrs. Yorke, Rosenberg and Mardall.)

Quicktho Horizontal Sliding Windows have attractive, functional design and faultless action. They are factory glazed and ready for direct mounting into timber sub-frames. Available in any dimensions up to four feet high by eleven feet wide or equivalent area.

The Quicktho Technical Department is always at your service.

Send for free brochure on Quicktho Building Division Products.

QUICKTHO

QUICKTHO ENGINEERING LTD.

QUICKTHO ROOF LIGHTS

Aluminium alloy fixed and hinged roof lights in single or multiple units. Opening type simply operated with balancing mechanism of unique design.

QUICKTHO TOP-HUNG VENTILATORS

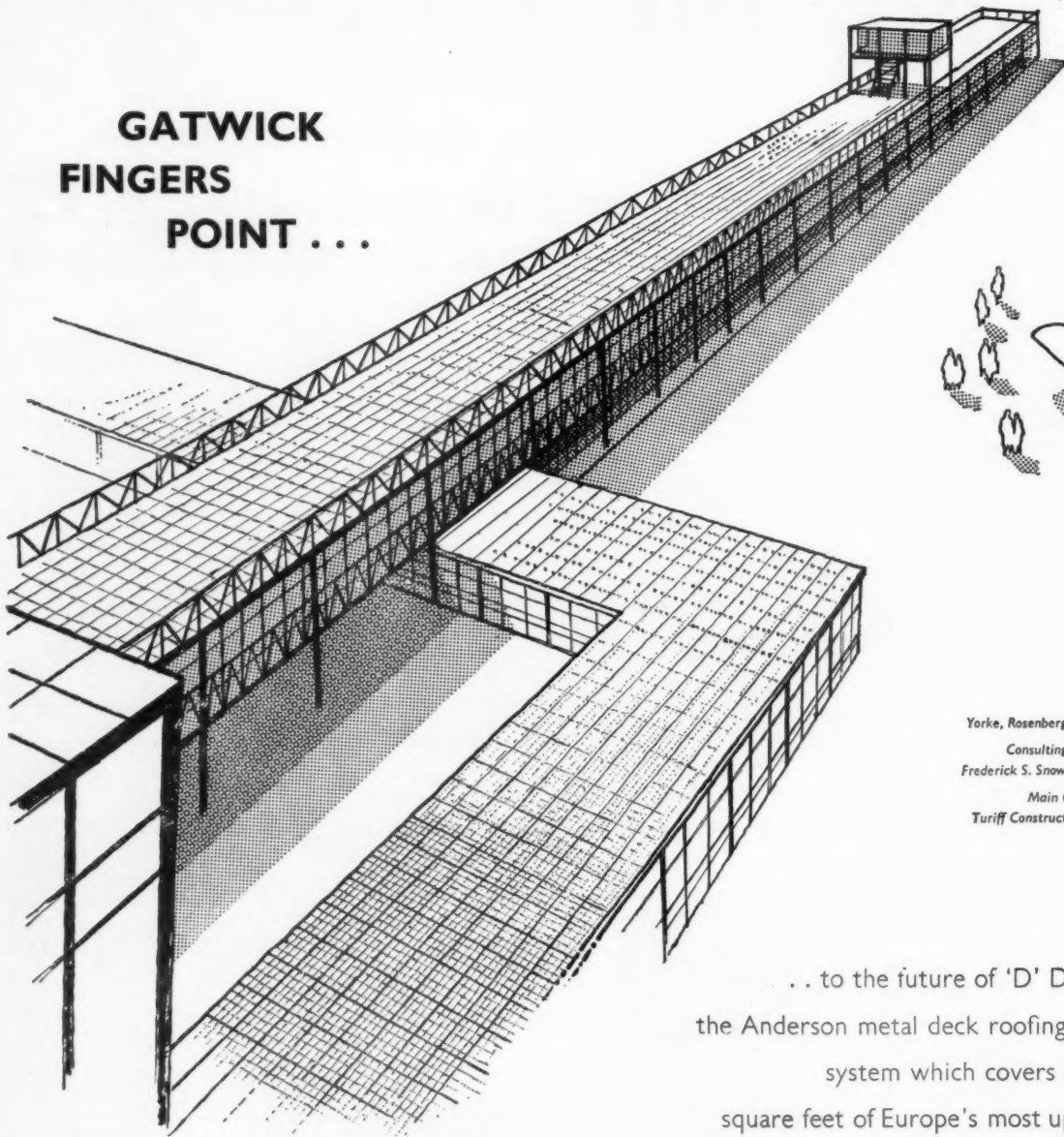
Supplied in any size to fit apertures up to seven feet wide. Factory glazed and ready for direct mounting into timber sub-frames.

POINT PLEASANT, WANDSWORTH, LONDON, S.W.18

Telephone: VANDyke 4115/6.

Telegrams: Quicktho, PUT., London.

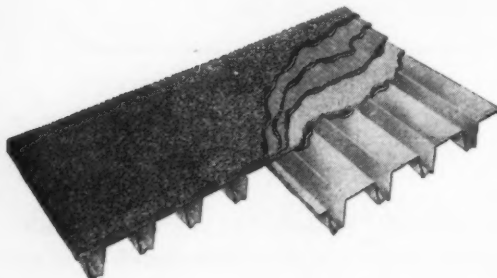
GATWICK FINGERS POINT . . .



Architects:
Yorke, Rosenberg & Mardall
Consulting Engineers:
Frederick S. Snow & Partners
Main Contractors:
Turiff Construction Co. Ltd.

. . . to the future of 'D' Decking
the Anderson metal deck roofing
system which covers over 70,000
square feet of Europe's most up to
date air terminal.

Over 50,000 square feet of Thermotile
promenade roofing and other Anderson
Roofing Systems have also contributed
to this fine airport.



D. ANDERSON & SON LIMITED

JN/D41

STRET FORD, MANCHESTER Telephone: LONGford 4444 OLD FORD, LONDON, E.3 Telephone: AMHerst 2388



LEYLAND

SLIDING PLATE GLASS WINDOWS



SUN LOUNGE OVERLOOKING MENAI STRAITS, ANGLESEY, ARCHITECTS, B. H. LINGARD & WILLIAMS, F/A.R.I.B.A.

These full length sliding windows in $\frac{3}{8}$ " polished plate glass bring the view into the room with maximum light, sunshine and ventilation unobtainable by any other kind of window.

The front set seen on the left is in 3 panels giving two thirds opening, and the return in 2 panels, half opening.

Our Sliding Windows are supplied in sizes to suit practically all types of buildings.

SEE OUR PERMANENT EXHIBIT AT THE BUILDING CENTRE, STORE STREET, LONDON, W.C.1

Full particulars on request from the Manufacturers :

LEYLAND & SONS LTD.

TALBOT RD., STRET福德 MANCHESTER &
YORK RD., COLWYN BAY, NORTH WALES
Phones : Longford 3211. Colwyn Bay 2075



Hills Dry Building System

was used in the
construction of the
CITY of LONDON PAVILION
at BRUSSELS

HILLS (WEST BROMWICH)
LIMITED

ALBION ROAD, WEST BROMWICH, STAFFS. TELEPHONE: WEST BROMWICH 1811 (15 lines)

LONDON: CHAPONE PLACE, DEAN STREET, W.1. TELEPHONE GERard 0526/9

BRANCHES AT BIRMINGHAM, MANCHESTER, BRISTOL, NEWCASTLE-ON-TYNE, GLASGOW.



Steelwork for 24-29, Rood Lane
and 24-30, Fenchurch Street,
for City of London
Real Property Company Limited.
Architects: Howard, Souster and Fairbairn.
Consulting Engineers: G. A. Dodd and Partners.

fabricators and erectors

of structural steelwork

**BOULTON
AND PAUL**

BOULTON AND PAUL LIMITED

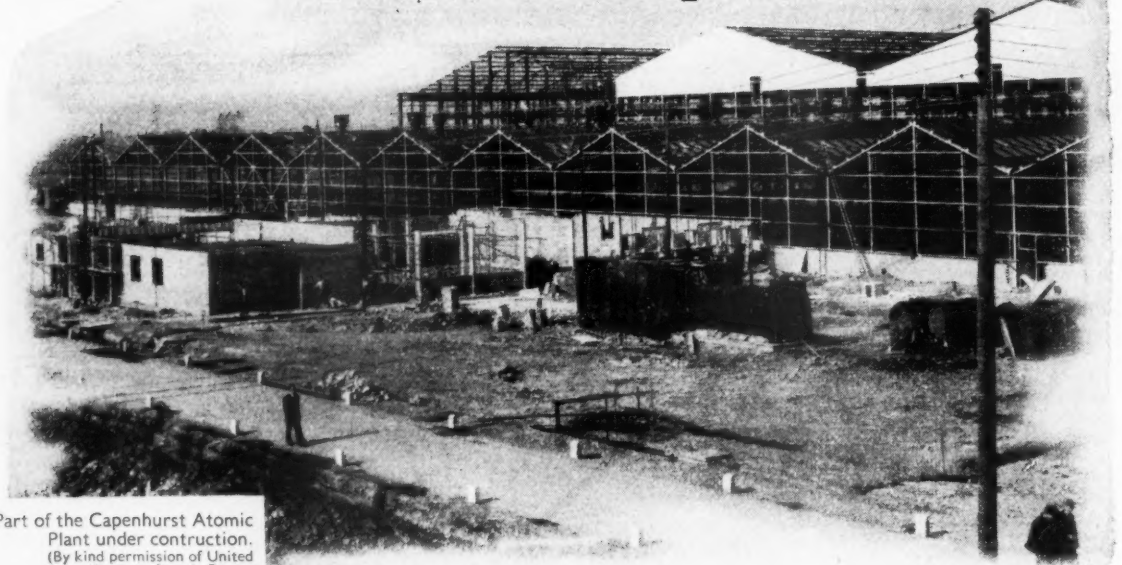
NORWICH LONDON BIRMINGHAM

APCE/28

**STRUCTURAL
STEELWORK BY
FINDLAY**

BRITAIN'S ATOMIC FACTORIES

Capenhurst



Part of the Capenhurst Atomic
Plant under construction.
(By kind permission of United
Kingdom Atomic Energy
Authority)

25,000 TONS OF STEELWORK

UNDER DIRECT CONTRACT WITH THE MINISTRY OF WORKS, ALEX. FINDLAY & CO. LTD., MOTHERWELL, HAVE SUPPLIED, DELIVERED AND ERECTED OVER 25,000 TONS OF STEELWORK TO BUILD THE UNITED KINGDOM ATOMIC ENERGY AUTHORITY PLANT AT CAPENHURST WORKS, CHESTER.

ALEX. FINDLAY & CO. LTD.

STRUCTURAL ENGINEERS

MOTHERWELL · SCOTLAND

Phone Motherwell 2301 (6 lines)

MEMBER OF THE NUCLEAR POWER PLANT CO. LIMITED

LONDON OFFICE: HIGH HOLBORN HOUSE, 52/54 HIGH HOLBORN W.C.1. TELEPHONE HOLBORN 7330-5083



speed

of delivery — of laying —
two of the many reasons why you can
with confidence
specify

RAPID PRECAST FLOORS

The Rapid Floor Co. Ltd. Africa House, Kingsway, W.C.2
John Ellis & Sons Ltd. Leicester
Tarmac Ltd. (Vinculum Division) Ettingshall, Wolverhampton
Rapid Floors (Wessex) Ltd. Bath
Cambrian Concrete Co. Ltd. Pontyclun, Glam.

Fast delivery to any site

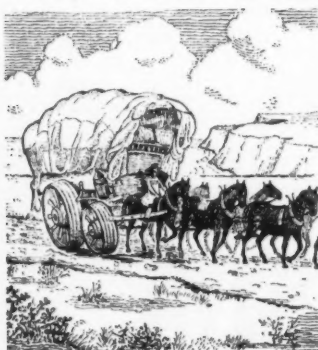
Today, delivery is fast and efficient —when you order Ferodo Stairtreads. For there are Ferodo wholesalers and twenty Ferodo Depots in major towns and cities up and down the country.

Ferodo Non-Slip Stairtreads blend with any interior decorations and even after years of constant use they give a reassuring foothold. Staircases in many kinds of public buildings and factories are fitted with Ferodo Stairtreads because they prevent accidents and are easy to clean.

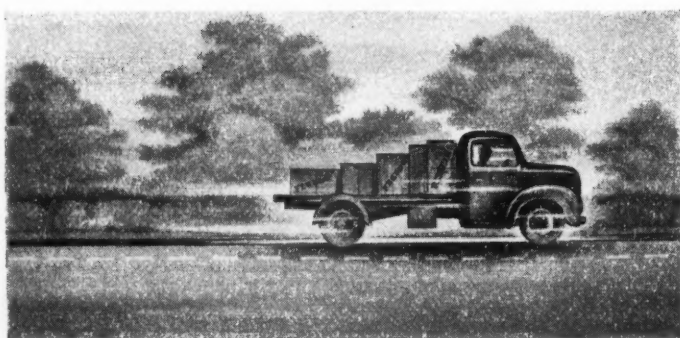
Ferodo Stairtreads are available in 7 colours, 3 types of metal channel and 39 types of tread to suit any stair.

A Ferodo technical advisory service is available and a technical representative is in your area.

TEN MILES A DAY BY STAGE-WAGON



Sir Christopher Wren waited so long for deliveries of materials, but he expected nothing better. It was tough going for the teams of horses that drew the slow wagons of the 17th Century—the roads were deeply rutted and the wagons often overloaded.



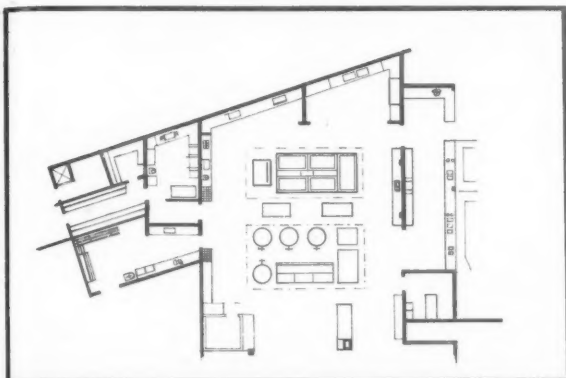
FERODO

non-slip stairtreads

For your Reference Files: New Illustrated literature in full colour will be sent on request to Stairtreads Dept.,

FERODO LIMITED • CHAPEL-EN-LE-FRITH
A Member of the Turner & Newall Organisation

THE STOTT SERVICE TO ARCHITECTS



Kitchen at Firth Brown Ltd., Sheffield, catering for
1,500 meals per day

Years of experience have taught us that careful initial planning is vitally important for the smooth running of the kitchen.

If you have a kitchen planning problem, from the supply and installation of a single piece of equipment to the planning of a complete kitchen, the Technical Experts in our Planning Department with their wide knowledge and experience are at your service.

Send now for a copy of our booklet "Large Scale Planning"
—a 32-page guide to planning for large scale catering.

(PLEASE USE BLOCK LETTERS)

PLEASE SEND COPY(IES) KITCHEN PLANNING/11

NAME

ADDRESS

"Stotts of Oldham"

VERNON WORKS, OLDHAM

A J

THE ARCHITECTS' JOURNAL

No. 3304 Vol. 127 June 26, 1958

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

BRASILIA

Hitherto it had seemed to me that Brazilian architecture, for all its obvious qualities, had to be considered under certain reserves. I thought—and I still think—that without equitable distribution of wealth, spread over all sections of the population, the basic aim of architecture, that is, its social foundation, was bound to be sacrificed and architecture reduced to merely satisfying the whims of a leisured class.

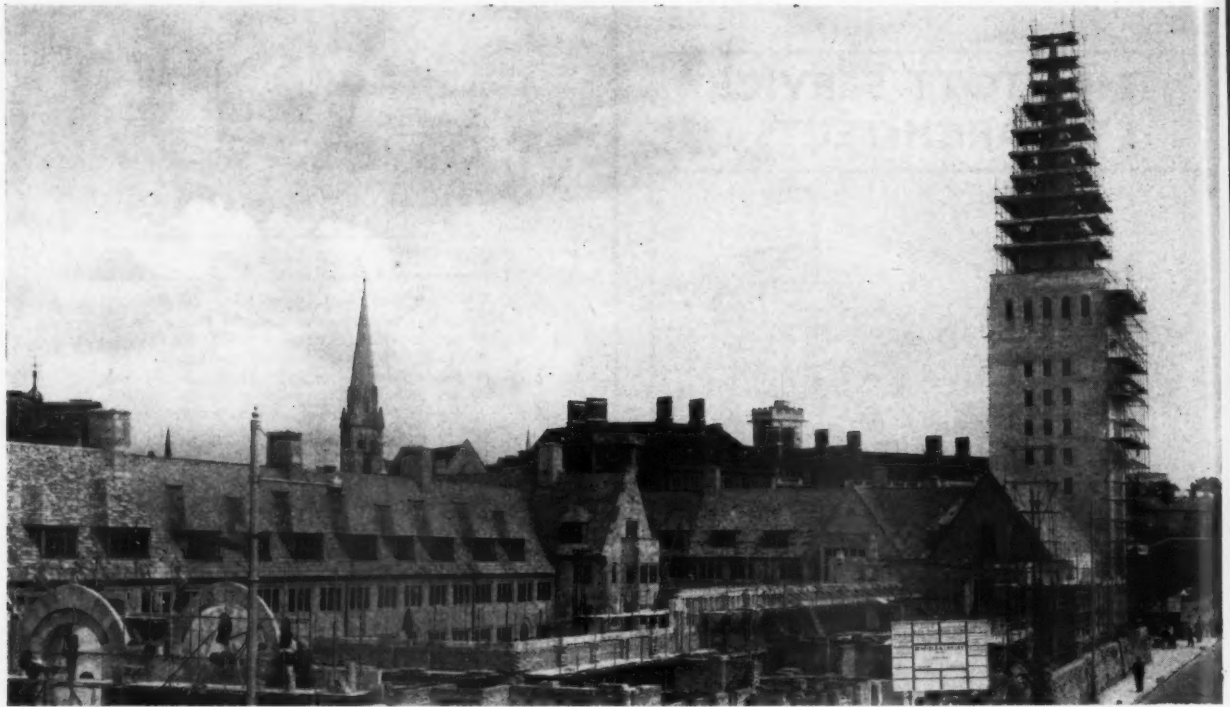
From Oscar Niemeyer's article "About My Work" in the official booklet *Brasilia*.

*

It's magnificent, but is it town-planning for the 20th century, this superb motorized baroque axial plan for Brasilia that has been on show at the ICA? The most brilliant solutions to the traffic problem and the most superb architectural quality in its buildings and its civic design will not save Brasilia from becoming a terrible headache to the government, a bottomless financial pit, and a source of acute social conflict if it is not based on a sound social foundation and its problems realistically solved. Niemeyer's reserve about Brazilian architecture deserves to be applied equally to Brazilian town-planning, especially when done in the grand Brazilian manner.

*

There are evidently some very sound economic, political and social reasons for opening up the central plateau of Brazil. It does not follow that the real way to do so is to build a new capital city in it. In the handbook published by the Brazilian government J. O. de Meira Penna gives, broadly speaking, three reasons for the new capital. The first is the need to open up the central plateau and make Brazil a "continental" power; the second is to remove the "parasitical bureaucracy" that flourishes in the heat and humidity of Rio to a site with an equable climate in which an efficient administration can better devote itself to the task of solving the nation's problems; the third is to insulate the government from the influence of the press and the people. "A large city," says Penna, "with its pressures, its passions, its economic



"The Rashest Remark Ever Made" (in Oxford)

"The spirit was willing, but the flèche is weak" a wit is reported to have observed about Nuffield College, according to the *Oxford Times*, which published a special supplement on the college following the presentation of a Royal Charter by the Duke of Edinburgh recently. This new, and oddly out of scale, addition to Oxford's dreaming spires is not the only feature about Nuffield College which has been criticized, and readers will note in the photographs above, the crudeness of doorways, of the Hall ceiling and the fussy prettiness of the planting and paving in the upper quadrangle. The building is not yet finished, but accommodation is planned for about 40 students and fellows living in, and studies for another 30 or so living out. There is a Hall seating up to 100, a library (in the tower), seating 60, and holding nearly 100,000 books, and various common rooms and administrative buildings. The estimated cost is £650,000. This gives a figure per place of approximately £10,000. It is startling to compare this with the University Grants Committee's advice of a figure of £1,500 per place, or the MOE's figure for teachers' training colleges of only £1,000 per place; and it is reasonable to question whether the more expensive building is, proportionally, more worth

having, in architectural terms, than one that is only one-sixth the price. According to the *Oxford Times* it was Lord Nuffield, the founder of the college, who insisted on the college building being, externally, at least, largely traditional, in Clipsham stone, and with a stone-tiled roof, and he also wanted a spire, despite the objections by purists to having a spire in Oxford on a secular building. The Duke quoted Lord Nuffield as saying that "it can be said without fear of contradiction that Nuffield College will improve the appearance of Oxford if nothing more," a remark which the Duke described as "by far the rashest remark ever made in this City." Bearing in mind the money spent, and the time and care lavished over this building, it would be fair to say that this building is also by far the greatest opportunity missed in post-war Oxford, and will stand as lasting evidence of a great industrialist's fear of progress in architecture. However, it is to be hoped that our senior universities will learn, from the small return in terms of architecture for this vast expenditure in time, energy and money, exemplified by Nuffield College, that there is no satisfactory answer to our twentieth-century building problems to be gained by escape into the styles of the past.

interests, the exaggerations of a very vocal press, and the constant danger arising from an emotional populace, is not the proper seat for a federal government." Is it unreasonable to ask whether this means that a South American government would feel safer in a capital city where the entire population consists of the state bureaucracy, and the problems of the "emotional populace" are far away? What reason is there to suppose that a change of the physical climate will by itself transform indolent bureaucrats into do-gooders charged with a sense of mission, or that an expensive new capital will make the Brazilian coffee kings any more willing to pay for schools, houses and hospitals than they are today?

Still, the capital is going to be built. Work has already started. And Niemeyer's first commission is to build a Presidential Palace outside the city limits. Again, one asks, why start with the Presidential Palace? Where is the building programme? How is it to be phased over the years? What is the order of priorities? Whatever questions one asks about Brasilia, Costa's report or the official descriptions invariably fail to provide any answer. If Costa's report, admittedly no more than an outline of a brilliant idea, has been worked out, there is no sign of it at the exhibition. It is, apparently, to be a bureaucrats' city, with a negligible amount of industry, though a substantial amount of offices and an incredible number of banks rising in a cluster of skyscrapers. It is to be dominated by the tallest building in Brazil—the office tower of the Parliament buildings. How many civil servants there are to be, and what employment there is to be for their sons, daughters and wives, we are not told. The drawings published are purely diagrammatic: there is no scale, so that one cannot even see whether the city is to be two miles long or 20. The traffic solution sounds excellent: but not even a trained mind-reader can be sure it will work from the meagre information provided; there is not even a road diagram. How large are the residential "super-squares" or neighbourhoods, and how many people is each to contain? Since they are all to be sold off to speculators for development (a proposal that no doubt commended the plan to Brazilian developers) what reason is there to suppose that there will be low-cost housing for the low-paid bureaucrats? How much is Brasilia going to cost? How is it going to be financed? If, when the Brazilian Chancellor decides he can't afford all the trimmings, what is going to go? Not the Presidential Palace, evidently. The houses perhaps? or the schools? or the motorways?

Possibly there are convincing explanations on all these points. But it is a pity that Brasilia was put on show in London and in Brussels with such meagre information, leaving the impression that it is a town plan of the old kind in a new guise: the maestro's brilliant inspiration, not backed by the essential work of analysis and development.

M. M.

The Editors

RIBA ELECTION RESULTS

THE RIBA Council election results, published on page 963, make interesting, if inconclusive, reading to the non-expert in electoral methods. It would seem obvious that the large vote given to Cleeve Barr is the measure of the great confidence in which he is rightly held by the profession, both for his work as an architect and for the statesmanlike way in which he criticized the RIBA at the recent AGM. Thurston Willians, who was also elected, is probably similarly known to the voting members of the profession for the motion he put at the well-known AGM of 1955 and for the comments he made at the last. Indeed his vote has increased over last year's by several hundred.

The other results are puzzlingly inconclusive. It is hard to see from a study of the candidates' election addresses, or from a slight knowledge of their careers, why the profession so markedly prefers Sheppard Fidler (F) to, say, Frederick Pooley (F), or Harold Conolly (F) to L. C. Howitt (F), all of whom are high up in local government. Or why Ralph Tubbs (F) reputed to be one of the quieter members of the RIBA Council, and certainly no great propagandist outside it, is so much more popular than Llewelyn Davies (F) or Douglas Jones (F). Similarly, why has Clifford Culpin (F) a lead over Bryan Westwood (F), John Eastwick-Field (A) over John Whitfield-Lewis (A) and William Howell over Geoffrey Powell? Dr. Thomas Sharp (L) collected the highest votes of all but this is not necessarily due to his popularity, considerable though it may be, but merely because he is outstanding in the small category of Licentiates. It would seem from this list that votes do not go necessarily to the *avant garde*, to the big practitioner or the big talker, but fall almost at random.

The fact that, despite recent important happenings in Portland Place, only 26 per cent. of the profession voted shows the profession's lamentable indifference to its affairs, and, probably, its resignation to the fact that the directly elected members to Council are only a minority anyway and are therefore hardly worth voting for. Perhaps the new committee which is to be set up to consider the reconstruction of the council will remedy this.

FEWER BUILDINGS

The interim report of the NFBTE speaks with concern of the plight in which the industry finds itself. Compared with a year ago, there are 45,000 fewer building workers and 13,000 more unemployed. For industrial buildings the value of new contracts let is one-fifth less than the value of completions and large contractors are now eager to tender for small jobs and work outside their normal area. The fierceness of competition is illustrated by one £100,000 job quoted in the report, for which 42 tenders were received. From another

source we learn that tenders have dropped by a healthy average of 10 to 15 per cent.

The most regrettable consequence of this situation is the unemployment. The shortage of work comes, for the contractors, after a long phase of prosperity. It should cause suppliers and sub-contractors also to reduce their prices, perhaps even cause breaches in price agreements and rings and make the medium size builder look to the efficiency of his management and organization.

The *good* news for both architects and builders is of course the fall in the bank rate to 5 per cent. and the increase in Initial Allowance against tax to 15 per cent. for buildings and 30 per cent. for plant and machinery. Clients are now more free to unshelve projects and start new ones, but the effect may be delayed for it takes perhaps between one and two years from the decision to build to start of work on the site. Architects and quantity surveyors may breathe again, but the volume of building going on will probably not pick up for several months.

We can only reiterate the advice given by the NFBTE itself that builders should "review the structure of their firms and reshape their internal organizations" and the plea made recently by Stanley Farrow (LMBA president) for the abandonment of wasteful and indiscriminate open tendering.



KEEPING UP DOWNING STREET

The committee on the preservation of Downing Street (architect member, Sir Howard Robertson) has made its report. It wants to preserve the appearance of the exteriors—apart from the rebuilding of no. 12 to its full height

(it is now only one storey)—and to strengthen and reconstruct the buildings. The cost for the operation, which will involve the preservation of rooms and features of architectural importance and the replanning of the rest of the interior, will be about £400,000. The Minister of Works has appointed Raymond (Regency) Erith—ASTRAGAL'S nomination as Top Academician—to do the work.

By any standards this is an expensive plan. But we all hate demolishing buildings with the slightest historical associations—even if the walls are cracked and without foundation, the floors sagging and the roof rotting—so, this is probably the best compromise decision. Still, couldn't we surround the features of merit (two staircases, the State rooms, the Cabinet room and the Soane rooms) with an entirely new building, properly planned for its important function? Perhaps Mr. Erith will be allowed to put forward a good new solution—if his examination of the problem shows it to be worth while. Let's hope we see any new proposals before it is too late.

Incidentally, the committee's report should make worrying reading for

Harold Macmillan, who was mainly responsible for the triumphant post-war return of the spec. builder. "Because they were built originally as a speculation," says the report, "these houses (annual maintenance, over £8,000) were not as solidly constructed as, say, the average family mansion intended to last for generations."

FILING ISN'T ENOUGH

Did you read Eric Bird's masterly paper on "The Problems of Technical Information" in last week's JOURNAL? ASTRAGAL, who heard the discussion which followed this paper at the RIBA, was reminded of a huge traffic jam. Everyone knew what was holding him up, but no one, by himself, could do anything about it.

The problems Mr. Bird talked about are corporate problems and they can only be solved by corporate means. It was clear from the discussion that a lot of people now recognise this, and that the time is close when decisive moves can be taken. There are one or two little things to be done first, like the standardising of paper sizes and the agreement of a classification. But the greatest difficulties will be found in knocking information into shape. You can classify and file for ever, but it won't get you anywhere if the stuff you're filing is no good. Knocking information into shape—even trying, as the AJ does, to do so—is expensive. Dargan Bullivant, the AJ Research Fellow in this subject (remember?) startled the meeting when he pointed out that the IEE spends 17 per cent. of its annual budget on information for members, while the RIBA spends only 5 per cent.

An information service, as Thomas Mitchell so rightly pointed out, doesn't make an architect; it only gives him time to be one. And that, of course, is just what everyone wants.

A DIFFERENT ANGLE

So the Pembroke Coast National Park is to have an iron ore dump. It will be very close to Angle, which the Minister of Housing, Henry Brooke, calls "one of the most pleasant and unspoiled villages in the Park." He would not, however, "be justified in refusing to grant the planning permission." Why? "On the balance of advantages in the national interest."

By approving this dump—and he did it very discreetly, without much publicity, through his Welsh office—the Minister has given us a test case. It is now obvious that when the National Park is considered against major industrial development, industry is to win every time. This will doubtless help other would-be developers to strengthen their arguments, such as the owner of some cliff-top land at Littlehaven who wants to develop it for housing, with the support of the RDC, and has appealed against the County Council's refusal.

WELLS COATES

The name of Wells Coates does not mean as much as it should to young architects today, partly because a lot of his recent work was done in Canada, and partly because many of his latest projects didn't come to anything. But all architects—particularly those who were active in the 1930's—must know enough about him to realize that his sudden death in Canada is a real loss to the profession.

This original and sensitive designer never got the opportunities his talents deserved. He was a pioneer: Lawn Road Flats; Embassy Court, Brighton; 10 Palace Gate, London, and so on were among the first buildings of their kind in this country. He was passionately interested in design—in the design of buildings, door-handles or sailing boats. And he was a *serious* designer and thinker—as his colleagues in the early days of the MARS Group found. He was never a fashion monger. Modern architecture owes more to him than many people realize.

SON ET LUMIERE

Son by E.M.I., *et Lumiere*, by Atlas Lighting Ltd., is to turn Greenwich Palace sky blue pink again this summer, for the delight of visitors to London and the profit—if any—of the Ministry of Works. This was announced with great affability by the Minister, at a Press conference he held in the wine cellar of Henry VIII, otherwise known as Charles Laughton, whose faintly sinister lisp will be the principal sound to be magnified by E.M.I. this year. In the hey day of this wine cellar *canapes* mounted on such very stale biscuits would surely have been disastrous to somebody's life or limbs. However, these are civilized days and Hugh Molson's ears were not severed.

Telephone: GROsvenor 8146.

HEMEL HEMPSTEAD

*On the fringe of the Chilterns.
Euston 45 minutes.*

**Detached Architect-designed
Georgian Style Residences.**

3 Bedrooms, garage, Parquet flooring to
reception rooms and Entrance Hall.
Ground Floor Cloakroom. All Services.
No road charges.

£3,800 Freehold

90% Mortgages available.

Full particulars from:
CHIEF ESTATES OFFICER,

HEMEL HEMPSTEAD DEVELOPMENT CORPORATION,
41, Marlowes, Hemel Hempstead. Phone: Boxmeer 4644.



New Town, or Neo-Georgian Town? Hemel Hempstead Development Corporation, as this advertisement from the Daily Telegraph shows, has gone into the "architect-designed Georgian-style residence" business.

Indeed, he even heard the obvious, though unasked, question—"Why Greenwich again?" He replied that he would have loved to "do" the Tower, but he couldn't charge five shillings in a place with a right of way running through the courtyards.

And Hampton Court? This, apparently, is full of elderly Grace-and-Favour ladies, who wouldn't like the *Son* after their bedtime. So what about the Stately Homes—particularly that enterprising one with the coffee machine, the peep-show and other sensational trimmings?

THINKING ALOUD

On the correspondence page Reyner Banham replies to the remarks made here two weeks ago about R. Buckminster Fuller's unintelligible jargon. ASTRAGAL, who was not alone in making this criticism, feels that if Mr. Fuller wants to be understood he should do what so many other speakers have found it worth while to do—to prepare what he is going to say, and not to assume that whatever pops into his mind is worth popping into someone else's. Mr. Banham may like to know that a proposed television broadcast of the great man was cancelled because the producer felt that something like six months was needed to prepare Mr. Fuller for the task of saying something remotely intelligible. This programme would have been for the lay public, of course, not for professional men like ourselves with an anticipatory listening technique who readily, that is to say—well, the funda-

mental things about the process, and I'm thinking aloud now—or to put it another way is, does Mr. Fuller understand Mr. Banham?

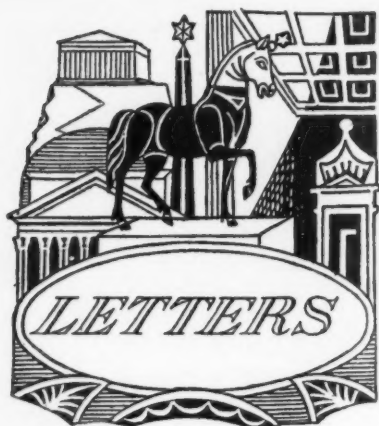
IS THAT YOU, PADDY?

A novel about an architect is rare enough—and more's the pity—but one with a town planning officer as its hero is surely unprecedented. Sandy Ferguson—the "I" of *The Hard Man*, by W. J. White*—is a pleasant, cosily married and diffident young architect who gives up his struggling one-man practice in Dublin to join the Planning Office, only to find that the meshes of the Old Boy network, and the daily struggle with his conscience and conflicting loyalties make the hoped for security an illusion. "How I wish," he reflects, "an application for permission to build could just be a signature on a form, and not a telephone conversation beginning, 'Is that you, Paddy?'"

The story ambles along at what might be called T. & C.P. pace—there is a mild domestic quarrel and an extra-mural flirtation. Professional problems are shrewdly observed but are kept generally at a distance. A sea-rescue and a heath fire provide brief notes of drama and the whole business fades out as inconclusively as it began. Recommended, nevertheless, to all colleagues, if only for the description (on p. 130) of what really happens when you instruct a contractor to clean up a building site.

ASTRAGAL

* Jonathan Cape. 15s.



Theo H. Crosby, A.R.I.B.A.

Technical Editor, Architectural Design

Peter Jay, M.A.

Reyner Banham, B.A.

Paul V. Mauger, F.R.I.B.A.

"A Perplexed Planner"

G. Noel Hill, F.R.I.B.A.

County Architect, Lancashire

C. P. Moon, A.R.I.B.A.

Is BoT A Square?

SIR.—Reyner Banham's onslaught on the Board of Trade is beside the point. No one expects bureaucrats or diplomats to know about architecture or design. It is a matter for congratulation that they and the Embassy are prepared to go to a deal of trouble to find and exhibit the work of leading modern architects; and, who knows, they may be right about the Iraqis preferring exciting architecture. I do myself. And anyway, does the interesting case of H. Muthesius really come into it?

THEO CROSBY.

London.

SIR.—While it must be admitted that the letter from the Board of Trade quoted by Reyner Banham in the AJ for June 19 is sufficiently absurd, it is to be doubted whether any harassed Civil Servant will have learned much from Mr. Banham's comments.

One of the reasons why architecture is so little understood in this country is because the journalists who write about it seem more interested in polemics than in exposition. Is Mr. Banham seriously trying to suggest that British architects ought not to try to obtain a foothold in Iraq? or that the Board of Trade is responsible for the state of architecture at the present time?

Further, I suggest that Mr. Banham is quite wrong, and that tail fins do help to sell Cadillacs to oil sheikhs, and that the officials of the Board of Trade, however ill-informed about architecture, have understood the attitude of the Iraqi government officials far better than Mr. Banham.

As for whether there are in England any architects of the stature of Le Corbusier and Frank Lloyd Wright (is it really necessary to refer to them as "Frankie" and "Corb" in print?)—that is another matter.

PETER JAY.

London.

[Reyner Banham replies: Theo Crosby, who is an interested party, might at least be grateful for the free plug. Mr. Jay, apparently overcome by zeal for battle, seems to have misread or misconstrued my comments, to judge from his second paragraph, for I suggested neither of the ideas he brandishes in my face. Clearly, Mr. Jay is quite as interested in polemics as he believes me to be: his letter would carry more weight if he could produce facts to substantiate his assertions about sheikhs, tail-fins and Iraqi government officials.]

Is Banham A Square?

SIR.—It was a disappointment to see ASTRAGAL joining with Abner, and other powers of darkness, in suggesting that Buckminster Fuller is incomprehensible, and needs my services (or John McHale's) as an interpreter. May one suggest that ASTRAGAL, Abner *et al.* merely need their ears washed out?

Admittedly, Mr. Fuller's ideas are not the busted platitudes normally hawked around by speakers going through the motions of being profound about architecture, and his derision of Louis Sullivan's kindergarten jingle *Form follows Function* was probably as distasteful to the New Establishment as his reminding us that the theory of structures and the technology of materials were not taught at the Bauhaus (Gropius has admitted as much). Thus it was necessary to admit new thoughts into the mind while listening to Mr. Fuller, and those who found this a strain might do well to examine their own mental capacities before questioning his.

The tone of press comment on Mr. Fuller's various speeches gave a devastating picture of the mental age of the public voices of English architecture. ASTRAGAL, to his credit, was not the first—Abner's statement that he never cared much for geodesic domes struck the lowest note of irresponsibility. No doubt plastic theory also gives him a pain, and post tensioning drives him right up the curtain wall, but personal neuroses about the laws of Physics are not the sort of thing a grown man parades in public unless he wants to look stupid. As for the *Builder's* statement that Mr. Fuller is "a mystic," one can only assume that this was achieved by not listening to his factual explanations of his domes, nor looking at the slides of them, and not having the OED at hand to check the meaning of "mystic."

We seem to be witnessing a repeat of what the boys did to Corb in the 20s and 30s—the dead-heads lifting quotations out of context and claiming they don't mean anything, the smart-alecs climbing on the bandwagon by cribbing the outward forms, without understanding the methods and mental disciplines behind them. Some of the latter may never know how much they owe to Mr. Fuller's gentleness and gentlemanly unwillingness to sue, for his designs are safely locked up in a world-wide network of patents that is far from mystical in its thoroughness.

No one is obliged to believe everything he says—he is not a Pugin preaching a narrow-minded creed and demanding absolute faith. He is a practical man interested (among other things) in moving ideas around. Some of the ideas are new or unfamiliar, he has to use new and unfamiliar words to handle them, but the interpretations of the words were built into the contexts in which they were uttered—all you had to do was pay attention.

Students, on the whole, seem to have been much more attentive than their elders, and clearly got a lot more out of him. Is it too much to hope that one of our "progressive" schools of architecture will honour their attentiveness and invite him back for a full-scale seminar, but soon—or are we content to lag behind the Common-

wealth and the Continent in our willingness to exercise our minds?

REYNER BANHAM.

London.

[ASTRAGAL's reply: page 961.]

Visual Education

SIR.—A group of us concerned with visual education had a stimulating experience last year on visiting the exhibition of students' work at the Shoreditch Training College, Cooper's Hill, Englefield Green, Egham, Surrey. The exhibits included wood and metal work, book-binding, calligraphy of superb quality and examples of the work of the students' sketching clubs, and we were the more impressed because we had only recently come to know of this LCC College and to meet its Principal, E. F. Marshall.

I judge from our experience that the College may not be nearly as well known in the profession as it should be. I hear from Mr. Marshall that this year's exhibition is to be held on July 5, 7 and 8. There may be architects who would welcome the opportunity of visiting the College on this occasion.

PAUL V. MAUGER.

Welwyn.

What Would You Do?

SIR.—I have some sympathy with the pleas of some of your readers who ask to be "set free" from planning control. But I should welcome some suggestions from the architectural profession on the wisdom of "setting free" an architect who designs a single storey bank to look like a Victorian chapel with a neo-Georgian doorway under a stepped and curved pediment—and a porch-hole—to boot. Thus the front elevation: the rear elevation suggests a traditional bungalow with a flat-roofed garage added as an afterthought.

This creation is to be set in a charming curving Georgian street, of noble proportions; and set forward, if you please, for all to see and (?) admire.

Perhaps I could quote a well-known architectural writer here:

"An unwillingness to face the test of putting modern buildings alongside the finest old buildings is presumably due to the mistrust of our own architects' ability to keep up the standard set by our predecessors."

I wonder who ought to be "set free"—and from what?

A PERPLEXED PLANNER!

Highest Paid County?

SIR.—In your issue of June 19, ASTRAGAL stated that "the average architect's salary today in the best paid County office is £1,080 per year," but investigation would have revealed the average in my own office is (excluding Architect and Deputy):

Actual today, £1,129

At maximum of grade, £1,183.

Though this may show a better average it is still too low.

G. NOEL HILL.

Preston.

RIBA Subscription

SIR.—Your correspondent G. A. D. Hammond (AJ, June 19) is in error in assuming that the annual subscription to the RIBA does not rank as a business expense. Provided membership is a condition of employment, and this is certified by the authority concerned, the Inspector of Taxes will allow the amount in full. This also applies to the Retention fee of the ARCUK.

C. P. MOON.

Sutton-cum-Granby.

[The Editors write: Under the current Finance Bill, certification by the employer will no longer be required.]

NEWS

BERLIN COMPETITION

Prize-winners Announced

As we go to press we learn that Peter Smithson (in association with Alison Smithson and Peter Sigmunde-Wonke) has been placed equal third in the competition for the replanning of the centre of Berlin. An aerial perspective of this scheme is printed in the adjoining columns. We expect to be able to publish the full list of prize-winners next week, and to publish the winning plans when they become available.

BRITISH SANITARY FIRECLAY ASSOCIATION

Sink Design Competition

The British Sanitary Fireclay Association have announced the result of their competition for the design of a kitchen sink. The assessors were David L. Medd, architect, R. V. Cooper, and the President of the National Federation of Clay Industries. The assessors decided that as none of the 185 designs submitted was outstanding to rearrange the awards as follows: First (£60) G. A. Carter, A.R.I.B.A., and Miss M. Atkinson (Bromley); Second (£50) Peter Gray, B.A.R.C.H. (London); Third (£30) David E. Clark (Chilwell); Fourth (£25) W. D. B. Rotherham (London); Fifth (three of £15) A. J. Short (West Bridgford), Peter H. Liley, A.R.I.B.A. (Macclesfield), John Hoile, A.R.I.B.A. (London), and Eighth (two of £10) Richard L. Staniland (Oxford), Mary G. Jones (Harrogate).

An assessor's report is being prepared. Illustrations of the winning designs have not yet been released.

RIBA COUNCIL, 1958-59

Election Result

Number of voting papers received	4,833
of which invalid	62

Number of valid papers	4,771
------------------------	-------

In addition 49 invalid envelopes were received, of which 13 were unsigned, 20 were unstamped, and 16 arrived too late. The active membership of the RIBA—according to the current Kalendar—is 17,916, 26.6 per cent. of whom voted.

PRESIDENT	
Basil Spence	Unopposed

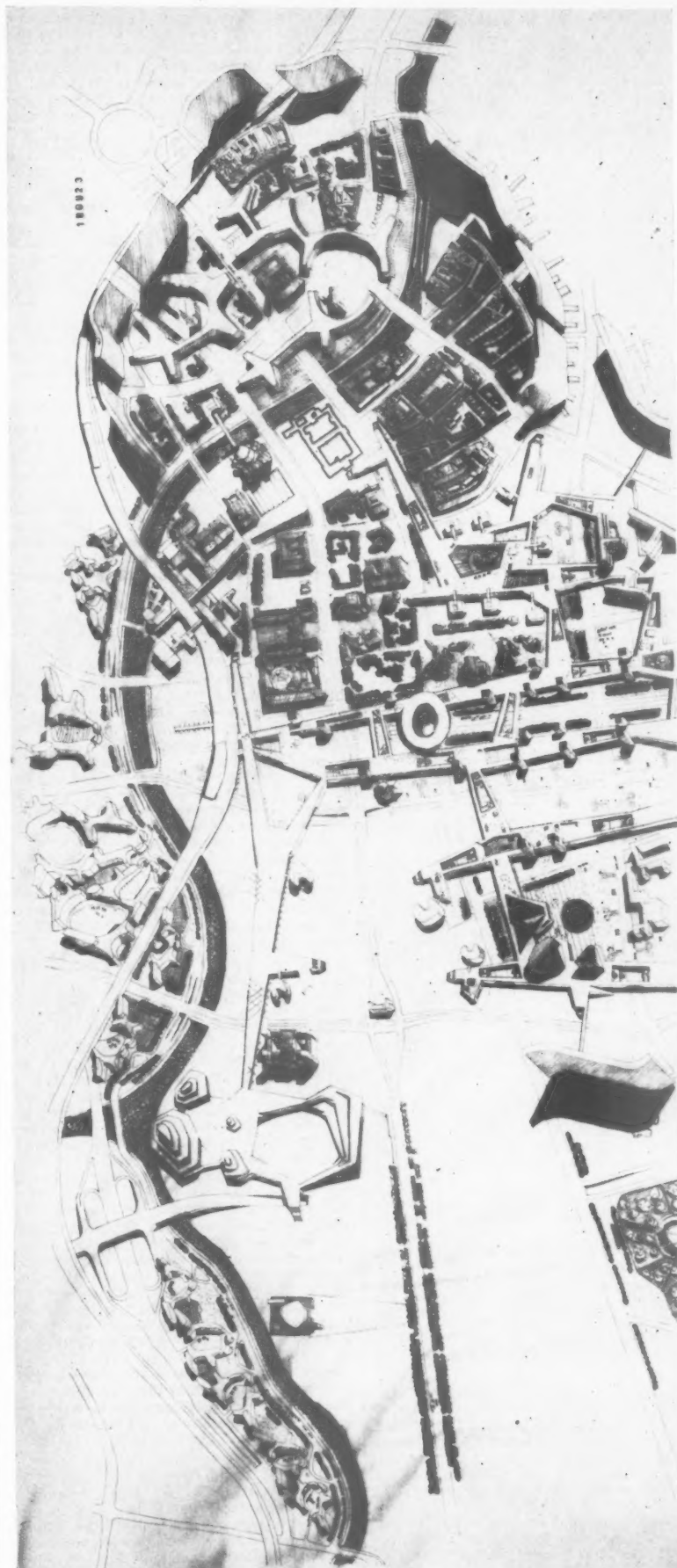
PAST PRESIDENTS	
Charles Herbert Aslin	Unopposed
Kenneth Mervyn Baskerville Cross	"

FELLOW MEMBERS OF COUNCIL	
<i>Elected</i>	votes
Alwyn Gwilym Sheppard Fidler	1,682
Ralph Tubbs	1,460
Clifford Ewart Culpin	1,244

ASSOCIATE MEMBERS OF COUNCIL	
<i>Elected</i>	votes
Albert William Cleeve Barr	2,330
John Charles Eastwick-Field	1,476
Thurston Monier Williams	1,300

LICENTIATE MEMBER OF COUNCIL	
<i>Elected</i>	votes
Dr. Thomas Sharp	2,463

ORDINARY MEMBERS OF COUNCIL	
<i>Elected</i>	votes
William Gough Howell	1,200
Leslie Hugh Wilson	1,176
Harold Conolly	1,171



An aerial perspective of the plan for Berlin by Peter Smithson, in association with Alison Smithson and Peter Sigmunde-Wonke, which has been awarded third prize (equal) in the Berlin competition.

CANDIDATES, NOT ELECTED

	votes
Bryan Percy Westwood	1,135
Frederick Bernard Pooley	1,112
Herbert John Whitfield Lewis	1,103
William Eden Tatton Brown (Hertford)	1,066
Aldwyn Douglas Jones (Birmingham)	977
Richard Llewelyn Davies	974
Leonard Cecil Howitt (Manchester)	945
Geoffrey Charles Hamilton Powell	923
Arthur Brian Bunch	900
Peter Browning Dunham	896
John Michael Austin-Smith	844
Robert William Paine (Fordwich, near Canterbury)	841
Robert MacKellar (Newcastle upon Tyne)	826
Harry Judson (Horbury, near Wakefield)	802
Michael Patrick	773
Cecil Max Lock	751
Harold Arthur Rolls (Leighton Buzzard)	731
W. Norman Oliver (Bridport)	686
Cecil Howitt (Nottingham)	652
Charles Howard Simmons (Shrewsbury)	608
Robert Duncan Scott (Guildford)	549
Richard Alfred Simmons (Abbots Langley)	543
Eric Samuel Ambrose	521
Dewi Prys Thomas	521
Alexander John Gordon	510
Harold Bruce Allsopp (Stocksfield)	455
Miss Elsbeth Fordyce Stronach (Heston)	443
Robert Forbes Hutchison (Edinburgh)	437
Henry Ronald Ewart Knight (High Wycombe)	427
Philip Raymond Bee	400
Cyril Francis Bates (Newport, Mon.)	341
Charles Herbert Bingham-Powell (Surbiton)	316
Donald Plaskett Marshall	197

LOCAL GOVERNMENT

Architects' Society Formed

The Local Government Architects' Society was formed at a well attended and nationally representative meeting held at the RIBA last Friday. Some 250 architects in local government, the new towns, hospital boards and public utilities adopted a motion setting up the organization, elected a Provisional Executive and instructed it to make recommendations on a series of organizational questions to a delegate meeting to be held in about six months' time. The motion, which was moved by Thurston Williams (LCC) on behalf of the Preparatory Committee, was as follows:

"This meeting of architects in Local Government, New Town Development, the Public Utilities and the Hospital Boards expresses its dissatisfaction at the present level of status and salary of the salaried architect.

"It is conscious of the role played by the existing trade unions, as a result of whose efforts architects, along with their professional and non-professional colleagues, have received many benefits.

"But, in order to make further advances possible, the meeting believes there to be a need to strengthen immediately the representation of architects in the negotiating machinery affecting their conditions of service.

"To do this the meeting proposes to form a Local Government Architects' Society.

"The new Society shall have a Provisional Executive Committee, elected by the meeting, with instructions to consider and report after six months to a representative meeting of members on the following issues: 1. The participation, along with other professional organizations, in any discussion or negotiation that may lead to the formation of a 'professions' panel within the Nat-

ional Joint Council for Local Government. 2. The range and scope of membership. 3. The organizational form of the Society. 4. Its financial policy and rate of subscription. 5. Relations with (a) the RIBA; (b) other trade unions having architect members. 6. Methods of publicity. 7. A draft constitution.

"The meeting calls on all architects to support the new Society; future success will require the active participation of all those whom the Society will represent."

In the course of discussion the motion was amended by deleting the word "other" in paragraph 5 (b) and by inserting a sentence which requires elections of new officers and a committee to be held within three months of the delegate meeting that is, among other things, to adopt a Constitution and to determine the final name of the organization. The motion as amended was carried without a single vote against it, and with but one abstention.

It was apparent from the start that those present represented many more than themselves. A glance at the attendance sheets revealed that while there were relatively few architects from the London offices, delegates were present from every part of the country. Many announced in the course of the discussion that they had been elected by meetings and represented whole offices, and it was stated from the platform that over 100 offices were in fact represented.

The chair was taken at the start by Richard Sheppard, the chairman of the RIBA ad hoc committee, who launched it with the RIBA's blessing and withdrew in the course of the meeting (owing, he said with a grin, to a "domestic mistake") handing the chair over to Thurston Williams, who was on the platform as the spokesman of the Preparatory Committee. Mr. Williams piloted the meeting through a rather stiff organizational agenda in a limited time at a brisk (if at times over-brisk) pace that gave the meeting time to take all the necessary decisions before people had to leave. The most striking characteristic of the meeting was its determination to take no decisions on principle, but to refer all disputed issues to the Provisional Executive, giving it a free hand to make any recommendations it likes. The questions raised, however, did indicate the problems that the Society has to face.

The first of these is the scope of membership. A proposal to exclude chief architects and their deputies in the first six months was defeated. So was a proposal to include students and unqualified assistants; during the discussion on this point the interesting fact emerged that the local government lawyers have a separate section of unqualified solicitors' clerks. A. M. Harris, Northamptonshire County Architect, speaking for his department, strongly pressed the case for an all-embracing society to negotiate for assistants in private as well as public practice, and moved an amendment which stated that the Society would later make way for the all-embracing one he had in mind. But this was defeated, as was another that the organization be called "The Association of Salaried and Registered Architects," which had a similar purpose. On the other hand, it was also pointed out that the name "Local Government Architects' Society" was too restrictive, as from the start it includes members from other sections of the public service, and it was conceded that the name of the Society would also have to be reviewed. The rejection of these motions, it should be emphasized, did not necessarily imply rejection of the idea put forward, but merely reflected the meeting's refusal to take policy decisions.

It was agreed that until the next meeting recruitment would have to be confined to registered architects or RIBA members working for local authorities, new towns, hospital boards and certain utilities. Architect planners are eligible though not working in architects' departments, but apparently

such bodies as the nationalized railways and the National Coal Board are not yet included.

The second major problem is clearly the setting up of the Professions Panel (Thurston Williams said this was the main task of the Society) and its relations with Nalگو. Richard Sheppard indicated that there would have to be some hard bargaining both inside and outside Nalگو, and although a large proportion of those present seemed to be Nalگو members, there were others who stressed the fact that they were not, or were (in one case) opposed to it.

H. Judson, representing 60 architects in the West Riding office, asked why the LGAS should succeed when the Association of Local Government Engineers and Surveyors had got nowhere with Nalگو in 10 years, and referred to a resolution passed by Nalگو's annual conference last week refusing to accept any society in the Professions Panel that had not at least 60 per cent of its members in Nalگو. Thurston Williams thought that this could be regarded as "guidance" to Nalگو's leadership, and capable of modification.

Other questions that rose can be dealt with more briefly. A proposal to elect the Provisional Executive on a regional basis was defeated, although it was made clear that here, again, a regional organization for the Society itself was not excluded at all. Thurston Williams' explanation that the next meeting, in six months' time, would be a delegate meeting (so that the man with a flat near the RIBA office would not be in a more favoured position than the man in the provinces) was well received. It was explained by Thurston Williams that the RIBA could not finance the Society, and a temporary subscription of 5s. was paid by those present as a prior condition to balloting for the Temporary Executive. Kenneth J. Campbell made a most friendly speech on behalf of ABT promising its wholehearted co-operation. Thurston Williams, in this connection, advised members not to sever connections with existing trade unions, such as Nalگو, ABT and the LCC Staff Association. Interim reports of the work of the Provisional Executive Committee, he indicated, can be expected.

The Provisional Executive Committee consists of the following 15 members, who will elect their own office-bearers:

J. Barker (Bucks), J. T. Bell (Essex), J. Duxbury (Gateshead), G. Foxley (Derbyshire), A. Goss (Basildon Development Corporation), A. R. Green (Lewisham), S. A. B. Heppell (Lancs), M. E. Holt (Crawley), K. G. Jones (West Ham), C. F. Kimm (Walthamstow), A. J. Passmore (Holborn), Miss N. Shield (Middlesex), E. C. Tory (Bucks), E. H. Turner (Nottinghamshire), T. M. Williams (LCC).

TPI

"All Developers should Employ Planners"

The latest in the spate of papers on the state of planning 10 years after the 1947 Act was given last week at the TPI in London by Professor Myles Wright, under the title "Planning Objectives Today." His most novel, and perhaps his most important proposal (designed to rescue the town planning profession from the dangers of a narrow professionalism, and to raise the standards of layout and design) was that all developers who could afford it should have their own town planners. Those who planned and executed great roads, power stations, water supplies, afforestation schemes—all the big public and private users of land—should be encouraged by all the means in the TPI's power to have a town planner on

BOOK REVIEWS

Traffic in Towns

Although the motor car has had a tremendous impact upon our towns and cities, and created a host of problems, some of them fundamental, it had not been the subject of any serious study in this country until "Mixed Blessing—The Motor In Britain" appeared. This important book is here reviewed by D. H. Crompton, an architect-planner.

Ever since the Town Planning Act of 1909, there has been a divorce between the interests of town planners and traffic engineers. In matters relating to road planning, this has affected not only legislation and administration, but has also influenced the nature and scope of studies carried out by the two interested professions. The architect as a serious contributor in the field has been until quite recently a non-starter. C. D. Buchanan, the author of *Mixed Blessing—The Motor in Britain*,* belongs to all three professions and is thus able to present an integrated view in his book on the motor in Britain. Its most valuable feature is the clear and readable analysis of the problems posed by the growing use of the motor vehicle.

The first problem which the author identifies is the difficulty encountered by vehicles moving between the large towns. He regards such towns as the principal generators of traffic, and suggests that solutions are well within our technical competence—we know what ought to be done, but the difficulty is to find the financial means to do it. Solutions to this first big problem generally seem to presuppose the canalization of traffic into one-purpose express roads broadly similar in design to the railways.

The second and really difficult problem arises inside the larger towns, when vehicles leave the main canalized routes and make for particular places. The myriad of trips generated by the town itself results in the familiar congestion and associated problems. What is the best way of alleviating them? The idea that congestion can be reduced by means of urban motorways and bypasses is apparently still widespread, but the author points out that traffic cannot perpetually be diverted—eventually vehicles must make for different places and individual buildings in the town. It is at this point that the difficulties really begin. The author observes that we know very little about what vehicles in the towns really do. For the want of such basic facts, it is hard to say what should be done to deal with congestion, and he finds some compensation in the delay we are experiencing in our urban road building works, since we may at least gain time to learn from the experiences of other countries.

The chapter dealing with traffic in towns is the most important and original part of the book. Broadly, the approach is that "it is not traffic movement but civilized town life that is at stake." It deserves a careful reading by all who profess their concern over the momentous problems which will eventually have to be faced.

Precinct Planning

Attempts now being made to accommodate

* Leonard Hill Books, 30s.

the motor in towns are based on road planning theories—or notions about the best way to do things. Buchanan traces the development of British ideas since 1936, and in the course of his analysis shows clearly that these ideas rest on very haphazard origins. It is shown that the bypass theory—as a device for relieving congestion—has gradually evolved by disjointed stages, into the precinct planning and inner ring road theories which are the present bases of urban planning. The essence of the theory of precinct planning is that the central part of a town should comprise a series of homogeneous uses, each with terminal facilities in the form of car-parks and bus stops so that traffic need not penetrate the whole of it. The precinct is defined by the creation of a diversionary ring road encircling it. The author finds it has yet to be shown that traffic is really canalizable to the extent necessary to achieve effective insulation. He is prepared to concede that the idea applied on a small scale in a new town seems to offer a high degree of insulation for the price of only a small loss of car-mobility. He suggests that the great interest of Coventry is that the scheme probably represents the most that can be extracted from the theory. Complete relief for the shopping pedestrian is provided, but it remains to be seen, the author thinks, whether the inner ring will provide sufficient insulation to the network of streets in the precinct.

In his examination of the proposals of the Statutory Development Plans for dealing with urban traffic problems, Buchanan finds little to give hope of a successful large-scale application of the precinct planning principle. Five difficulties are mentioned: (1) to remove the discordant uses now existing in order to get areas of homogeneous use; (2) to carve out diversionary routes and to ensure that they do not swallow up a large area with their great width and many roundabouts; (3) to contrive the traffic terminals within the precincts: this may require the complete reconstruction of many buildings; (4) to enable town life to flow from precinct to precinct, and (5) to contrive a programme that will enable all this to be brought into being in useful stages and in a reasonable time. The author argues very convincingly that these difficulties are so formidable that the precinct theory is unlikely to survive the process of application. In his view, there is not yet any standing full-scale demonstration of the way to cope with the motor in towns; in the blitzed cities, with few exceptions, "the familiar conflicts are beginning to reappear, though the streets may be wider and the traffic faster."

The author's doubts of the validity of the precinct theory are reinforced when he considers the nature of urban traffic. In the regrettable absence of scientific studies of vehicle movements and urban activities, he distinguishes the principal types of urban traffic as follows, making it clear that his classification is based on little more than common sense:

There are those journeys which are radial in character, comprising journeys to work and journeys from one main use area to another. These Buchanan estimates may account for about 45 per cent. of the total vehicle trips taking place in a town. Secondly, there are cross trips made in broadly circumferential directions. These journeys might take place on ring roads, but the author doubts that they amount to more than about 5 per cent. of the whole. The third group, scatter journeys, comprise the remaining half of all the journeys, and are the unidentifiable short distance trips made in every direction and hence impossible to canalize.

If an analysis of this kind were taken as the starting point in deciding how to cope with urban traffic, it seems unlikely that a precinct theory would emerge as the answer.

their staff, or working closely with them, helping to prepare their development scheme. "Until all developers whose scale of operations justify it employ a town planner as naturally as they now employ an engineer or an architect," he said "we cannot hope for a general and noticeable improvement of layout and design; and planners will continue to be blamed for that which we are powerless to put right."

Professor Wright also wished, of course, to safeguard and enhance the position of the planning officer, who would always remain the key man, and he condemned as "thoroughly bad" the recent trends towards delegation of planning powers from counties to county districts. If not checked it would practically ensure random sprawl of the worst kind around the conurbations. The other objectives that Professor Wright put before the town planning profession were these:

"The first is that each conurbation plus the rural fringe around it should have its own planning authority. I do not know how much of the rural fringe could be placed under the control of the planning authority; but I wish to emphasize, as strongly as I can, the importance of these rural fringes. I think the 15 or 20 belts around the conurbations will be the vital planning districts of the next 10 years. On their problems we should concentrate a major portion of our planning resources."

"The second objective concerns the methods by which we should try to solve the major planning problems in and near big cities. These methods, I suggest, include: some new approach roads to city centres, running through slum districts; the easing of traffic congestion by use of parking meters and staggering of office hours and by some planned extension of offices complete with car parks into dilapidated residential districts; a very cautious attitude towards high density rebuilding for any purpose; new settlements in the rural fringes to be concentrated in a few favourable places; the rest of the rural zone to be permanent green belt."

"The third aim is to try to encourage comprehensive development of land by as many different agencies as we can—including private enterprise—under conditions that will encourage the agency to retain a permanent interest in the well-being and improvement of the estate."

REBUILDING SMITHFIELD*Architects Appointed*

T. P. Bennett and Sons have been appointed architects by the Common Council of the City of London for the rebuilding of the poultry section of the London Central Markets at Smithfield.

AA*1958 Scholarships*

The Council of the Architectural Association has awarded the following scholarships: Leverhulme Scholarship (£2,000 over 5 years), C. F. Jackson (Whitehaven Grammar School); Allied Ironfounders Scholarship (£75 per annum), I. Pickering (Carlisle Grammar School); Metal Window Scholarship (£75 per annum), R. Benson (Shrewsbury); Natural Asphalte Scholarship (£50 per annum), C. S. Cunningham (Kelly College, Tavistock); Patent Glazing Scholarship (£50 per annum), Lt.-Cdr. R. N. Howard (ex-student of Imperial Service College); The Architectural Review Scholarship (£75 per annum), C. J. Press (Rugby); The Second Hadley Scholarship (£75 per annum), C. D. Frank (William Ellis); AA Members' Scholarship, 1921-23 (£75 per annum), R. W. Oram (Canford School).

One of the main difficulties to be faced is the conflict between the pedestrian and the vehicle. The promise of some resolution of this conflict is one of the most attractive features of the precinct theory. But there are other possible solutions, and it is here that the architect can contribute to an environment of buildings and spaces around them which would allow full scope to the vehicle without penalizing the pedestrian. In accepting the need for two level separation of hard and soft traffic, the author favours the raising of pedestrians off the ground rather than vehicles, since this is relatively easier and less costly. He argues in favour of the application of this idea to a mixed shopping and traffic street such as Oxford Street, London.

Any serious attempt to segregate pedestrians and vehicles on a large scale, is likely to result in unfamiliar forms of urban and architectural development. In the author's view this is to be expected at least to some extent, if it is remembered that the aim is to cope with entirely new kinds of transport and mobility which have already led to completely novel social habits. He cites a number of proposals involving the rearrangement of buildings and circulation systems, one of whose aims has been to segregate the pedestrian. In Great Britain there are the LCC proposals for the Barbican area, and the scheme for the same area by Kadleigh, Whitfield and Horsburgh. There is also the important proposal for the centre of Fort Worth, Texas. In his analysis of these schemes, the author can be said to be putting the problem in its architectural context. *Mixed Blessing* makes it very clear to the reader that the difficulties cannot be solved single-handed by either the town planner, the traffic engineer or the architect. It also marks a great advance over the view earlier expressed by some experts—for example Bressy's remark in the Bressy-Lutyens Report "the new road in its pristine innocence as it leaves the engineer's hands, is no more than a string on which the architect is invited to thread his choicest pearls. . ."

Major adaptations wanted

The planner must surely accept the probability of a great extension of mobility and the continued growth of the privately operated vehicle as a new social fact. Having accepted this he must recognize that in the course of time some major adaptations will have to take place—either of the present urban environment, of the form and mode of transport, or of public behaviour. This much appears to be inescapable. The only other alternative is to do virtually nothing beyond the making of small improvements in the urban road system, supported by *ad hoc* regulatory measures as and when they are felt to be necessary. This is broadly the present approach of the larger British towns. The trouble is that the motoring habit has already extended, and it can no longer be assumed that every new car park or other improvement will contribute towards the relief of congestion. This might be the case if every vehicle within the catchment area (however defined) were already in daily use—a most unlikely proposition. Every small improvement may present a temptation to those potential car users now being discouraged by present congestion, and may even extend the boundaries of the catchment area itself. This is not to deny the need for many improvements, but experience in those American cities which have extensive expressways supports the view that here is a real difficulty to be faced.

At present, the motor vehicle user is being discouraged from making the fullest use of his car not only by the congestion and the poor condition of the urban road system, but also by the purchase tax, the vehicle tax, the petrol tax, and by parking charges. Nevertheless the number of vehicles continues to increase. Confirmed car users regard the car as a raincoat, a shopping bag

and even as a front parlour for courting purposes. But over and above this, its supreme value lies in its mobility, and there seems little hope of relegating it by means of regulatory measures and planning schemes to the status of a mere family railway car, tied to more or less prescribed, canalized routes.

A degree of congestion may be reached in our towns which will cause people in search of greater mobility to turn their vehicles away from established city centres to new, regionally orientated centres; such a trend has certainly been apparent in American cities for many years. It might be desirable to encourage and support this trend, with the planned partial abandonment of city centres, in favour of a reorganization in the form of a suburban or regional motor-city. This would be much more drastic than the decentralization now planned, for example, for London. As the author points out, one of the most important contributions of the LCC and Greater London Plans was their recognition of the fact that congestion is partly the result of London's own excessive size and density; having recognized the relation between employment and congestion in the centre, they proposed for this and other reasons the removal of 1,000,000 persons from the crowded parts. Although it has not been taken very far, the idea of tackling congestion by reducing the traffic generating potential of the centre was an entirely novel step forward. But it does not seem that it was carefully related, from the traffic point of view, to a planned "capacity" for the centre. Buchanan does not take the idea much further as a serious means of adaptation, perhaps because it would mean vast expense and the end of metropolitan life as we now think of it.

Another major adaptation possibility is the gradual reorganization of towns with the aim of avoiding the lethal effects of the motor, the congestion and the unpleasant environment for the pedestrian. This is the approach which Buchanan discusses very fully; but in the end he confesses that the question of what should be done is baffling. Sound progress seems now to depend on our acquiring more knowledge of how vehicles are used, how traffic is generated, and what congestion really is. We are reminded that the *Redevelopment of Central Areas Handbook* expressed the view that one way to limit traffic generation was by the control of floor space per acre—the system now in use in London. But Buchanan does not develop this theme. How effective is this method? The Handbook was surprisingly vague in its discussion of the relationship between floor area and traffic generation, and it seems doubtful that LCC plot ratio figures controlling development are closely related to traffic generation facts.

Progress may also depend on our rethinking what exactly is meant by "homogeneous" uses. Groups of activities which are considered compatible from the orthodox planning point of view are not clearly relevant in terms of reduction of the number of urban journeys. The policy of allowing mixed uses in parts of London, announced last year, was a less doctrinaire approach to land-use zoning, designed to combat congestion. The New Barbican scheme envisaged mixture of uses on one site, and although the Minister did not approve the projected scheme, this was one aspect of it he was able to commend and encourage.

We also need to know more of the present capacity of our urban areas and how far the traffic likely to be generated lies within their capacity. If not, there would seem no other course but to extend the policy of decentralizing; but we ought to be sure whether it is floor space, jobs or certain types of generators which should be exported. An approach of this kind seems necessary even where multi-level solutions are being considered. But everything is obscured by our not knowing how many vehicles will, in coming years, have to be

catered for. The answer to this may in part depend on the policy that is adopted to combat congestion.

The motor vehicle in its present form is simply the latest technical outcome in the quest for greater mobility. A final adaptation possibility is the gradual alteration of its form to overcome what are, under present conditions of use, inherent weaknesses. Buchanan does not look very far into this for, after all, he is mainly concerned with the motor as it now is. But drastic modification of motorized transport might solve many difficulties. There is not only the possibility of fast moving horizontal pavements; a concerted effort to perfect privately operated helicopters or flying bedsteads might give multi-level separation to all, fairly quickly, leaving pedestrians undisturbed on the ground. The fiendish four-dimensional problems of control resulting could hardly be more difficult than our present dilemma, and might even prove to be relatively inexpensive.

Mr. Buchanan makes it clear that something will have to be done. "Suddenly at a stroke the familiar arrangements of buildings, streets and footways that have endured for so long as to seem unchangeable, are jerked out of date as people race and jostle in the streets in their new found mobility. . . . New urban arrangements are needed if the killing and the wounding, the noise and the stink and confusion are to be avoided. Alternatively, the old arrangements may yet suffice if the new mobility is surrendered, or at least drastically restrained. It is certain there has never been a choice so significant to the future of our towns."

D. H. CROMPTON.

An Architect's Sculptor

One of the reasons why artists tend to be disesteemed in proportion to the size of their contribution is that they reach their conclusions intuitively and for this very reason are unable to explain them rationally. Therefore the bigger the jump they make, the more there is that requires to be explained and the more socially disastrous is their failure to do so. Naum Gabo is a case in point. The architect reader of this magnificent volume, which illustrates virtually all his works, must be forgiven if he experiences difficulty in rightly assessing them, and if he is flummoxed by the attempts of Gabo himself, Herbert Read and Leslie Martin to explain them; but he can hardly be forgiven if he finishes with the thought that they have nothing for him. Gabo is very much an architect's sculptor, or rather, an "architect's constructor," for the idea of sculpture is foreign to what he has to give. In a sense only time can make clear precisely what this is; but enough time has already passed for us to be able to form some idea. Just as Cubism has enabled us to apprehend space time, Constructivism has enabled us to apprehend the substitution of structure for mass. Ideas originate in the figurative arts and spread from thence to architecture and town planning. Remembering how profitably architecture has fed on ideas generated by Cubism, it is surprising that she has fed hardly at all on the ideas generated by Constructivism. Surprising, because this has been a great period for constructional ingenuity at the technical level. We have in the last 10 years or so been supplied with a new grammar of fixing and jointing: yet what arid use seems to have been made of it. This suggests that the life and work of Gabo is a relatively untapped source of illumination, and that architects should pay attention to it. If so, they will not get a better record than that provided by this book.

LANCE WRIGHT

Gabo. Constructions, Sculpture, Paintings, Drawings, Engravings. With introductory essays by Sir Herbert Read and Sir Leslie Martin. (Lund Humphries. 84s.)

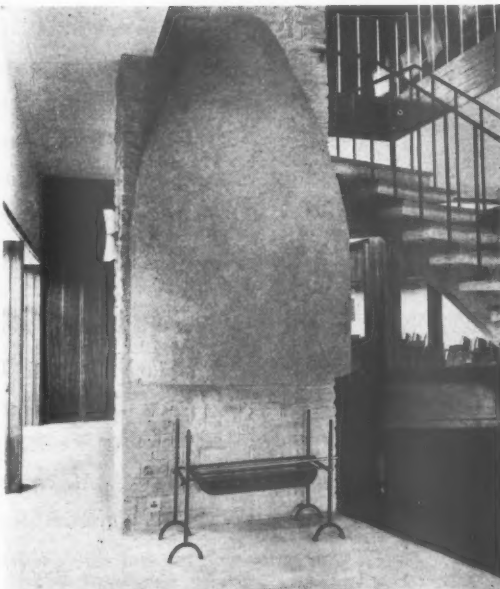
BUILDINGS IN THE NEWS

**Hangar at Gatwick Airport**

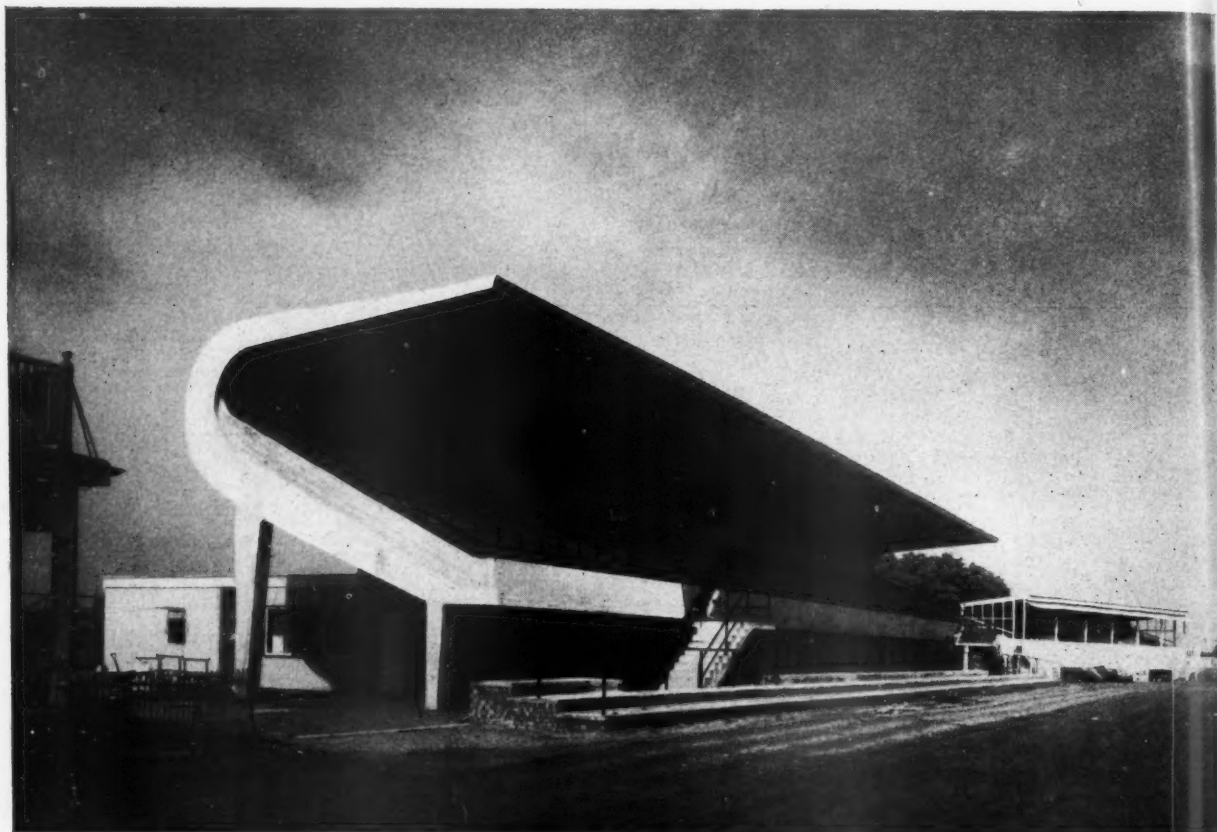
This hangar, for Transair Ltd., was designed by Clive Pascall and Peter Watson (chief assistant architect J. M. Stovold). The design and erection of the structural frame was by the London Ferro-concrete Co., Ltd., in association with A. J. and J. D. Harris, and the general contractors were Sir Alfred McAlpine & Son Ltd. The construction will be described in a later issue.

Church in London, S.E.16

A church for Finnish seamen in London, designed by Yorke, Rosenberg and Mardall, and built on a bombed site at the Bermondsey end of the Rotherhithe Tunnel has recently been opened by the Archbishop of Finland. Below, the interior, and left, the large open fireplace in the church. The building contains recreation rooms, including a sauna (steam bath), and a flat for the chaplain.



GRANDSTAND AT RICHMOND ATHLETIC CLUB, SURREY



The new grandstand at Richmond Athletic Ground, Richmond, Surrey (designed by Manning & Clamp) replaces one burnt down last year during the Royal Horse Show. It is a composite structure: the actual grandstand being in reinforced concrete, a single-storey portion at the rear (which contains showers, changing rooms, bar and tea-room, and offices) being steel-framed. The two parts are not structurally separate: the r.c. hairpin which seats about 1,000 spectators is supported on pairs of r.c. columns, the rear of each pair also supports the steelwork of the single-storey portion. The consulting engineers were Jenkins & Potter and the quantity surveyors Mercer & Miller. The general contractors were Percy Bilton Ltd., and the steelwork contractors Mackey Bowley Co. Ltd.

INFORMATION CENTRE

4.84 planning: urban and rural HOUSING LAYOUT

Housing Layout. Scottish Housing Handbook, Part I. Department of Health for Scotland. (Revised Edition 1958. HMSO. 6s.)

The revision of Part I of the Scottish Housing Handbook (there are seven other parts in the Handbook) is further evidence of the care with which the Scottish Department of Health services its local authorities. Containing 42 pages of text and 22 pages of illustrations, it is of value to those interested in local authority housing anywhere. It is not possible to do justice to all of its 12 sections and 5 appendices in a short notice. In its totality, it affords an unconscious record of the long way we have travelled in this subject since the end of the war. This journey has been all in one direction: the increased application of scientific data to the subject, leading, curiously enough, to a greater and greater differentiation in the end product. It is amusing to notice how, in 1945, we were so keen to humanize housing by the application of æsthetic rules. We now attempt the same by applying scientific data. It is not so much that our æsthetic rules were wrong, but that we have only just acquired the rational background for them. Thus, in 1945 the artists perceived that differentiation was necessary in housing layout: we now know that if you make a proper social survey, provided by a careful study of the economics of road layout and under-building, and of daylight and sunlight penetration, differentiation automatically emerges. From the technical point of view, the most interesting part of this volume is the appendices. These deal in turn with the site survey, density and house types, communal facilities, public open space, and sunlight and daylight. The best of these is undoubtedly the last, which gives (so far as we know) for the first time, tables and diagrams showing how precisely (and reasonably quickly) you can ensure that rooms will fulfil the standards laid down in the British Standard Code of Practice for sunlight (at least one hour a day from February to November) and daylight (sky factors of 2 per cent. for kitchen, 1 per cent. for living-room and $\frac{1}{2}$ per cent. for bedrooms). It was shrewd of the Department to realize how important it is that these little operations should be made as easy as possible, for otherwise they will not be carried out. Modern building technique needs much more mathematical and geometric help than it is actually getting; we want more gadgets of this kind and more people habituated to using them.

8 ESTIMATING

current wage rates, market prices and measured rates

Despite the wage increase of February last, tenders are lower than they were a year ago. This downward trend, which started at the beginning of the year, is at present resulting in a level of prices about 15 per cent. below last year's figures and would appear to be at the expense of profits, overheads and preliminaries. Whether this trend will be maintained is a matter for conjecture, but it should be taken into account when using the following prices which may well be higher than those in current tenders. The Prices feature is prepared by Davis, Belfield and Everest, Quantity Surveyors.

Wage rates

Rates of wages rose on February 3, 1958, and are now as follows:

	Craftsmen		Labourers	
	s	d	s	d
London District	4	8½	4	2
Within 12 miles radius	4	8	4	1½
From 12 to 15 miles radius				
Liverpool and District	4	8½	4	2
Grade classifications				
A	4	7	4	0½
A1	4	6½	4	0

Market prices

Prices are given for the major items in each trade, they are intended as average prices and include delivery in the outer London area. They do not include overhead charges and profit.

Measured rates

Prices are for work carried out in the Outer London area and include 10% to cover overhead charges and profit except in the case of work which would be carried out by specialists when 5% has been allowed. The prices given in italic represent the total value of the materials included in the measured rates, including an allowance for waste and 10% for overhead charges and profit. The cost of labour included in the measured rates (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

Abbreviations

Inches: in. Feet: ft. Yards: Y. Yards cube: YC. Yards super YS. Feet cube: FC. Feet super: FS. Ton: T. Feet run: FR. Thousand: M. Square: Sq. Number: No. Hundredweight: C. Pound: lb. Gallon: Gal.

Preliminaries

To all estimates based on prices for measured rates add, if required, for Preliminaries, water, insurances, etc., depending on the nature of the job.

Price changes

* Shows changes in market prices and measured rates since the last issue (March 27, 1958).

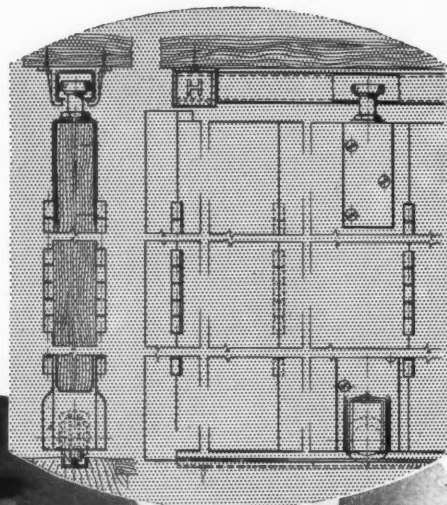
'COLLEGE' & 'COUNCIL' FOLDING PARTITION GEAR

One example of pleasant, efficient, all round collaboration between architect, general contractors and two other outstanding firms.

'COLLEGE' HEAVY DUTY FOLDING PARTITION GEAR AND FURNITURE SUPPLIED AND MADE ONLY BY P. C. HENDERSON LTD., IS SATIN CHROME IN COLOUR.

Joinery and fixing of the folding partitions by Samuel Elliott & Sons (Reading) Ltd. The large assembly hall is divided by two double (sound resistance) End-Folding Partitions 56' 8" long x 13' 3" high. Each end or auxiliary hall is then divided at the centre by another Centre-folding partition 39' 3" long x 13' 3" high. In all over 300 feet lineal.

Catalogue 55 (184 pages) available upon request. A large range of Full Size Details also ensures accurate joinery and fixing.



NEW SEDGELY COMPREHENSIVE SCHOOL—LEWISHAM
(Acknowledgments to Professor Robert H. Matthews, C.B.E., A.R.I.B.A.)

Photographs by permission of the Architects' Department of the L.C.C.
Contractors: Rush and Tompkins Ltd.

Henderson

SLIDING DOOR GEAR

P. C. HENDERSON LIMITED · ROMFORD · ESSEX · ENGLAND

Telephone: INGrebourne 4444, London calls dial IL4-4444

H113

technical section

EXCAVATOR

s d

Market prices

Carting away, up to 8 miles	YC		
Hand loaded	8	0	
Machine loaded	7	0	
Hardcore	YC	10	0
Ashes	YC	10	6

Measured rates

Hand excavation and disposal

NB: the following are applicable to excavation in heavy soil.

Excavating over site to remove top soil and vegetable matter, 6 in. deep	YS	1	3
As above, 12 in. deep	YS	2	6

Excavating over site to reduce levels and getting out	YC	9	11
---	----	---	----

Excavating for basement and getting out	YC		
---	----	--	--

Depth up to 5 ft.	11	2	
Depth between 5 & 10 ft.	16	2	
Depth between 10 & 15 ft.	21	2	

Excavating surface trenches and ditto	YC		
---------------------------------------	----	--	--

Depth up to 5 ft.	13	8	
Depth between 5 & 10 ft.	18	8	
Depth between 10 & 15 ft.	23	8	

Excavating basement trenches and ditto	YC		
--	----	--	--

Commencing 5 ft. below existing ground level	18	8	
Commencing 10 ft. below existing ground level	23	8	
Commencing 15 ft. below existing ground level	28	7	

Wheeling surplus excavated material not exceeding 100 yards and depositing	YC	4	11½
--	----	---	-----

Add to last for:			
Roughly spreading and levelling	YC	1	6
Spreading, levelling and consolidating to make up levels	YC	3	3

Returning, filling-in and well ramming excavated material around foundations	YC	4	4½
--	----	---	----

Loading surplus material into lorries and carting to tip, not exceeding 8 miles	YC	16	0
---	----	----	---

Excavating from spoil heaps selected top soil, wheeling not exceeding 100 yards, and spreading, levelling and consolidating, not exceeding 6 in. to receive turf	YS	2	2½
--	----	---	----

Mechanical excavation and disposal

Excavating for shallow surface excavation and loading into lorries or dumpers (using ¾ yd. cube excavator)	YC	3	0
--	----	---	---

Excavating for surface excavation and removing,			
---	--	--	--

spreading and levelling not exceeding 200 yds. (using 6 yd. cube scraper)	YC	2	7½
---	----	---	----

Removing excavated material and depositing, not exceeding 200 yds. (using 3 yd. cube dumper)	YC	2	0
--	----	---	---

Planking and strutting

Planking and strutting to sides of surface or basement excavation	FS		
---	----	--	--

Depth up to 5 ft.	8		
Depth up to 10 ft.	10		
Depth up to 15 ft.	1	0	

Planking and strutting to sides of surface and basement trenches	FS		
--	----	--	--

Depth up to 5 ft.	2		
Depth up to 10 ft.	3½		
Depth up to 15 ft.	4		

Hardcore, etc.

Hardcore filled-in in layers, each layer well rammed	YC	20	5
		13	9

Bed of ditto, 4-in. thick	YS	3	5
		1	6½

Ash filled-in in layers, each layer well rammed	YC	19	11
		14	5

CONCRETOR

Market prices

Portland cement, 6 tons and over	T	113	6
----------------------------------	---	-----	---

Rapid hardening, 6 tons and over	T	124	0
----------------------------------	---	-----	---

¾-in. down, washed, crushed and graded shingle	YC	18	1
--	----	----	---

1½-in. ditto	YC	17	2
--------------	----	----	---

Sharp sand	YC	22	1
------------	----	----	---

¾-in. diam. mild steel rods to BS 785 delivered station	T*859	0	
---	-------	---	--

¾-in. ditto	T*921	6	
-------------	-------	---	--

Measured rates

Portland cement mass concrete in foundations etc.	YC		
---	----	--	--

1 : 12, 1½-in. "all-in" aggregate	60	9	
	40	4	

1 : 3 : 6, 1½-in. aggregate	69	1	
	48	8	

1 : 2 : 4, ¾-in. aggregate	76	6	
	56	1	

1 : 1½ : 3, ½-in. aggregate	78	1	
	57	9	

Add for:			
Working around rod or mesh reinforcement	YC	4	11½

Walls not over 6-in. thick	YC	24	10
----------------------------	----	----	----

Walls 6-in. to 12-in. thick	YC	17	5
-----------------------------	----	----	---

Walls over 12-in. thick	YC	12	5
-------------------------	----	----	---

Columns not over 72 sq. inches	YC	47	3
--------------------------------	----	----	---

Columns 72 to 144 sq. inches	YC	37	3
------------------------------	----	----	---

Columns over 144 sq. inches	YC	29	10
-----------------------------	----	----	----

Suspended floors and roofs not over 4½-in. thick	YC	19	11
--	----	----	----

Suspended floors over 4½-in. to 6-in. thick	YC	17	5
---	----	----	---

Suspended floors over 6-in. to 12-in. thick	YC	14	11
---	----	----	----

Beds not over 4½-in. thick	YC	9	11
----------------------------	----	---	----

Beds 4½-in. to 6-in. thick	YC	7	5
----------------------------	----	---	---

Beds 6-in. to 12-in. thick	YC	2	6
----------------------------	----	---	---

Hollow tile floor of clay tiles 4-in. thick at 15-in. centres laid on formwork (measured separately), nibs filled in with concrete (1 : 2 : 4) and finishing top of tiles with bed of concrete 1½-in. thick including tamping around reinforcement (measured separately)	YS	17	6
		10	4

Ditto, but tiles 8-in. thick	YS	27	0
		18	0

Sundries

Finishing concrete with trowelled face to receive linoleum	YS	1	2½
--	----	---	----

Applying horizontal damp-proof membrane of Synthaprupe in three coats to surface of concrete and blinding with sand to form key	YS	5	9
		4	1

Supplying floor clips (p.c. 6d. each) and fixing	No.	1	1
--	-----	---	---

Formwork

Formwork including strutting easing and striking:			
---	--	--	--

Vertical faces of foundation	YS	18	4
		9	6

Vertical faces of wall	YS	18	10
		6	11

Soffite of floors not over 12-ft. high	YS	18	8
		8	6

Sloping soffit of stairs	YS	22	7
		9	3

Sides of columns	FS	2	5
			10½

Sides and soffits of lintols and beams	FS	2	7
		1	0

Add to the above for wrot formwork including rubbing down concrete	YS	2	6
--	----	---	---

Reinforcement

¾-in. diameter mild steel rods, hooked, bent and tied and fixing	C	*68	3
		52	1

½-in.	C	*73	7
		54	0

¾-in.	C	*80	1
		55	10



English Oak for St. Paul's

Our English Oak has regularly been approved for joinery and constructional work in the maintenance and restoration of St. Paul's Cathedral. We can meet the exacting requirements of those responsible for Britain's ancient and historic buildings because we offer—

FORESIGHT to accumulate the right stocks up to ten years and more before they are used.

EXPERIENCE to understand the problems.

SKILL to produce what is needed.

INTEREST to co-operate in these fascinating works to their successful conclusion.

Architects and Contractors who are now working on the great buildings of the future appreciate and value highly the same foresight, experience, skill and interest which they find at—

**William Mallinson
and Sons Ltd.**

TIMBER and VENEER MERCHANTS

130 HACKNEY ROAD • LONDON • E.2

Telephone Shoreditch 7654

Telegrams 'Almoner' London

MANUFACTURERS OF PLYWOOD, AMOURPLY, PANELS, COMPOSITE PARTITIONING AND INFILL PANELS

technical section

Concretor continued	s	d
1-in.	C	*93 8 60 7

Steel wire mesh fabric weighing 4.32 lb. per yd. super and laying in concrete	YS	4 1 3 5
---	----	------------

Ditto weighing 6.57 lb. per yd. super	YS	6 0 5 3
---------------------------------------	----	------------

Ditto weighing 9.32 lb. per yd. super	YS	8 6 7 5
---------------------------------------	----	------------

Precast concrete

Precast concrete (1 : 2 : 4) finished fair on exposed faces and hoisting setting and jointing:

4½-in. × 6-in. lintols reinforced with one ½-in. rod	FR	*2 9 2 3½
--	----	--------------

4½-in. × 9-in. ditto with two ½-in. rods	FR	*4 2 3 5½
--	----	--------------

Piling

Reinforced pre-cast concrete piles, approximate prices for supplying, unloading, pitching and driving

12-in. × 12-in. up to 30 ft. long	FR	34 0
14-in. × 14-in. up to 50 ft. long	FR	40 0
Sheet steel piling, ditto	T	1176 0 to 1680 0

BRICKLAYER

Market prices

Soft sand	YC	18 0
Hydrated lime	T	117 6
Plain Flettons	M	118 0
Second hard stocks	M	300 0
Lingfield Engineering wire cuts Grade B	M	256 0

Partitions

Clinker concrete, solid	YS	
2-in.		*3 11
2½-in.		4 4
3-in.		*5 6
4½-in.		*7 0

Thermalite-Ytong	YS	
2½-in.		7 0
3-in.		8 5
4-in.		11 0

Hollow clay	YS	
2-in.		4 5
2½-in.		4 8
3-in.		5 5
(6 cavity) 4-in.		6 10

Normal quality wood wool slabs	YS	
2-in.		8 10
2½-in.		10 2
3-in.		11 5

Measured rates

Reduced brickwork in cement lime mortar.

Lingfields in cement mortar	s	d
YS		
Flettons	33	3
17	7	
Second stocks	52	11
37	2	
Lingfield Grade B	50	11
32	9	

Half brick wall ditto	YS	
Flettons	18	3
8	4	
Second stocks	28	1
18	1	
Lingfield Grade B	27	8
15	10	

11-in. hollow wall with 2-in. cavity and wall ties	YS	
Flettons	*37	6
17	1	
Second stocks	*57	2
36	8	

One brick wall built fair and pointed both sides	YS	
Flettons	39	10
17	7	
Second stocks	59	5
37	2	
Lingfield Grade B	56	4
32	9	

Sundries

Extra over common brick-work for internal fair face and flush pointing

Horizontal damp proof course of two courses of slates and bedding and pointing	FS	4 2 2 5
--	----	------------

Horizontal damp proof course of hessian base bitumen	FS	11 9
--	----	------

Facings

Extra over ordinary brick-work with bricks P.C. 118s. per 1,000 for facings as described

To solid wall in Flemish bond	YS	
Facings P.C. 250s per M	15	9
9	7	
Facings P.C. 350s per M	23	0
16	11	
Facings P.C. 450s per M	30	3
24	2	

To cavity wall in stretcher bond	YS	
Facings P.C. 250s per M	13	0
7	4	
Facings P.C. 350s per M	18	6
12	11	
Facings P.C. 450s per M	24	1
18	5	

Half brick wall in facings built fair and pointed on one side	YS	
Facings P.C. 250s per M	30	0
16	0	
Facings P.C. 350s per M	35	6
21	6	
Facings P.C. 450s per M	41	1
27	1	

Partitions

Clinker concrete solid partition blocks and setting in cement lime mortar	YS	
2-in.	*9	3
	4	10

2½-in.	10	6
	5	6
3-in.	*12	9
	6	10
4½-in.	*15	10
	8	9

Thermalite-Ytong ditto	YS	
2½-in.	12	8
	8	6
3-in.	15	0
	10	3
4-in.	19	1
	13	4

Hollow clay ditto	YS	
2-in.	9	10
	5	5
2½-in.	10	11
	5	10
3-in.	12	8
	6	10
(6 cavity) 4-in.	15	8
	8	6

Wood wool slabs ditto	YS	
2-in.	14	1
	10	6
2½-in.	16	3
	12	2
3-in.	18	5
	13	9

DRAINLAYER

Market prices

Salt glazed stoneware pipes and fittings, "Best" quality:

Ordinary pipes	FR	
4-in.		1 7½
6-in.		2 5½
9-in.		4 4½
Bends	No.	
4-in.		4 10½
6-in.		7 3½
9-in.		19 9

The above are Standard List prices less 2½%.

Pitch fibre pipe	FR	
3-in.		1 10½
4-in.		2 6
6-in.		5 0½

Cast iron s. and s. pipe to BS 437	YR	
4-in.		28 2
6-in.		41 3
9-in.		77 3

Spun iron s. and s. pipe to BS 1211, Class B	YR	
4-in.		13 3
6-in.		21 3
9-in.		35 8

Measured rates

Trenches and beds

Excavate trenches by hand in heavy soil, including planking and strutting, part returning, filling and ramming and wheeling and spreading surplus, for pipes 4-in., 6-in. and 9 in. dia.

Average depth of trench	3-ft.	16 9
	4-ft.	22 3
	6-ft.	39 0
	9-ft.	71 9

Excavate trench as last but by mechanical trencher	YR	
Average depth of trench	3-ft.	12 8
	4-ft.	17 4
	6-ft.	32 0
	9-ft.	52 10

*Air Traffic Control Building
(The Central Block), London Airport
Architect: Frederick Gibberd, F.R.I.B.A.
Consulting Engineers:
Sir William Halcrow and Partners*

Truscon Theorem 5



Required: Fine Floors for a fine building

The Central Block at London Airport is a fine building

∴ Truscon Floors were used

q.e.d. Truscon

The Trussed Concrete Steel Company Limited, 35-41 Lower Marsh, London SE1 : Telephone, WATERloo 6922

technical section

Drainlayer continued

6-in. concrete bed and benching for 4-in. pipes	YR	9	6
		5	10
As above, for 6-in. pipes	YR	11	1
		6	10
6-in. concrete bed and surround for 4-in. pipes	YR	15	5
		9	6
As above, for 6-in. pipes	YR	18	7
		11	5

Stoneware drains

"Seconds" quality salt glazed stoneware drain pipes and laying and jointing in trench

FR	
4-in.	2 5
	1 8
6-in.	3 5
	2 6
9-in.	5 8
	4 7

"Best" quality salt glazed stoneware drain pipes and laying and jointing in trench

FR	
4-in.	2 9
	2 0
6-in.	3 10
	2 11
9-in.	6 5
	5 4

Extra over "Seconds" quality pipes for:

Bend	No.	
	4-in.	3 9
		3 3
	6-in.	5 6
		4 11
	9-in.	16 0
		15 4

Single junction

No.	
4-in.	6 6
	5 0
6-in.	9 4
	7 6
9-in.	20 1
	18 0

Double junction

No.	
4-in.	10 9
	8 4
6-in.	15 6
	12 6
9-in.	30 6
	27 1

Stoneware gullies

Salt glazed trapped gully with galvanized grating including setting gully on and surrounding with concrete and jointing to drain

No.	
6 in. x 6 in. grating 4 in. outlet	26 5
	22 3
9 in. x 9 in. grating 6 in. outlet	48 11
	43 7

Grease and mud gully 9-in. diameter with 4-in. outlet, galvanized bucket and grating and setting gully on and surrounding with concrete and jointing to drain

No.	92 0
	81 2

Road gully with 6-in. outlet including setting on and surrounding with concrete and jointing to drain

No.	
15-in. dia. 30-in. deep	108 7
	86 6
18-in. dia. 48-in. deep	216 5
	180 0

Pitch fibre drains

Pitch fibre drain pipes and laying and jointing in trench

FR	
3-in.	2 3
	2 1 1/2
4-in.	2 11 1/2
	2 9 1/2
6-in.	5 10
	5 8

Extra over pitch fibre pipe for 45° bend

No.	
3-in.	13 11
	13 1
4-in.	22 1
	21 3
6-in.	35 3
	34 3

Cast iron drains

Cast iron spigot and socket drain pipes and laying and jointing in trench

FR	
4-in.	13 1
	11 0
6-in.	19 1
	16 4
9-in.	36 4
	30 7

Extra over cast iron pipes for bend

No.	
4-in.	31 4
	25 2
6-in.	73 2
	64 2
9-in.	186 5
	170 10

Spun cast iron spigot and socket drain pipes and laying and jointing in trench

FR	
4-in.	7 6
	5 5
6-in.	11 7
	8 11
9-in.	20 9
	15 0

Cast iron gullies

Cast iron gully trap with high invert and setting on and surrounding with concrete and jointing to drain

No.	
4 in.	45 9
	37 3
6 in.	111 8
	99 2
9 in.	247 7
	230 9

ASPHALTER

Measured rates

Damp proof course and tanking

1/2-in. vertical damp proof course in two thicknesses on brick or concrete	YS	
	BS1097	17 10
	BS1418	24 2

1/2-in. horizontal damp proof course in one thickness on brick or concrete

YS	
BS1097	11 7
BS1418	15 9

Vertical tanking in three thicknesses

YS	
BS1097	26 3
BS1418	33 7

Horizontal tanking in three thicknesses

YS

BS1097	19 5
BS1418	29 5

Roofing

1/2-in. flat laid to falls in two thicknesses on and including felt underlay

YS	
BS988	13 8
BS1162	22 1

6-in. skirting with angle fillet at bottom and rounded edge at top turned into groove

FR	
BS988	2 4
BS1162	2 11

6-in. fascia with solid water check roll at top and undercut drip at bottom

FR	
BS988	4 6
BS1162	5 3

PAVING

Market prices

Granite chippings, 1/2-in. to dust	T	50 2
Buff quarry tiles, 6 in. x 6 in. x 3/4 in.	YS	22 0
2-in. Noelite paving	YS	13 11

Measured rates

Cement and sand floated screed to receive pavings	YS	
1/2-in.		4 1
		2 4
1-in.		5 0
		3 0
1 1/2-in.		5 7
		3 6

Cement and sand paving trowelled hard and smooth

YS	
1/2-in.	4 7
	2 4
1-in.	5 6
	3 0
1 1/2-in.	6 1
	3 6

Granolithic paving laid on concrete

YS	
1-in.	7 4
	5 4
1 1/2-in.	9 5
	7 0

1/2-in. red composition paving laid on prepared screed

YS	16 6
----	------

3/8-in. terrazzo paving laid on prepared screed

YS	38 4
----	------

1/2-in. rubber flooring and laying in rolls

YS	39 5
----	------

1/2-in. rubber flooring and laying in rolls

YS	63 0
----	------

1/2-in. cork tile flooring, 12 in. x 12 in. and fixing with mastic and including polishing

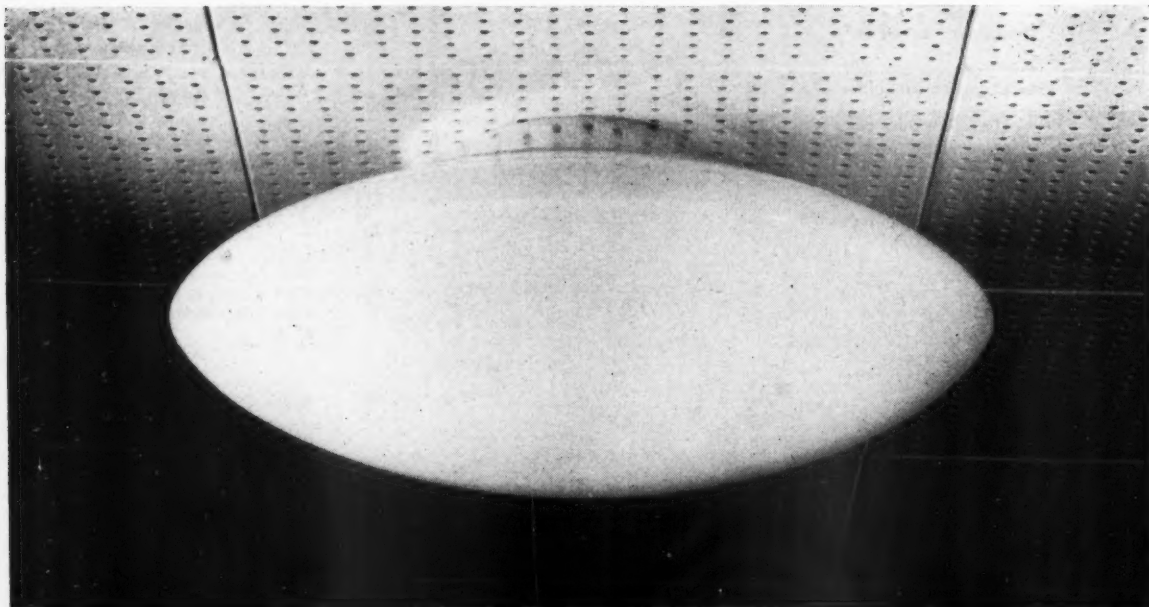
YS	45 11
----	-------

1/2-in. thermoplastic tile flooring and laying-on screed

YS	12 0
	to
	21 0

1/2-in. coloured linoleum and fixing with mastic to cement screed or boards

YS	26 9
----	------



MA 1500 series from 34/8 plus 7/10 tax

Designed by Paul Boissevain, Dip. Arch., M.S.I.A.

announcing the new ELLIPSE SERIES 10" 12" 14" 18" & 22" 60-300w

The Ellipse series provides architects and engineers with a basic range of 120 elegant lighting fittings, of slim appearance, which do a first class lighting job. The quality and finish is of the highest order, and the construction without use of screws or levers is simple, effective and foolproof, allowing for easy fixing and maintenance.

Prices are comparable with ordinary commercial units. Full details, including dimensioned drawings, are given in publication MA 1500 available on request.



THE MERCHANT ADVENTURERS LIMITED

16-43 PORTLAND ROAD LONDON W.11

TELEPHONE PARK 1221 (5 lines)

technical section

Pavior continued	s	d
$\frac{1}{2}$ -in. coloured linoleum and fixing with mastic to cement screed or boards	YS	21 3
$\frac{3}{8}$ -in. buff quarry tiles laid on prepared screed	YS	37 1
$\frac{3}{8}$ -in. blue black quarry tiles laid on prepared screed	YS	34 9
2-in. Noelite paving laid on prepared bed, in random sizes and mixed colours	YS	20 1 16 1
12 in. $\times$ 12 in. anchor steel plates laid complete	YS	55 1

MASON**Market prices**

Stone in blocks in truckloads at stations in the London area:

Beer	FC	8 9
Portland	FC	8 8
Woodkirk Blue building quality	FC	17 11
Broughton Moor slate in blocks at stations in the London area	FC	65 0
Marble in blocks at works:		
Dove	FC	70 0
Roman stone	FC	70 0

Measured rates

Stone and all labours in pilasters and quoins	FC	
Portland	55	2
Beer	51	5
Jambs	FC	
Portland	55	2
Beer	51	5
Lintols	FC	
Portland	56	2
Beer	52	6
Arches	FC	
Portland	67	3
Beer	60	5
Ashlar average 7-in. on bed with plain dressed face	FS	
Portland	31	3
Beer	29	11
Extra for each additional 1-in. thickness	FS	
Portland	3	7
Beer	3	5
$4\frac{1}{2}$ in. $\times$ 4 in. sill sunk, weathered, throated and grooved for water bar, set and jointed in cement mortar	FR	
Portland	11	7
Beer	10	11
Artificial	*4	9
4 in. $\times$ 12 in. coping, weathered and twice throated	FR	
Portland	22	1
Beer	21	2
Artificial	*11	8

Marble and slate

$\frac{3}{8}$ -in. Dove marble lining and fixing on brick backings	FS	36 9
$\frac{3}{8}$ -in. Roman stone lining	FS	36 9

$\frac{3}{8}$ -in. Broughton Moor slate lining	FS	39 11
--	----	-------

SLATER TILER AND ROOFER**Market prices**

Welsh slates, best quality	M	
16-in. $\times$ 10-in.	1038	6
20-in. $\times$ 10-in.	1914	3

Best hand made sand faced plain tiles, $10\frac{1}{2}$ -in. $\times$ $6\frac{1}{2}$ in.	M	315 0
---	---	-------

Grey corrugated asbestos cement sheets	YS	7 0
--	----	-----

Measured rates

16-in. $\times$ 10-in. best Welsh slates laid 3-in. lap	Sq.	310 0
---	-----	-------

20-in. $\times$ 10-in. best Welsh slates 3-in. lap	Sq.	412 0
--	-----	-------

Westmorland green slates in random sizes laid 3-in. lap	Sq.	632 9
---	-----	-------

Best hand made sand faced plain tiles, $10\frac{1}{2}$ -in. $\times$ $6\frac{1}{2}$ in. laid to a 4-in. gauge	Sq.	221 0
---	-----	-------

Best hand made sand faced plain tiles, $10\frac{1}{2}$ -in. $\times$ $6\frac{1}{2}$ in. hung vertically to $4\frac{1}{2}$ -inch gauge	Sq.	237 0
---	-----	-------

Berkshire hand made sand faced red pantiles, $14\frac{1}{2}$ -in. $\times$ 10-in. laid $2\frac{1}{2}$ -in. head and $1\frac{1}{2}$ -in. side lap	Sq.	213 0
--	-----	-------

Grey corrugated asbestos cement sheets fixed to wood roofs	Sq.	129 3
--	-----	-------

Grey corrugated asbestos cement sheets fixed vertically	Sq.	139 3
---	-----	-------

Cedarwood shingles laid 5-in. gauge	Sq.	258 0
-------------------------------------	-----	-------

Metal roof decking and fixing with hook bolts, finished with $\frac{1}{2}$ -in. insulation board and three layers self finish felt roofing	YS	
18 gauge for spans up to 10 ft.	57	6
20 gauge for spans up to 8 ft. 6 in.	50	0

Two layer one ply bitumen felt and fixing with bitumen to concrete or boarding	YS	9 5
--	----	-----

Three layer bitumen felt	YS	12 7
--------------------------	----	------

Patent ribbed aluminium roofing and fixing to purlins	Sq.	287 6
---	-----	-------

CARPENTER**Market prices**

Softwood, carcassing quality	Std.	1910 0
------------------------------	------	--------

Softwood, joinery quality	Std.	2160 0
---------------------------	------	--------

$\frac{1}{2}$ -in. fibre board	Sq.	45 0
--------------------------------	-----	------

$\frac{1}{8}$ -in. standard hardboard	Sq.	40 0
---------------------------------------	-----	------

$\frac{3}{8}$ -in. insulating gypsum wallboard	YS	3 3
--	----	-----

Measured rates

Softwood and fixing in plates, sleeper joists and lintols	FC	15 9 13 10
---	----	---------------

In floor and ceiling joists	FC	18 0 13 10
-----------------------------	----	---------------

In stud partitions, purlins and struts	FC	20 2 13 10
--	----	---------------

In hip and valley rafters	FC	22 9 13 10
---------------------------	----	---------------

Battening and boarding

Slate or tile battens $1\frac{1}{2}$ in. $\times$ $\frac{3}{4}$ -in. and nailing to fixing for	Sq.	
--	-----	--

16-in. $\times$ 10-in. slating to $6\frac{1}{2}$ -in. gauge		39 0
---	--	------

20-in. $\times$ 10-in. slating to $8\frac{1}{2}$ -in. gauge		32 0
---	--	------

$10\frac{1}{2}$ -in. $\times$ $6\frac{1}{2}$ -in. plain tiling to 4-in. gauge		56 0
---	--	------

$14\frac{1}{2}$ -in. $\times$ 10-in. pantiles to 12-in. gauge		22 0
---	--	------

S.E. boarding in batten widths close jointed and fixing to flat or sloping roofs	Sq.	
$\frac{3}{4}$ -in.	120	6
	87	9
1-in.	148	3
	115	6

T. & G. boarding in batten widths close jointed and fixing to flat or sloping roofs	Sq.	
$\frac{3}{4}$ -in.	139	0
	98	0
1-in.	170	2
	129	0

$\frac{3}{4}$ -in. wrot and cross tongued eaves soffit	FS	2 3 1 0
--	----	------------

$\frac{3}{4}$ -in. $\times$ 6-in. wrot and grooved eaves fascia p.o.	FS	10 6
--	----	------

Wall and ceiling boards fixed to softwood	YS	
---	----	--

$\frac{1}{2}$ -in. fibre board		6 6 4 10
--------------------------------	--	-------------

$\frac{1}{2}$ -in. hardboard		5 9 4 4
------------------------------	--	------------

$\frac{3}{8}$ -in. insulating gypsum wallboard		5 8 4 0
--	--	------------

$\frac{3}{8}$ -in. asbestos cement flat sheeting		8 6 4 11
--	--	-------------

$\frac{1}{2}$ -in. asbestos cement flat sheeting		10 3 6 8
--	--	-------------

2-in. Stramit, showerproof quality fixed to joists with butt joints		15 8 11 5
---	--	--------------

JOINER**Measured rates****Floors and skirtings**

Tongued and grooved softwood flooring and nailing to joists	Sq.	
---	-----	--

$\frac{3}{4}$ -in.	164	9
	126	6
1-in.	182	6
	144	0

1-in. nominal double grooved t. and g. Swedish softwood		
---	--	--

A new building for Plymouth's new centre



Architects: EASTON & ROBERTSON, CHARTERED ARCHITECTS.

This fine new building for Lloyds Bank and Pophams Departmental Store has recently been completed by Costains, and now forms a handsome part of Plymouth's modern Royal Parade. Costain's are proud to be associated with the transformation of war scarred Plymouth into a well planned modern city.



**Building & Civil Engineering
Contractors, London.**

MIDDLE EAST · RHODESIA · NIGERIA · CANADA · WEST INDIES

technical section

Joiner continued s d

block flooring set in mastic
and polished YS 29 5

European beech YS 32 7

African Muhuhu YS 37 10

Burma teak YS 48 4

Moulded skirtings, 3-in. to
6-in. sectional area planted
on (per inch in sectional
area) FR

Softwood 3 1/2
2 1/2
Oak 9
7 1/2

Extra for grounds plugged to
brickwork FR

Softwood 9
2

Windows

2-in. rebated and moulded
sashes divided into squares FR

Softwood 3 8
Oak 10 11

Extra for side hanging Each

Softwood 2 9
Oak 4 2

Doors

2-in. framed, ledged and
braced doors, filled in with
1-in. T and G and V jointed
boarding and hanging FS

Softwood 6 2
5 5

Four panelled door square
both sides and hanging FS

Softwood 6 8
6 0
Oak 19 6
18 6

1 1/2-in. Standard flush door,
hardboard faced size 2-ft. 6-in.
x 6-ft. 6-in. and hanging No. 42 2
31 1

Linings and frames

Window and door linings,
6-in. to 12-in. sectional area
(per inch sectional area) FR

Softwood 4
3
Oak 9
8

Frames wrot all round and
framed (per inch sectional
area) FR

Softwood 3 1/2
Oak 8

Mullions, transoms and cills
(per inch sectional area) FR

Softwood 4
Oak 9

Mouldings, architraves, etc.
4-in. to 6-in. sectional area
(per inch sectional area) FR

Softwood 4
3
Oak 10
9

6-in. window boards, 1-in.
thick with rounded nosing
tongued at back and includ-
ing bearers FR

Softwood 3 0 1/2
1 8

s d

Oak 5 6
3 7

Shelving and fittings

3/4-in. shelving of 2-in. slats
spaced 1-in. apart on bearers
(measured separately) FS

Softwood 2 6
1 11

3/4-in. solid shelving on
bearers FS

Softwood 2 3 1/2
1 11
Oak 4 8
4 1

2-in. shelf bearers plugged
to wall FR

Softwood 7 1/2
5 1/2
Oak 1 2
11 1/2

Staircases

1-in. treads and 3/4-in. risers
tongued together on and
including framed carriages FS

Softwood 4 7 1/2
3 6 1/2
Oak 13 6
12 0

1 1/2-in. x 11-in. wall string
plugged to brickwork FR

Softwood 4 5
3 5
Oak 11 5
10 1

1 1/2-in. x 9-in. outer string FR

Softwood 3 4 1/2
2 10
Oak 6 11
6 2

Ends of treads and risers
housed to strings No.

Softwood 1 4 1/2
Oak 6 2

2 1/2-in. x 3-in. moulded
handrail FR

Softwood 3 1 1/2
2 6
Oak 6 5
5 7

1 1/2-in. x 1 1/2-in. square
balusters FR

Softwood 8 1/2
6 1/2
Oak 1 4
1 1

Framed ends to balusters No.

Softwood 6 1/2
Oak 9

IRONMONGER

Market prices

As prices for ironmongery
vary so greatly depending
upon the type and quality
required no prices are quoted
here

Measured rates

The rates which follow are
for fixing only and are
inclusive of profit

s d

3-in. steel butts Pr.
to softwood 4 5
to hardwood 5 11

Double action floor springs
No.
to softwood 22 3
to hardwood 29 7

6-in. barrel bolts
to softwood 2 0
to hardwood 2 8

Cupboard locks
to softwood 4 2
to hardwood 5 7

Cylinder night latch
to softwood 6 11
to hardwood 9 3

Mortice latch
to softwood 5 7
to hardwood 7 5

Mortice lock
to softwood 6 11
to hardwood 9 3

Casement fastener
to softwood 1 8
to hardwood 2 3

Casement stays
to softwood 1 8
to hardwood 2 3

STEEL & IRONWORKER

Market prices

Structural steel joist
sections, basis sizes,
ex mills T*812 6

Extras for other than
basis sizes vary between
10s. and 70s. per ton

Measured rates

Rsj in steel framed
structures hoisted and
fixed complete T*1600 0

Riveted compound girders
including plates and rivets T*1890 0

Rs stanchions including caps,
bases, cleats etc. T*1860 0

Metal windows including
cutting and pinning lugs to
brickwork and bedding
frames in cement mortar No.

Domestic type 4 ft. high
to BS 990

Type ND2F 3 ft. 3 1/4 in. wide 91 0
75 2

Type HD2F 3 ft. 3 1/4 in. wide 98 4
82 6

Type ND11F 6 ft. 6 1/2 in. wide 156 3
128 4

"Z" range, 4 ft. high

Type ZND1 2 ft. 0 3/4 in. wide 61 10
51 4

Type ZND4F 6 ft. 0 3/4 in. wide 157 9
129 10

PLASTERER

Market prices

Plastering sand YC 22 1

Plaster to BS 1191



RUNNYMEDE RUBBER...



A.1. at LLOYD'S

THE RUNNYMEDE RUBBER CO. LTD. are proud to have supplied all the rubber flooring in the new Lloyd's building in Lime Street. A special gauge of rubber, $\frac{1}{2}$ " thick, was produced for this purpose.

It is significant that Runnymede was chosen by the most famous Society of Underwriters in the world. A Runnymede rubber floor offers unique personal safety and security; and its extreme durability makes it an ideal long-term investment for every kind of building.

Colour schemes range from the restful to the exciting; patterns can be conventional or ultra-contemporary. We shall be happy to place our advisory service at your disposal.

*Architect: T. E. HEYSHAM F.R.I.B.A.
General Contractor: JOHN MOWLEM & CO. LTD.*

RUNNYMEDE RUBBER CO. LTD. 6 OLD BAILEY, LONDON, E.C.4. Telephone: CITY 2471

technical section

Plasterer continued s d

Class B in loads of 4 tons
to 5 tons 19 cwt. T

Browning 160 9
Fibred browning 163 9
Board finish 160 9

$\frac{3}{8}$ in. plaster lath, over
600 yds. YS 2 5

$\frac{3}{8}$ in. $\times$ 6 in. $\times$ 6 in. cream
glazed wall tiles YS 27 2

Measured rates

Metal lathing

No. 24 gauge expanded metal
lathing and fixing YS

To softwood soffits 6 9
4 4

To metal 7 6
4 4

Lime plaster

Render float and set on brick
walls and partitions YS 7 2
2 4

R.F. and S. on concrete
including hacking YS 8 10
2 4

R.F. and S. on expanded
metal lathing YS 7 3
2 5

Gypsum plaster

Render in cement-lime-sand
(1 : 1 : 6) and set in gypsum
plaster on brick walls and
partitions YS 5 8
1 11

Render in gypsum fibred
browning-sand (1 : 1 $\frac{1}{2}$) and
set in gypsum on concrete
soffits including bonding
coat YS 9 1
3 6

Render and set on expanded
metal lathing including
pricking up coat YS 8 8
3 10

Plaster board

$\frac{3}{8}$ -in. gypsum plaster lath
fixed to softwood soffits
finished to receive plaster YS 4 10
2 11 $\frac{1}{2}$

Gypsum board finish setting
coat on last YS 4 2
1 1

Plain face

$\frac{1}{2}$ -in. Portland cement and
sand (1 : 3) plain face
trowelled smooth on brick
walls YS 6 6
1 11

Tyrolean rendering

Render in cement, lime sand
(1 : 1 : 6) and finishing with
three coats patent coloured mix
preparations applied with
hand operated machine YS 9 11
2 5

Sprayed "Limpet" asbestos
Approximate prices for sprayed
"Limpet" asbestos on the
following surfaces to the
thickness shown for
quantities of 1,000 yds. super.
Normal pressed finish.
New concrete soffits and
beams YS

$\frac{1}{2}$ -in. 14 5
 $\frac{3}{4}$ -in. 19 8
1-in. 21 9

New structural steelwork

YS
 $\frac{1}{2}$ -in. 16 6
 $\frac{3}{4}$ -in. 21 9
1-in. 23 10

Extra over the above prices
for coloured texture finish YS 3 3

Wall tiling

6 in. $\times$ 6 in. $\times$ $\frac{3}{8}$ in. standard
quality white glazed wall
tiles set and jointed on
prepared screed YS 49 4

Egg shell matt or glossy
glazed enamelled tiles YS 60 11

EXTERNAL PLUMBER

Market prices

Sheet lead, 3 $\frac{1}{2}$ lb. and
upwards, in quantities of
5 cwt. to 1 ton C*115 0

Copper sheeting, 23 gauge,
in 1-ton lots C*250 0

Zinc sheeting, 14 gauge, in
1-ton lots C 98 0

Aluminium sheeting 20 SWG C
Super purity*513 4
Commercial quality*326 8

Cast iron rainwater and
soil goods

Medium weight pipe to
B.S. 416 and B.S. 460 in
6 ft. lengths No.
2 $\frac{1}{2}$ -in. 18 10
3-in. 21 0
4-in. 26 10

Half round gutter in 6 ft.
lengths No.
3 $\frac{1}{2}$ -in. 7 11 $\frac{1}{2}$
4-in. 10 4
6-in. 16 11

The above are Standard-List
prices plus 22 $\frac{1}{2}$ %.

Measured rates

Milled sheet lead C
Flat roofs*196 3
Gutters and flashings*196 3

24 SWG copper sheet FS
Flat roofs *5 1
Gutters and flashings *5 1

23 SWG copper sheet FS
Flat roofs *5 9
Gutters and flashings *5 9

14 gauge zinc FS
Flat roofs 3 3
Gutters and flashings 3 3

20 SWG super purity
aluminium FS
Flat roofs *5 3

s d

Gutters and flashings *5 3

20 SWG commercial quality
aluminium FS

Flat roofs *4 0
Gutters and flashings *4 0

Rainwater gutters and pipes

$\frac{1}{2}$ -in. cast iron half round eaves
gutter jointed and fixed to
fascia with brackets FR

4-in. 3 5 $\frac{1}{2}$

6-in. 5 1

3 7 $\frac{1}{2}$

18 gauge pressed steel half
round eaves gutter FR

4-in. 3 1 $\frac{1}{2}$

6-in. 4 2 $\frac{1}{2}$

2 8

Asbestos cement half round
eaves gutter FR

4-in. 2 10

6-in. 4 1

2 7

Aluminium half round
eaves gutter FR

4-in. *3 9

2 6

Cast iron medium section
rain water pipes jointed and
fixed to walls with pipe nails FR

3-in. 5 10

4 5

4-in. 7 4

5 8

Pressed steel

FR

3-in. 4 5

3 0

4-in. 6 3

4 7 $\frac{1}{2}$

Asbestos cement

FR

3-in. 3 9

2 3

4-in. 4 9

3 1

Aluminium

FR

3-in. 5 1

3 8

4-in. *6 10

5 2

Soil and ventilating pipes

Lead soil, waste and ventilat-
ing pipes (15 lb. per yd. for
3-in. and 19 lb. per yd. for
4-in. diameter) fixed to walls
with lead tacks FR

3-in. *11 8

8 7

4-in. *16 3

10 8

Cast iron soil, waste and
ventilating pipes with caulked
joints fixed to walls with pipe
nails FR

3-in. heavy 7 1

5 2

4-in. heavy 8 8

6 6

Asbestos cement soil and
ventilating pipe fixed to walls
with holder bats FR

3-in. 3 10

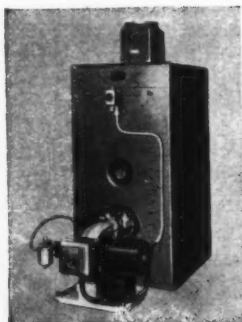
2 4

4-in. 4 10 $\frac{1}{2}$

3 2 $\frac{1}{2}$

ONE ORDER, ONE PRICE, ONE DELIVERY—

ONE 'POTTERTON' OIL-FIRED BOILER



Each 'Potterton' Oil-fired Boiler is supplied as *one* complete packaged unit. The unit is delivered in *one* consignment—right down to the last nut! Only *one* company is responsible for its overall efficiency. Boiler, burner and controls are a matched, tested and proven combination. There are no extras to buy.

Because of its high efficiency and accurate controls, the 'Potterton' Oil-fired Boiler is surprisingly economical to run. It is designed specifically for oil, and utilises the maximum heat from the fuel. Its thermal efficiency of 80% is close to the theoretical maximum. More important still, every 'Potterton' Boiler continues to maintain this efficiency for long periods. In this way there is a saving of one gallon of oil out of every five that would be consumed by a converted solid fuel boiler—an important point to bear in mind when you are specifying a boiler.

The consequent low running costs, the facilities for speedy maintenance, the ease of erection and installation can be demonstrated to you. If you would like such a demonstration, please do not hesitate to write for further details to the address below.

Another good reason for specifying

'POTTERTON' BOILERS *Oil-fired or Gas-fired*

the Key to comfort



POTTERTON DIVISION, Thomas De La Rue & Co. Ltd.,
20/30 Buckhold Road, London S.W.18.

DLB10/1

technical section

INTERNAL PLUMBER

Market prices

Lead pipe in quantities of
5 cwt. to 1 ton

C
BS 602*117 3
BS 1085*124 3

Polythene tubing, heavy
gauge, in quantities of 500 to
999 ft. per 100 ft.

$\frac{1}{2}$ -in. 112 6
 $\frac{3}{4}$ -in. 152 0
1-in. 193 6

Steel tubes to B.S. 1387

medium weight galvanised FR
 $\frac{1}{2}$ -in. 0 9
1-in. 1 1
 $\frac{3}{4}$ -in. 1 5
1 $\frac{1}{2}$ -in. 1 8

The above are Standard List
prices less 37 $\frac{1}{2}$ %.

Galvanised malleable fittings.

Bend No.
1-in. 2 9 $\frac{1}{2}$
 $\frac{3}{4}$ -in. 4 2 $\frac{1}{2}$
1 $\frac{1}{2}$ -in. 6 0

Tee

No.
 $\frac{1}{2}$ -in. 1 0
 $\frac{3}{4}$ -in. 1 4 $\frac{1}{2}$
1-in. 2 0
1 $\frac{1}{2}$ -in. 2 9 $\frac{1}{2}$
1 $\frac{3}{4}$ -in. 4 0

The above are Standard List
prices less 23 $\frac{1}{2}$ %, less 6 $\frac{1}{2}$ % plus
40%.

Copper tubes to B.S.659 FR
 $\frac{1}{2}$ -in. *0 9 $\frac{1}{2}$
 $\frac{3}{4}$ -in. *1 1 $\frac{1}{2}$
1-in. *1 8 $\frac{1}{2}$
1 $\frac{1}{2}$ -in. *2 0 $\frac{1}{2}$

The above are calculated on a
basic price of 1s. 9 $\frac{1}{2}$ d. per lb.
plus C.T.A. extras.

Measured rates

Lead pipe to BS 602

Main supply and laying in
trench (measured separately)
at the following sizes and
weights in lbs.

FR
 $\frac{1}{2}$ -in. 7 *3 9
 $\frac{3}{4}$ -in. 11 *5 7
1-in. 16 *7 11
 $\frac{3}{4}$ -in. 28 *13 3
1 $\frac{1}{2}$ -in. 35 *17 1
13 11

Main supply fixed to walls
and ceilings

FR
 $\frac{1}{2}$ -in. 7 *4 4
 $\frac{3}{4}$ -in. 11 *6 3
1-in. 16 *8 8
1 $\frac{1}{2}$ -in. 28 *14 0
1 $\frac{1}{2}$ -in. 35 *18 5
14 0

Distributing pipes fixed to
walls and ceilings

FR
 $\frac{1}{2}$ -in. 4 *3 2
 $\frac{3}{4}$ -in. 5 *3 7
1-in. 7 *4 8
1 $\frac{1}{2}$ -in. 9 *5 7
1 $\frac{1}{2}$ -in. 12 *7 3
5 2

Flushing and warning pipes
fixed to softwood

FR
 $\frac{3}{4}$ -in. 4 *3 7
1-in. 5 *4 4
1 $\frac{1}{2}$ -in. 6 *5 6
1 $\frac{1}{2}$ -in. 7 *6 0
2 10

Waste pipes and fixing to
softwood

FR
 $\frac{1}{2}$ -in. 6 *5 6
1 $\frac{1}{2}$ -in. 7 *6 0
3 0

Joints to fittings

No.
 $\frac{1}{2}$ -in. 5 11
 $\frac{3}{4}$ -in. 6 10
1-in. 7 5
1 $\frac{1}{2}$ -in. 8 2
1 $\frac{1}{2}$ -in. 8 11
4 4

Extra for:

Bend No.
 $\frac{1}{2}$ -in. 2 7
1 $\frac{1}{2}$ -in. 3 8

Branch joints

No.
 $\frac{1}{2}$ -in. 7 8
 $\frac{3}{4}$ -in. 8 9
1-in. 9 2
1 $\frac{1}{2}$ -in. 10 11
1 $\frac{1}{2}$ -in. 12 6
4 4

Polythene tubing to B.S. 1972
Heavy gauge as supply pipe
laid in trench (measured
separately)

FR
 $\frac{1}{2}$ -in. 1 8
 $\frac{3}{4}$ -in. 2 1
1-in. 2 7 $\frac{1}{2}$
2 3

Heavy gauge as supply or
distributing pipe fixed to
walls

FR
 $\frac{1}{2}$ -in. 2 9
 $\frac{3}{4}$ -in. 3 4
1-in. 3 11
2 9

Steel tubing to BS 1387

Heavy weight with screwed red
lead joints as supply pipe
laid in trench (measured
separately)

FR
 $\frac{1}{2}$ -in. 2 8
 $\frac{3}{4}$ -in. 3 1
1-in. 3 3
1 $\frac{1}{2}$ -in. 3 9
1 $\frac{1}{2}$ -in. 4 11
2 2

Medium weight tubing fixed to
walls

FR
 $\frac{1}{2}$ -in. 2 7
 $\frac{3}{4}$ -in. 3 0
1-in. 3 2
1 $\frac{1}{2}$ -in. 3 8
1 $\frac{1}{2}$ -in. 4 9
2 0

Extra for malleable iron:

Bend No.

1-in. 5 1
 $\frac{3}{4}$ -in. 7 3
1 $\frac{1}{2}$ -in. 9 4
6 7

Tee No.

$\frac{1}{2}$ -in. 3 1
 $\frac{3}{4}$ -in. 3 5
1-in. 4 0
1 $\frac{1}{2}$ -in. 5 6
1 $\frac{1}{2}$ -in. 6 10
4 5

Copper tube

Copper tube to BS 1386 as
supply pipe laid in trench
(measured separately) to the
following size and gauges FR

$\frac{1}{2}$ -in. 18 *1 10
 $\frac{3}{4}$ -in. 17 *2 6
1-in. 16 *3 4
1 $\frac{1}{2}$ -in. 16 *4 6
1 $\frac{1}{2}$ -in. 15 *5 9
4 11

Copper tube to BS 659 as
distributing pipe fixed to
walls

FR
 $\frac{1}{2}$ -in. 19 *1 11
 $\frac{3}{4}$ -in. 19 *2 4
1-in. 18 *3 0
1 $\frac{1}{2}$ -in. 18 *3 9
1 $\frac{1}{2}$ -in. 18 *4 4
3 6

Extra for brass compression
fittings joining copper to
copper

No.

Coupling $\frac{1}{2}$ -in. *5 1
 $\frac{3}{4}$ -in. *6 3
1-in. *8 10
1 $\frac{1}{2}$ -in. *11 0
1 $\frac{1}{2}$ -in. *15 1
11 0
Bend $\frac{1}{2}$ -in. *6 4
 $\frac{3}{4}$ -in. *7 10
5 6

technical section

Internal plumber continued s d

1-in. *11	3
8	3
1½-in. *14	1
10	6
1½-in. *23	0
18	11
Tee ½-in. *9	3
6	1
¾-in. *10	8
7	0
1-in. *15	7
11	4
1½-in. *21	4
16	5
1½-in. *31	11
26	5

GLAZIER

Market prices

Sheet glass cut to size	FS	
24 oz.	10	3
32 oz.	1	4½

¼-in. Polished plate glass, glazing quality in plates not exceeding:	FS	
2 ft. super	4	3
5 ft. super	5	3
45 ft. super	6	3
100 ft. super	6	9

Rolled plate glass	FS	
¼-in. rolled plate	11	½
¼-in. Georgian wired	6	0

Attention is drawn to reduction in certain glass prices offered by manufacturers for acceptance of specified minimum quantities of one size and substance delivered to one address at one time

Measured rates

Glazing to wood

Ordinary quality sheet glass and glazing with putty in squares	FS	
24 oz. O.Q.	1	5
32 oz. O.Q.	2	0

¼-in. rolled plate glass	1	6½
--------------------------	---	----

¼-in. rough cast glass	1	11
------------------------	---	----

Prismatic glass	2	9
-----------------	---	---

¼-in. wired glass	2	2½
-------------------	---	----

¼-in. Georgian wired plate glass	8	4
-------------------------------------	---	---

¼-in. Polished plate glass (glazing quality) in plates 5 to 45 ft. super	8	7
--	---	---

Glazing to metal

Add to above rates 1d.
per ft. super

Sundries

Hacking out broken sheet glass	FS	1	3
-----------------------------------	----	---	---

Black ribbon velvet and bedding to edge of glass	FR	8
---	----	---

Double glazing
Insight units of two skins
of glass with lead spacers

and glazing with mastic or
beads (supplied). In panels
15 to 20 ft. super FS
32 oz. sheet 10 1
¼-in. polished plate 21 4

Patent glazing

Patent glazing with rolled
steel lead capped bars for
8-ft. spans and glazing with
¼-in. Georgian wired cast FS 4 9

Aluminium alloy patent
glazing FS 5 3

PAINTER

Market prices

Washable distemper C. 120 0

Emulsion paint Gal. 45 0

Hard gloss paint: Gal.
Undercoat 46 0
Finishing 48 0

Measured rates

On walls and ceilings YS

Twice whiten plastered
ceilings 1 4½
3

Two coats distemper on
plastered walls or ceilings 2 2½
1 0½

Two coats distemper on
fair-faced brick or concrete
walls 2 8
1 3

Two coats emulsion paint on
walls or ceilings 2 10
1 8

Prepare, prime and apply one
coat oil colour on plastered
walls 3 9
1 9

Add for each additional coat 1 8½
10

On metal

Prepare, prime and apply one
coat oil colour on general
surfaces YS 3 6½
1 6

Add for each additional coat 1 8
10

On metal casements YS
Basis price 5 7
1 6

Add for each additional coat 2 6
10

On bars, angles etc., not
exceeding 6-in. girth YR
Basis price 11½
3

Add for each additional coat 5
2

On small pipes YR
Basis price 11½
3

Add for each additional coat 5
2

On large pipes YR
Basis price 11 6

Add for each additional coat 10
3½

Prepare, prime and apply one
coat heat-resisting paint on
heating surfaces of radiators YS

Basis price 4 3
1 5½

Add for each additional coat 1 11
9

On wood

Knot, prime, stop and apply
one coat oil colour on
general surfaces YS 3 11
1 7½

Add for each additional coat 1 8
10

On work not exceeding 3-in.
girth YR 6
1½

Add for each additional coat 2½
1

For each additional 3-in.
girth YR 5½
1½

Add for each additional coat 2½
1

Stain and varnish

Prepare, size, stain and twice
varnish on general surfaces
of woodwork YS 4 3½
1 8

On work not exceeding 3-in.
girth YR 7
1½

For each additional 3-in.
girth YR 6
1½

Oiling and polishing

Twice oiling general surfaces
of hardwood with linseed oil YS 2 9
1 4

On work not exceeding 3-in.
girth YR 4
1½

For each additional 3-in.
girth YR 3½
1½

Staining and wax polishing
general surfaces of hardwood FS 1 0½

Staining bodying-in and fully
French polishing on general
surfaces of hardwood FS 2 7½

Papering

Preparing and sizing walls
and hanging plain lining
paper Piece 10 7
3 3

Hanging wall paper, p.c. 10s.
per piece Piece 20 6
12 9

Hanging border p.c. 1s. per
yd. YR 1 9
1 3

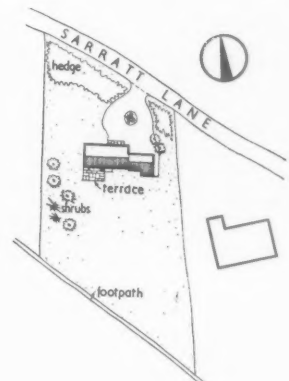
building illustrated

FOUR HOUSES

Architects commonly agree that the private house is one of the most painful of all architectural tasks. It must be "traditional" enough to feel like a home (a hearth) and yet it cannot conscientiously ignore modern knowledge and techniques. These four houses—two of them completed in 1955 and two in 1957—illustrate varying approaches to the resolution of this struggle. The technical analyses, with costs, of these houses are grouped together, for ease of comparison, on pages 982-990.

HOUSE

in SARRATT LANE,
RICKMANSWORTH, HERTS.
designed by DORE and WURR
assistant architect J. W. HUMPHRIES



The south elevation. The design is not entirely the responsibility of the architects. The owners of the estate on which the house is built caused them to raise the roof pitch to 45 deg. and to use a pitched instead of flat roof to the garage (foreground) in pursuit of a "traditional" character in keeping with the neighbourhood.

building illustrated



Ground and first floor plans [Scale: $\frac{1}{8}'' = 1' 0''$]

The hall of the house at Rickmansworth, with the cloakroom door at the end. Beneath the shelf on the right is a radiator fed from the living room back boiler. The staircase is of hardwood with m.s. bar balusters and the floor tiles are ceramic.

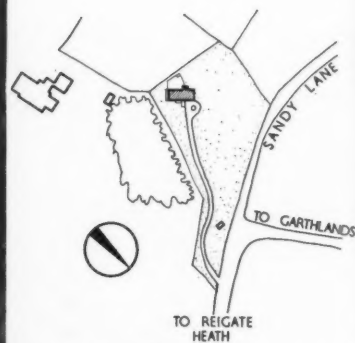


Section A-A

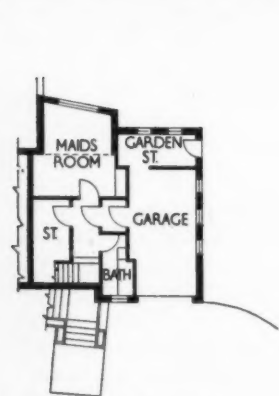


HOUSE

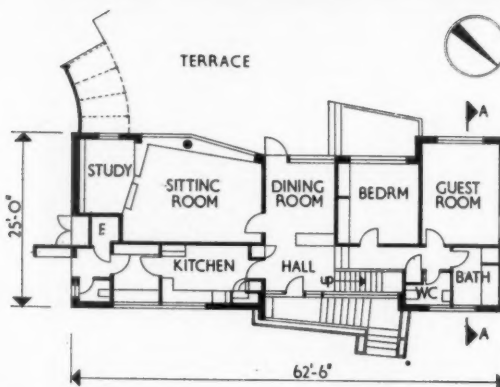
near REIGATE HEATH
designed by JOHN R. STAMMERS



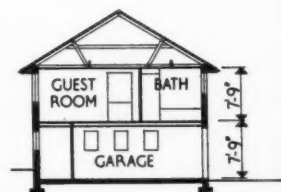
The south-west elevation. The window in the York stone wall lights the maid's room. Behind are the garage and store rooms—all this accommodation occupying only one end of the plan to "fill out" the sloping site.



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



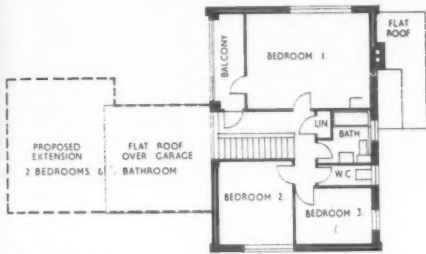
Ground floor plan



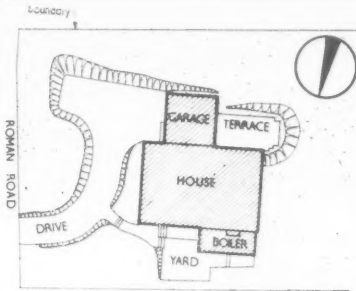
Section A-A



Far left: the large windows (with the arbitrary splay) of the house at Reigate light the dining and sitting rooms and are of proprietary double glazing. Left: looking towards the study from the sitting room. Apart from a guest and maid's room, this house has only one bedroom. Hence there will be no children to disturb whoever works in the study. Note the use of a step up into the study to form a spatial distinction between the two rooms. The house has electric underfloor heating.



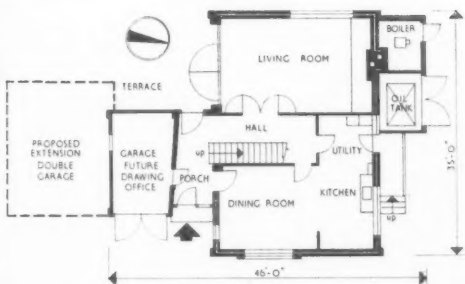
First floor plan



HOUSE

at ROMAN ROAD, DORKING, SURREY.

designed by G. DENNIS SYKES
of GERALD F. JONES and SYKES
consultants (heating) WILLIAM ALLEN
(landscape) SHEILA HAYWOOD
quantity surveyors HARRY TRINNICK
and PARTNERS

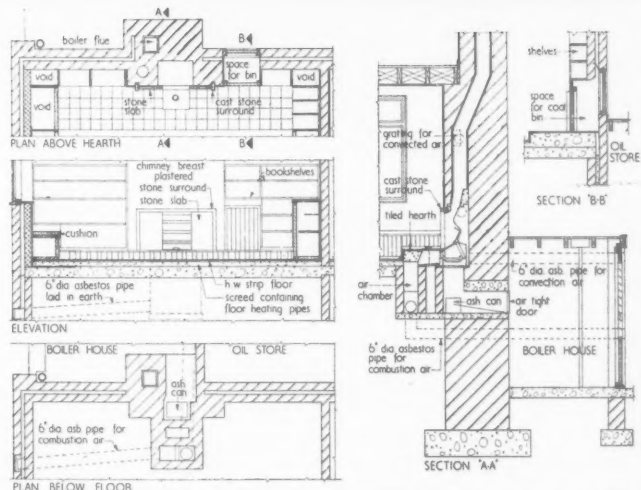


Ground floor plan [Scale: $\frac{1}{8}'' = 1' 0''$]



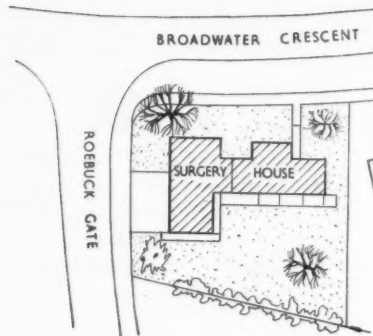
The south elevation. The sloping site allowed a boiler room below the ground floor level and hence gravity circulation.

Looking into the living room from the terrace. On the right is the hall and, beyond, the dining room.



Detail plans, sections and elevation, living room fireplace [Scale: $\frac{1}{4}'' = 1' 0''$]

building illustrated



HOUSE

in BROADWATER CRESCENT,
STEVENAGE, HERTS.
designed by STIRLING and MARGARET CRAIG
consultants BULLEN and PARTNERS
quantity surveyor F. J. NICOLL

Ground and first floor plans [Scale: $\frac{1}{8}'' = 1' 0''$]

Opposite: the west elevation. On the ground floor, from left to right, are the kitchen, dining room and living room. On the first floor are four bedrooms. It was a client's requirement that the left-hand bedroom (for the maid) should have its window looking north, so that she should not over look the garden. Above: looking towards the dining room from the living room. The veneered panel between them slides back behind the fixed partition so that the two rooms can be used as one.

analysis

House at Rickmansworth

CLIENT'S REQUIREMENTS

A 3-bedroom house, two double, one single bedrooms. A living room intercommunicating with the dining room, which must be easily accessible from the kitchen. A utility room, fuel store and garage.

Large windows on the south for all rooms, to make the most of sun and fine views. As the west elevation is overlooked by other houses, no windows to face that way. Rooms to be as spacious as possible within limits of cost, and without recourse to open planning. Central heating to living area but not bedrooms.

PLANNING AIMS

The clients wanted a house in "contemporary" style, but the design was restricted by rigid "Estate" control, which forbade anything but a traditional exterior, and forced the architects to raise the pitch of the main roof to 45° and to abandon the proposal of a flat roof to the garage. It was an interesting problem to retain a contemporary feeling despite these restrictions. Thorough detailing and specification enabled the house to be built, as the clients wished, by a building firm which had been personally recommended, without supervision. The porch coal bunkers and a screen wall were added later by the client.

price per sq. ft. (based on final account)	s	d
Preliminaries and insurances	4	0
Work below ground floor level	3	2
Concrete foundations, hardcore 6 in. minimum.		
Fletton brickwork, 4-in. surface concrete 1 : 3 : 6, reinforced with mesh No. 9.		

STRUCTURAL ELEMENTS

Frame or load bearing element
Prefabricated reinforcement to beam over hall window.
Concrete 1 : 2 : 4, involving shuttering and builder's work.

House at Reigate

CLIENT'S REQUIREMENTS

A house with two bedrooms, designed to take full advantage of the exceptionally fine views, especially from south-east and west. Some accommodation was needed for living-in help at a later date. The client possessed some good pieces of antique furniture and wished to mix with it a good deal of built-in furniture.

PLANNING AIMS

The house was placed on the highest corner of the site, and the sitting room, including the fireplace, was planned to make the most of the view. The slope of the land was used to place the garage and the future help's quarters on the lower floor and levels were helped out by a reduced room height in the upper, bedroom area. Electric floor heating was provided throughout, except in upper bedrooms and most windows are double glazed.

price per sq. ft.	s	d
Preliminaries and insurances	7	8½
Contingencies	2	2½
Work below ground floor level	9	0½
Normal strip footings in sand. Lower storey where partly below ground level waterproofed by filling wall cavity with waterproofed concrete.		

5½ Frame or load bearing element



analysis

House at Dorking

CLIENT'S REQUIREMENTS

A three-bedroom house with provision for economical future extension in various ways, and labour-saving garden

PLANNING AIMS

1. Use of sloping site to enable boiler to have gravity circulation, and fuel and delivery stores to be provided under rear entrance ramp.
2. Semi-open plan—an attempt has been made to combine the spaciousness of the modern open plan with the privacy and seclusion of traditional layout.
 - (a) utility, kitchen and dining room are combined. Note that utility space is concealed from dining table, and dining room could be walled off.
 - (b) living room is large and secluded, but can be combined with hall by means of double doors for dances, etc.
3. Provision for future extensions.
 - (a) garage can be converted into study or nursery, and new garage added on at south end;
 - (b) living room can be extended;
 - (c) one or two bedrooms can be added over garage and study wing;
 - (d) cloakroom and w.c. can be formed along south end of dining room (window, door, drain and c.w. connections, electric lights and switches are all ready in position).

	price per sq. ft.	s	d
Contingencies		6	$\frac{1}{2}$
Work below ground floor level		7	$9\frac{1}{4}$
Load-bearing brick cavity walls and piers on strip foundations, in 1 : 3 mortar. Ground floor slab 1 : 2 : 4 mix r.c. with d.p. membrane.			

STRUCTURAL ELEMENTS

Frame or load-bearing element

House at Stevenage

CLIENT'S REQUIREMENTS

The entrances to house and surgery to be as far apart as possible. The house to provide one large living room, divisible into sitting and dining rooms when required, three double bedrooms (one as a maid's room) and one single bedroom, convertible later into a dressingroom, for a baby. A double garage.

PLANNING AIMS

To provide privacy in the house and garden and separation from the surgery, despite convenient juxtaposition of the two; to enclose the corner site from the road, and secure the best aspect for all the rooms in the house, and to avoid surgery windows either overlooking the garden or being overlooked from buses and passers-by. The bedroom at the north end of the house, being intended for a living-in maid whom the client did not wish to overlook the garden, has its window overlooking the shopping centre.

(The costs given in the following analysis are approximate only, and are based on anticipated final account)

	price per sq. ft.	s	d
Preliminaries and insurances		6	6
contingencies, nil, but agreement with client as reduction			
work below ground floor level		8	$8\frac{1}{2}$
Deep reinforced strip foundation on made-up ground. Ground floor, slab reinforced with mesh carried on beams and carrying ducts for the heating system under the floor.			

Frame or load bearing element

(Cost given under "external walls").
10 $\frac{1}{2}$ -in. cavity wall construction with large window units continuous as frames through two floors.
R.c. beams across openings, where required to carry floors and roof.

analysis

House at Rickmansworth

External walls

11-in. cavity walls. 4½-in. secondhand London stock brick outer leaf and 4-in. clinker block inner leaf, except first floor front and back elevation, where a 4-in. inner leaf and 3-in. clinker block outer leaf are faced with battens and cedar horizontal boarding.

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \frac{1.48}{1}$$

Windows

R.C. lintels, softwood frames, hardwood sills and standard metal casements.

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \frac{0.22}{1}$$

External doors

1 double and 1 single garage doors, ledged, framed, braced and boarded.
Utility room and front door, external quality hardwood doors.

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \frac{0.09}{1}$$

Upper floors

Timber joists, 8-in. × 1½-in. at 14-in. c.c. and spanning 10 ft. 8 in. Area: 413 sq. ft.
8-in. × 2-in. joists at 16-in. spanning 14 ft. Area: 216 sq. ft.

Staircases

One ladder type staircase with 10-in. × 1½-in. hardwood treads, 10-in. × 2-in. hardwood strings, ½-in. m.s. balusters and plastic handrail on m.s. plate.

Roof construction

45 deg. pitched roof. 7-in. × 3-in. purlins, 4-in. × 1½-in. rafters at 16-in. centres for two-storey. Area: 1,120 sq. ft.
6-in. × 3-in. purlin, 4-in. × 1½-in. rafters at 16-in. centres for one-storey. Area: 572 sq. ft.

Glazing

24- and 32-oz. clear sheet glass. ¼-in. plate for doors and hall window. Obscured glass for "Cloaks."

Total of structural elements 21s 0½d

PARTITIONS AND FITTINGS

Internal partitions

Type of partition: 4½-in. brick 2½-in. clinker block.
Area of each type: 682 sq. ft. 360 sq. ft.

Internal doors

8 single doors, standard flush hardwood faced.
1 double door, softwood framed glazed plate.

House at Reigate

External walls

Rustic flettons. Some walls in rough York stone with raked-out joints.

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \frac{1.102}{1}$$

Windows

Pivoting metal casements in softwood frames.

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \frac{0.3151}{1}$$

External doors

Front door, 2-in. glazed. Other, f.l. and b., with flush face internally.

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \frac{0.056}{1}$$

Upper floors

Timber joists spanning 10 ft. and 12 ft. Softwood boarding.

Staircases

One, afrormosia polished, with softwood strings, painted.
Width: 2 ft. 9 in.
Total rise: 8 ft. 3 in.

Roof construction

35-deg. pitched gable end roof. Purlins strutted off cross walls where possible, but 2 TDA type trusses used over sitting room. Fibreglass insulation.

Glazing

Double glazing in most windows. 32-oz. sheet in garage, etc., reeded in bathrooms.

Total of structural elements 25s 1d

Internal partitions

Lightweight concrete blocks, clinker blocks and 4½-in. brick.

Screens

Sideboard-screen fitting in dining room-hall.

Internal doors

11 single, flush doors.

analysis

*House at Dorking***External walls**

Load-bearing brick cavity walls—outer leaf sand-faced multi-wire-cuts in Garden Wall bond with flush joints in 1 : 1 : 6 mortar—inner leaf 4-in. clinker blocks in 1 : 1 : 6 mortar. Small areas of patent renderings.

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \frac{2.11}{1}$$

Windows

Softwood frames, casements and hoppers (modified Ejma sections) some with external Agba picture frame surrounds.

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \frac{0.23}{1}$$

External doors

Generally painted softwood frames and doors with glazed panels.

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \frac{0.12}{1}$$

Upper floors

9-in. × 2-in. and 7-in. × 2-in. softwood joists carrying 1-in. nominal tongued and grooved softwood boarding. Maximum clear span is 13 ft. 9 in. Total area 726 sq. ft. (including balcony). Normal domestic superloads.

Staircases

Internal open riser staircase with 1½-in. nominal Agba treads, one end built into brick wall and other end supported on metal brackets to 5-in. × 4-in. softwood carriage. Number of internal staircases is one. Also folding aluminium loft ladder to roof space. Width of staircase : 3 ft., total rise : 9 ft.

Roof construction

Main pitched roof : 30 deg. standard Ejma trusses at approximately 6-ft. centres with 3-in. × 2-in. softwood rafters. Area of pitched roof 1,184 sq. ft. actual (1,000 sq. ft. on plan).

Flat roofs : 1-in. tongued and grooved softwood boarding laid flat on softwood joists. Area of flat roof 347 sq. ft.

Glazing

Generally 24-oz. and 32-oz. clear sheet puttied and ½-in. p.p. and ¼-in. Georgian wired cast glass beaded.

Total of structural elements 18s 9½d

PARTITIONS AND FITTINGS**Internal partitions**

Type of partition: 4½-in. brick 3-in. breeze blocks 2-in. breeze blocks
Area of each type: 560 sq. ft. 224 sq. ft. 56 sq. ft.

Internal doors

Number of single doors is ten. Number of double doors is one. Some semi-solid core flush doors, some fully glazed softwood framed, all hung to 1½-in. nominal Agba linings without architrave.

*House at Stevenage***6 4½ External walls**

$$\text{Ratio: } \frac{\text{solid wall}}{\text{floor area}} = \text{house } \frac{1.1}{1} \quad \text{surgery and garage } \frac{0.84}{1}$$

2 9½ Windows

Softwood painted. Standard metal vents.

$$\text{Ratio: } \frac{\text{windows}}{\text{floor area}} = \text{house } \frac{0.37}{1} \quad \text{surgery } \frac{0.36}{1} \quad \text{garage } \frac{0.079}{1}$$

4 7 External doors

$$\text{Ratio: } \frac{\text{doors}}{\text{floor area}} = \text{house } \frac{0.0019}{1} \quad \text{surgery } \frac{0.033}{1} \quad \text{garage } \frac{0.425}{1}$$

1 7½ Upper floors

T & g softwood boarding on 9-in. × 2-in. and 7-in. × 2-in. joists.

Span: 16 ft. maximum.

Area: 866 sq. ft.

Superloads: 40 lb. per sq. ft.

10 Staircases

Open riser, mahogany nosing, cork faced treads. Mahogany veneered balustrade wall and mahogany wreathed handrail on satin chrome brackets.

Width 3 ft. total rise, 9 ft. 1 in.

1 9 Roof construction

Type of roof: flat. Compressed straw slabs on timber joists with asphalt covering.

Area: (a) house, 1,081 sq. ft.; (b) surgery and garage, 1,268 sq. ft.

9½ Glazing

Clear glazing, 24-oz., 26-oz. and 32-oz. ½-in. polished plate. Obscure glazing, ¼-in. polished plate acid etched. Rolled cathedral in small lights.

Total of structural elements 16s 6½d

11 Internal partitions

Type of partition: 2-in. breeze blocks 4-in. breeze blocks
Area of each type: 900 sq. ft. 236 sq. ft.

Screens

Flush-horizontal-sliding timber screen with hinged leaf dividing dining room from living room.

1 2½ Internal doors

Obeche veneered, wax polished. 25 single, no double.

analysis

*House at Rickmansworth***Ironmongery**

Satin anodized aluminium. Lever handles.

Fittings

Hardwood framed hatch and cupboard fitment,
hardboard, opaque coloured glass and reeded glass.
Softwood bookshelves in living room.
Ejma kitchen cupboards.
Softwood wardrobes in bedrooms.

Total of partitions and fittings 4s 5½d

*House at Reigate***6 Ironmongery**

Mortice locks.

Anodized aluminium levers and cupboard knobs.

2 0½**Fittings**

Wardrobes, built-in dressing table and bedhead
fitting.
Bookcases and special fittings beside fireplace. All
in sapele.

s d

8½

5 7

Total of partitions and fittings 11s 4½d

FINISHINGS

Floor finishes

2 0¾

Type of finish	Area in sq. ft.	Price per sq. yd.
Black and white ceramic tiles	108	45s. od.
Sapele wood block	311	42s. od.
Sapele wood strip	61½	50s. od.
Quarry tiles	234	30s. od.
Softwood	515	1s. 6d.
Screed (trowel finish)	210	

Wall finishes

1 10½

¾-in. plaster render and set, including wood
pelmet.
6-in. × 6-in. wall tiling round bath.
Secondhand London stocks (cost included under
external walls)

Ceiling finishes

2 0½

¾-in. plaster lath and setting coat.

Roof finishes

2 3

Machine-made sand-faced clay roofing tiles.
Area: 1,692 sq. ft. measured on slope.

Decorations

1 11

Emulsion paint on walls and ceilings.
Oil paint on softwood.
Plastic seal to external hardwood, wax polish to
internal hardwood.

Total of finishings 10s 1½d

Floor finishes

2 9½

Type of finish	Location	Price per sq. yd.
Quarries	Dining room and hall	—
¾-in. thick mahogany blocks with aluminium backing	Sitting room	39s. 6d.
Linoleum	Kitchen, bathrooms	38s. 6d.
Thermoplastic	Maid's room	24s. od.

Wall finishes

1 10

Plaster.
Tiling in bathroom and kitchen.

Ceiling finishes

1 4½

Skim coat on plaster lath.
Garage, rendering on expanded metal reinforcement.

Roof finishes

3 0½

Cedar shingles. Area: 2,112 sq. ft.

Decorations

1 8

Washable distemper on walls and ceilings; 3 coats
gloss paint on wood and iron. External brickwork,
white cement paint, 2 coats.

Total of finishings 10s 8d

SERVICES

External plumbing

1 3½

C.i. r.w.p.s and half round eaves gutters.
(Cost includes soil stack and waste branches.)

External plumbing

1 5½

C.i. gutters and r.w.p.s. C.i. soil pipes. Copper
wastes. Copper flashings and casing to chimney
flue.

Sanitary fittings

1 10½

Sanitary fittings

Cost included with hot and cold water installation.

Type of fitting	No. of each type
Low level w.c. cistern	2
Stainless steel sink	1
Lavatory basins	3
Bath, 6 ft. × 2 ft. 3 in.	1
Porcelain sink	1

Type of fitting	No. of each type
Baths	2
Basins	3
Syphonic w.c.s	2
Stainless double sink unit	1

analysis

*House at Dorking***Ironmongery**

External doors: cylinder mortice dead locks (suited).

Internal doors: mortice latches (no locks).

Handles: B.M.A. lever type.

Fittings

Kitchen units, radiator shelves, curtain track, etc.

Total of partitions and fittings 3s 9d

FINISHINGS

Floor finishes

Ground floor: living room 1-in. nominal missanda tongued and grooved strip fixed to 1½-in. × 1½-in. treated splayed battens fixed in 1 : 3 screed.

Remainder: 6-in. × 6-in. × ½-in. red quarry tiles on 1 : 3 screed. (Garage, boiler-house, etc., concrete slab finished smooth.)

First floor: 1-in. nominal t & g softwood boarding covered as follows: bathroom and w.c. 3·2-mm. linoleum. Remainder, carpet.

Wall finishes

Generally ½-in. thick two coat plaster emulsion painted.

Panels of facing brickwork each side living room chimney breast.

Some walls papered.

Ceiling finishes

¾-in. single coat plaster on plaster-board (plain to ground floor, aluminium-foil covered to first floor).

Roof finishes

Main pitched roof, Redland "50" Double Roman tiles on battens and felt. Soffits, painted hardboard.

Flat roofs, 3-ply built-up roofing with granite chippings.

Decorations

External: high gloss oils.

Internal: all softwood semi-gloss oils. All hardwood wax polished or phenol lacquer.

All plaster emulsion painted. Some individual walls papered.

Total of finishings 11s 7d

SERVICES

External plumbing

C.i. single stack main soil and waste pipe (in internal duct). C.i. rainwater gutters and down pipes.

Sanitary fittings

Normal domestic lavatory basins and low-level w.c. suites.

Standard Belfast sink and hardwood drainer in Utility.

Coloured porcelain-enamelled double-drainer sink with mixer tap in kitchen. (Cold water off rising main.)

*House at Stevenage***10 Ironmongery**

Anodized aluminium and satin chrome.

Internal door handles, ebonised hardwood knobs on anodised shanks.

9½ Fittings

Built-in cupboard fronts in hall, bathroom and bedrooms.

Hatchway between kitchen and dining room

Total of partitions and fittings 7s 4½d

3 7½ Floor finishes

Type of finish	Area in sq. ft.	Price per sq. yd.
Mahogany wood block	450	37s. 11d.
Grey and black thermoplastic tiles	351	20s.
Cork tile	63	50s. 1½d.
T. & g. boards	307	13s. 6d.
Linoleum	—	—

1 7½ Wall finishes

Plaster and glazed tiles

1 0¼ Ceiling finishes

Plasterboard with skim coat

2 9 Roof finishes

½-in. asphalt covering 2,349 sq. ft.

2 7 Decorations

Architraves, skirtings and other hardwood wax polished, including doors and window linings.

Elsewhere, gloss paint.

Ceilings, washable distemper.

Walls, plastic emulsion.

Staircase wall, wallpaper.

Total of finishings 9s 1½d

1 6¼ External plumbing

None. All r.w.p.s internal in asbestos cement of vitreous enamelled sheet.

1 4¼ Sanitary fittings

Type of fitting	No. of each type
Lavatory basins	6
W.c.s	3
Bath	1 (6 ft.)
Sink	1 stainless steel double bowl.

analysis

House at Rickmansworth

Hot and cold water installation
Copper tubing. Solid fuel boiler.

Heating and ventilation

Fireplace with slow burning fire and back boiler providing convected warm air to living and dining rooms and hot water to radiators in living room, and hall, and hot pipes in linen cupboard.

Gas installation

2 gas poker points.

Electrical installation

Type of point	No. of each type
Ceiling points	15
Wall lights	4
Power points	10
Immersion heater	1
Bells	2

Total of services 8s 5½d

Drainage

One pipe system. Rainwater to soakaways. 4-in. Salt glazed stoneware. 2 inspection chambers.

Other elements

Balcony and flower box with ½-in. wrought iron balustrade and plastic rail as for staircase.

Total per sq. ft. of floor area:

£4,139 (final cost excluding external works)

1,518 sq. ft.

= 54 6½

*House at Reigate***Hot and cold water installation**

Insulated copper cylinder in bathroom with immersion heater.
Under draining board storage heater in utility room also serves kitchen.
Copper services. Electric towel rail.

Heating and ventilation

Underfloor heating, 9.92 kW with 5 thermostats. (Price includes builders' work in laying expanded metal reinforcement over floors, extra screed, etc.)

2

Electrical installation

Type of point	No. of each type
Light	32
Cooker	1
13-amp.	27
(Immersion heater, towel rail and water heaters)	
(Price includes light fittings.)	

Total of services 11s 8½d

Drainage

R.w. to soakaways. Septic tank. 4 manholes. Salt glazed stoneware pipes.

Other elements

Terrace and garden walling, etc.

Total per sq. ft. of floor area:

£7,051 16s. 3½d. (excluding external works)

1,813 sq. ft.

= 77 9½

SUMMARY

Ground floor area: 889 sq. ft.

Total floor area: 1,518 sq. ft.

Type of contract: RIBA (without quantities).

Tender date: September 1956.

Work began: November 1956.

Work finished: July 1957.

Tender price of foundations, superstructure, installations and finishes: £4,010.

Final contract price: £4,139.

Tender price of external works and ancillary buildings: £170.

Final contract price: £211.

Total: £4,450.

Lower floor area: 534.5 sq. ft.

Main floor area, 1,278.5 sq. ft.

Total floor area: 1,813 sq. ft.

Type of contract: RIBA.

Tender date: September 1956.

Work began: November 1956.

Work finished: March 1957.

Tender price of foundations, superstructure, installations and finishes: £7,024.

Final contract price: £7,051 16s. 3½d.

Tender price of external works and ancillary buildings: £900.

Final contract price: £1,100.

Total: £8,151 16s. 3½d.

analysis

*House at Dorking***Cold water installation**

Piping galvanized Class C. 100-gallon tank, galvanized, in insulated boxing.

Heating and hot water installation

Internal temperatures 55 deg. F. when external temperature 32 deg. F. Air change 1-1½. "U" of walls 20. "U" of roof 18.

Heating installation: ground floor, floor heating by ¾-in. welded class C coils embedded in screed, controlled by Leonard Type 4 mixing valve.

Circulating pump. ½-in. fibreboard edge installation 2 ft. wide to ground floor slab. First floor, hospital-type radiators.

Hot water installation: 35g. indirect cylinder in landing cupboard with 3-kW immersion heater for summer.

Electrical installation

Type of point	No of each type
Lighting	24
Power	24
Bell	2
Cooker	1
Immersion heater	1

Wiring: t.r.s. in roof and floor voids, conduit drops in plastered walls. Power 13 amp. ring main system. Switch and socket outlet plates, plastic. Lighting: fluorescent in kitchen and utility, tungsten elsewhere.

Total of services 13s 3d

Drainage

Soil and waste: salt glazed stoneware pipes with No. 2 manholes leading to main sewer. Rainwater: "seconds" pipes leading to soakaways.

Other elements

External balustrades.

Living room fire: modified convector fire with under-floor combustion and convection air. Sunk ashpit emptied through external boiler-house. (Solid fuel bin compartment also filled through external hatch.)

Total per sq. ft. of floor area
£5,259 (excluding external works)

1,774 sq. ft.

*House at Stevenage***1 11½ Hot and cold water installation**

(a) house: solid fuel warm-air heating. Copper piping.

(b) surgery: instantaneous heating, of water, by gas; of space, by electricity.

Internal temps.: 60/65 deg. F.

Air change: 1½-2 per hour.

"U" of walls: 0.2.

"U" of roof: 0.15.

Gas installation

3 points.

3 1½ Electrical installation

Type of point	No. of each type
Light/ceiling	32
Light/wall	10
Power/13 amp.	27
Power/30 amp.	1

Total of services 7s 3d

2 4½ Drainage

(a) surface water. Salt glazed stoneware—seconds

(b) foul. Salt glazed stoneware—ordinary, encased under building.

Other elements

Terrace canopy.

Total per sq. ft. of floor area:
£7,850 (excluding external works)

2,721 sq. ft.

SUMMARY

Ground floor area: 1,041 sq. ft.
Total floor area: 1,774 sq. ft.
Type of contract: RIBA with quantities.
Tender date: December 1954.
Work began: February 1955.
Work finished: September 1955.
Tender price of foundations, superstructure installations and finishes: £5,259.
Tender price of external works: £108
Total £5,367

Ground floor area: 1,855 sq. ft.
Total floor area: 2,721 sq. ft.
Type of contract: RIBA with quantities.
Tender date: September 1954.
Work began: November 1954.
Work finished: December 1955.
Tender price of foundations, superstructure, installations and finishes: £8,688.
Final contract price: £7,850.
Tender price for external works: £762.
Final contract price: £500.
Total £9,450

analysis

COST COMMENTS

It is not easy to make useful direct comparisons in cost between houses so different in character and size. The best one can do is to calculate the actual sums of money spent on certain items to serve as a guide when drawing up one's own schemes.

The fireplace with backboiler and radiators at Rickmansworth is of course the cheapest form of heating (£120) but it is interesting to observe that at Reigate underfloor electric heating only cost £245 to floors twice the area. At Stevenage the total cost of all services £986 against £1,175 at Dorking (two thirds the size) seems remarkably low to include a full heating scheme. That the lighting and power installation was only £100 at Rickmansworth and £366 at Reigate is evidence of the degree of difference which one must expect in meeting a client's demand.

An endeavour to decide what makes Reigate so relatively expensive apart from fittings and equipment, and despite its economic heating scheme leads one to the roof. At Rickmansworth and Dorking the roof structural work and coverings amount to £411 and £399 respectively. At Reigate, however, this is £1,140 although the house is only a little larger.

Having regard to the total price, the price per foot super and accommodation provided, the figures suggest that the house at Stevenage is the most economical.

CONTRACTORS

HOUSE AT SARRATT LANE, RICKMANSWORTH: *General contractor:* Abbiss & Hale Ltd. *Sub-contractors:* *Roof tiling:* A. H. Herbert Ltd. *Wood block and strip floors:* Stevens and Adams Ltd. *Electrical installation:* A. Thompson & Son Ltd. *Handrail:* Marley Tile Co. Ltd.

HOUSE AT REIGATE HEATH: *General contractors:* House & Tester. *Sub-contractors:* *Drive:* Mechanised Gardening Ltd. *Roof shingles:* W. H. Colt & Son Ltd. *Slate sills:* Broughton Moor Green Slate Quarries Ltd. *Steel windows:* James Couper & Co. Ltd. *Door frames:* Henry Hope & Sons Ltd. *Electrical installation:* P. J. Brown. *Floor heating:* Panelec Ltd. *Joinery:* James Glanville Ltd. and Jayanbee Joinery Ltd. *Flooring:* Decorative Floors Ltd. *Ironmongery:* Alfred Roberts Ltd.

HOUSE AT ROMAN ROAD, DORKING: *General contractor:* R. E. Stephens. *Sub-contractors:* *Heating installation:* Barrett & Wright. *Electrical installation:* D. G. S. Hendry. *Roofing:* (pitched) Redland Tiles; (flat) Neuchatel Asphalt Co. *Hardwood flooring:* Horsley Smith.

HOUSE AT BROADWATER CRESCENT, STEVENAGE: *General contractor:* Tersons Ltd. *Sub-contractors:* *Central heating:* Radiation Whole House Warming. *Asphalt roofing:* Ragusa Asphalt Ltd. *Floor tiles:* Marley Tiles Ltd. *Cork stair treads:* Rowan and Bowden Ltd. *Woodblock flooring:* Hollis Bros. Ltd. *Linoleum:* Bowman Bros. Ltd. *Sanitary fittings:* Shanks & Adamsez Ltd. *Plumbing:* Thomas Talbot Ltd. *Insulation boards:* Stramit Boards Ltd. *Sliding windows:* P. G. Allday Ltd. *Rainwater goods:* Vitraflex Ltd. *Ironmongery:* Gibbons, Alfred Roberts. *Doors and kitchen fittings:* Jayanbee Joinery Ltd. *Other joinery:* Rippers Ltd.



North elevation of the house at Rickmansworth.



Entrance hall of the house at Reigate.



Kitchen of the house at Dorking.



The pergola of the house at Stevenage.

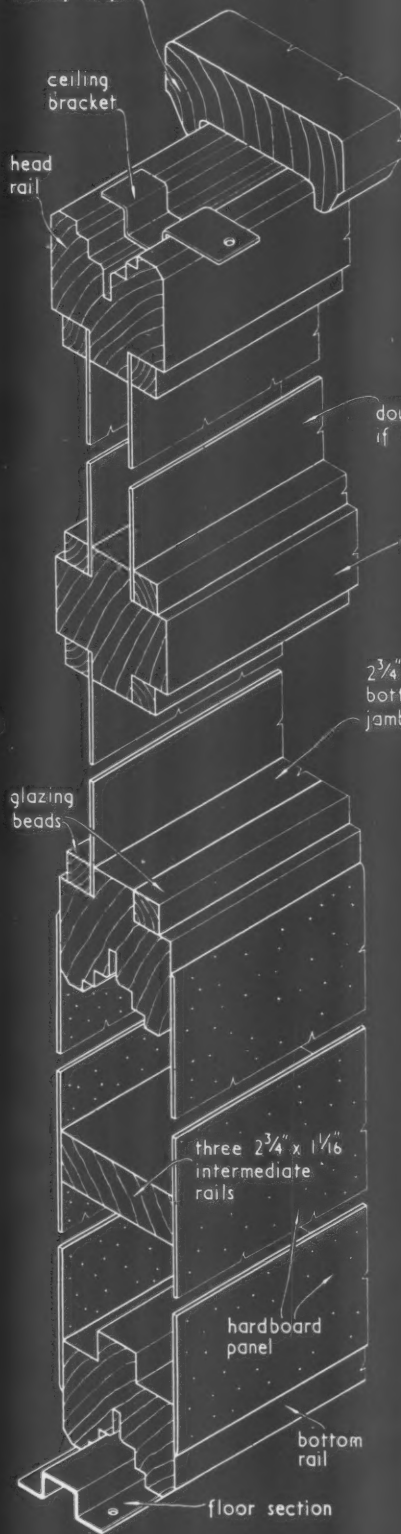


PARTITIONS | TIMBER-FRAMED | BUILDING BOARD

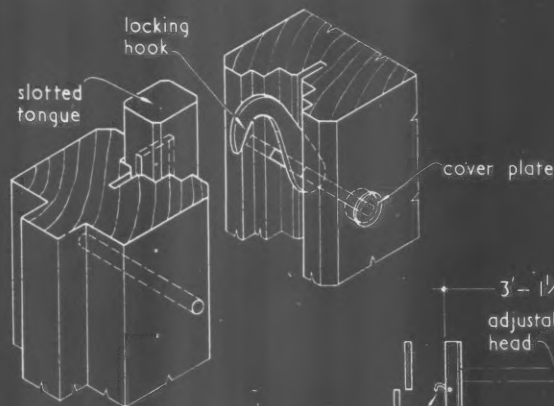
The Architects' Journal Library of Information Sheets 677. Editor: Cotterell Butler, A.R.I.B.A.

21.E4
21.E4

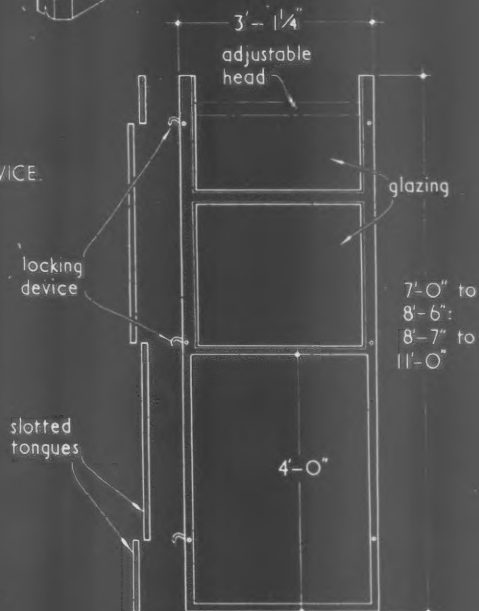
capping for use where top of partition is below ceiling height



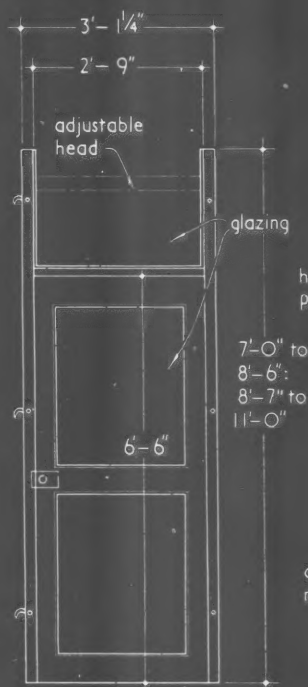
SECTION THROUGH STANDARD UNIT



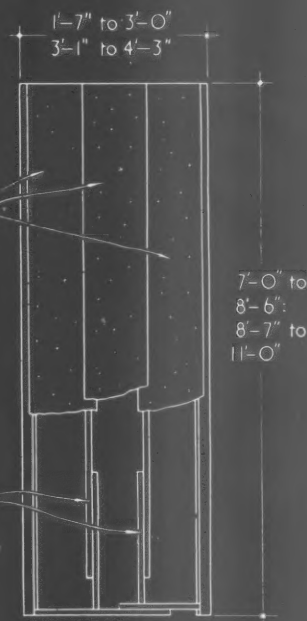
DETAIL OF LOCKING DEVICE



standard unit



standard door unit



telescopic unit

STANDARD PARTITION UNITS

21.E4 · GRANGEWOOD · UNIT PARTITIONING

This Sheet describes Grangewood timber-framed unit partitioning which is simply and speedily erected and dismantled and can, within limits, be varied in height and width to suit site conditions.

Principle

The partitioning consists of standard units and door units of which each available size permits a height variation between the limits shown on the face of the Sheet (runs in excess of 150 ft. can be specially made to any height). The partitioning is therefore easily adapted to fit under beams or accommodate varying ceiling heights. Corresponding telescopic units are also obtainable, variable in width as well as height, for filling in where necessary. The base fixing consists of a metal section which is screwed to the floor, the bottom rail of the partitioning being grooved to slide over it. Each standard unit requires a single fixing bracket only at ceiling height. Concealed patent locking devices of the trigger type, three to each unit, link the partitioning together; they are operated by a removable key. Provision for electric wiring is made in the standard units.

Construction

Standard unit: The construction of the standard unit is shown in the isometric section on the face of the Sheet. The timber framing has a double skin of $\frac{1}{2}$ -in. hardboard, with bevelled edges, to a height of 4 ft. 0 in. from the floor. The upper part provides for two or three glazed panels (according to height). Glazing beads are included on both sides of the unit, as shown, to allow for double-glazing if desired; the glass rebate is $\frac{1}{4}$ in. high by $\frac{1}{8}$ in. deep. Units are supplied with obscure glass for single glazing cut to size to suit the particular ceiling height.

Units are joined by the patent locking device shown in the detail on the face of the Sheet. The spindle of the locking hook is countersunk in the jamb and cover plates are provided. Three locks are provided to each unit. Timber tongues, equal in length to the centres of the locking devices and slotted at the ends to allow the locking arm to pass, are positioned in the grooved jambs.

Door unit: The framing of the door unit is similar to that of the standard unit. A 6 ft. 6 in. by 2 ft. 9 in. half-glazed door is supplied, hinged for hanging to either jamb to open either way. Lock and handles are supplied. Provision is made for one or two glass panels over the door (according to height of partition).

Telescopic unit: The ends of internal members of the telescopic unit are grooved and jointed with a loose tongue, so that they can be extended to any size up to the maximum.

Junction post: A member of 2½-in. square section is available for filling in the angle between units at corners, and for use as a junction post at three- and four-way intersections.

Floor fixing section: This is a 2½ in. by ½ in. by 16 s.w.g. rolled steel section. The flanges are provided with countersunk holes at 2 ft. 3 in. centres for screwing to the floor.

Ceiling bracket: This is of 2½ in. by ½ in. by 16 s.w.g. metal section and 1 in. wide with a countersunk hole in the longer flange as shown in the drawing on the face of the Sheet.

Sizes and weights

The partitioning can vary in height from 7 ft. 0 in. to 11 ft. 0 in. It has an overall thickness of 3 in. and weighs 2 lb. 14 oz. per sq. ft.

Fixing

The floor fixing section is screwed to the floor and the partition adjusted for height: the top rail of each partition unit can be moved down to the required height and the surplus length sawn off the side members. One ceiling bracket is required for each unit and the top rail can be raised to butt the ceiling and engage with the bracket before being pinned to the side members. Electric wiring may be run in the grooved head and bottom rails and between the jambs where a groove is provided for the purpose.

Thermal and Sound Insulation

The units may be double-glazed if required. The flush lower panel can be supplied with an infilling of glass fibres or mineral wool and flush doors can be similarly supplied. To isolate the partitioning from the main structure a packing of hair felt can be inserted at floor, ceiling and wall junctions.

Finish

The units are supplied "in the white" ready for decoration on the site.

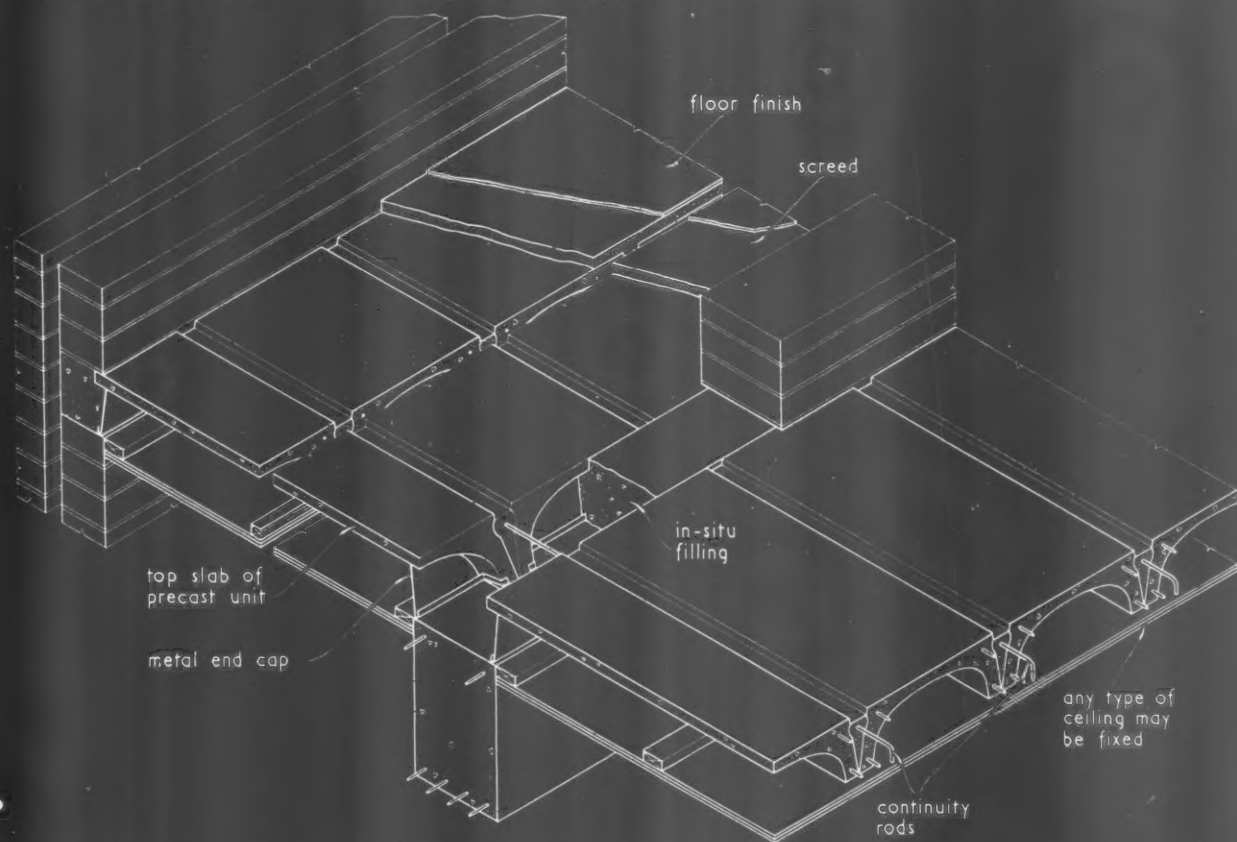
Further Information

The manufacturer can give a quotation for a complete scheme where the purchaser is to carry out erection or, alternatively, where the Grangewood Partition Service is to erect the partitioning and carry out all glazing, door-hanging, fitting of latches and decoration.

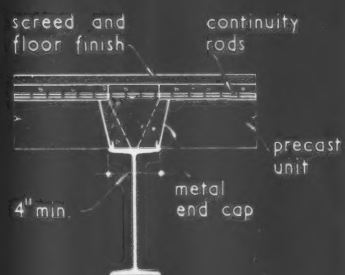
Compiled from information supplied by:

Grangewood Partitions.

Address: 2, Abbots Road, London, E.6.
Telephone: Grangewood 3444-9.

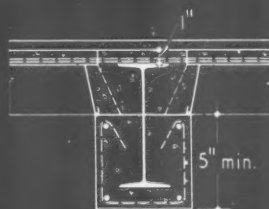


ISOMETRIC VIEW OF FLOOR WITH TYPICAL BEARINGS.

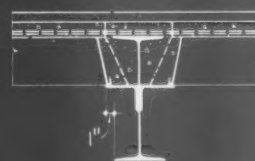


open r.s.j.

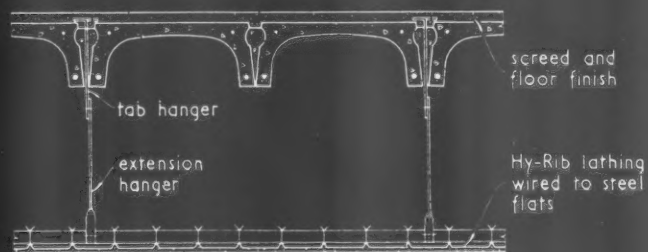
TYPICAL BEARINGS ON STEELWORK.



cased r.s.j.

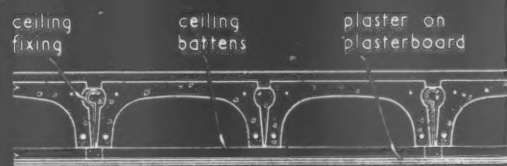


r.s.j. with shelf angles



suspended ceiling

TYPICAL CEILING DETAILS.



plasterboard ceiling

20.D4 · TRUSCON · PRECAST CONCRETE FLOOR TYPE 1

This Sheet describes the construction of floors and roofs using Truscon Type 1 precast reinforced concrete units. The drawings on the face show the design of the units and typical bearings and ceiling treatments. Prestressed units (Truscon Type 3) are also available up to 40 ft. 0 in. in length: these are dealt with on Sheet 20.D5.

Construction

The units are purpose-made to suit individual span and load requirements (see *Sizes*). They are easily erected without the use of close-boarded shuttering and supports. The isometric drawing on the face of the Sheet shows the placing of the metal end-caps, which are supplied, and the grouting of the vee joints. It also shows the solid end bearings and the continuity rods which are placed in the vee joints across intermediate supports.

The soffits of the units may be left unceiled, but if a ceiling is required electric conduit and other services can be concealed in the troughs.

Sizes

The units are available in lengths up to 21 ft. 6 in. and depths from 5 in. to 9½ in. The standard overall width is approximately 1 ft. 4½ in., varying by fractions of an inch according to depth. Three-quarter width units are available for filling in.

Loading

The table below gives maximum spans and suitable unit depths for various superimposed loadings in lb./sq. ft. In every case, an additional 20 lb. per sq. ft. has been allowed for finishes. The top slab of the concrete units is usually 1½ in. for loadings up to 150 lb./sq. ft. and 2 in. for loadings over 150 lb./sq. ft.

Depth of units (in.)	Maximum span (ft. and in.) for loading:		Depths of units (in.)	Maximum span (ft. and in.) for loading:	
	up to 80 lb./sq. ft.	up to 100 lb./sq. ft.		up to 150 lb./sq. ft.	up to 200 lb./sq. ft.
5	11 0	10 10	5½	11 2	10 0
6	13 0	13 0	6½	12 10	11 7
7	15 0	14 6	7½	13 11	12 7
8	16 6	16 4	8½	14 10	13 4
9	18 6	17 4	9½	15 8	14 2

Fire Resistance

A number of typical Truscon floor constructions have been tested by the J.F.R.O. and the following table summarises the fire resistance gradings which can be offered for Type 1.

Fire resistance grading	Details of Truscon precast floor construction			Minimum thickness of solid concrete floor required by Model Byelaws
	Ceiling	Thickness of concrete		
		at crown of unit	screed	
1 hr.	none	2 in.	1 in.	4 in.
	½ in. fibreboard, painted	1½ in.	1½ in.	
2 hr.*	plasterboard, plastered two coats	1½ in.	1 in.*	5 in.
4 hr.	Hy-Rib, plastered three coats	1½ in.	¾ in.	6 in.

* Estimated figures, approved by J.F.R.O., based upon a test construction with a ½-in. screed, which qualified for 1 hr. grading.

Further Information

The manufacturer maintains a technical advisory department available to answer questions and to supply preliminary and detailed drawings. Units can be delivered to the site or the nearest goods station. If required the manufacturer will undertake the fixing of units and the site work.

Compiled from information supplied by:

The Trussed Concrete Steel Co. Ltd.

Head Office: Truscon House, 35-41, Lower Marsh, London, S.E.1.

Telephone: Waterloo 6922.

Birmingham Office: 133, Edmund Street, Birmingham 3.

Telephone: Central 2345/6.

Bristol Office: Royal London Buildings, Baldwin Street, Bristol 1.

Telephone: Bristol 21861.

Glasgow Office: 10, India Street, Glasgow C.2.

Telephone: Central 0157/8.

Liverpool Office: 3, Tithebarn Street, Liverpool 3.

Telephone: Central 5281/2.

Manchester Office: 50, Seymour Grove, Old Trafford, Manchester 16.

Telephone: Trafford Park 2766.

York Office: 56, Shipton Road, York.

Telephone: York 24594.

Factories (producing precast units): London, Birmingham, Manchester and Edinburgh.

Copyright Reserved.

The Architects' Journal Library of Information Sheets.

Editor: Cotterell Butler, A.R.I.B.A.

working detail

WALLS AND PARTITIONS: 63

WALL: GYMNASIUM IN GENEVA

P. Waltenspühl, architect (material supplied by Dariush Borbor)

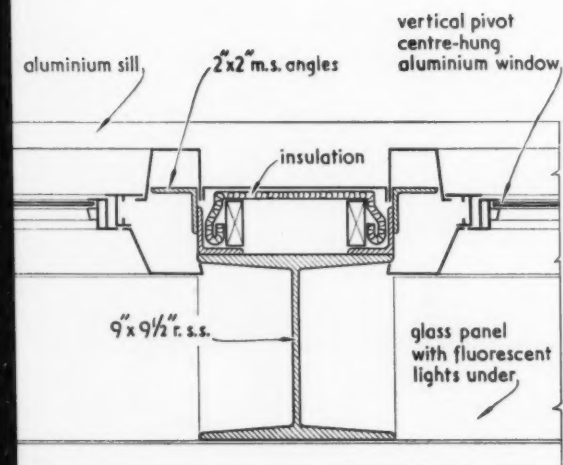
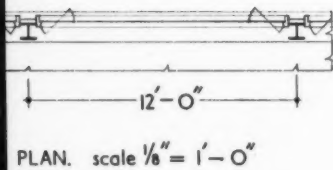
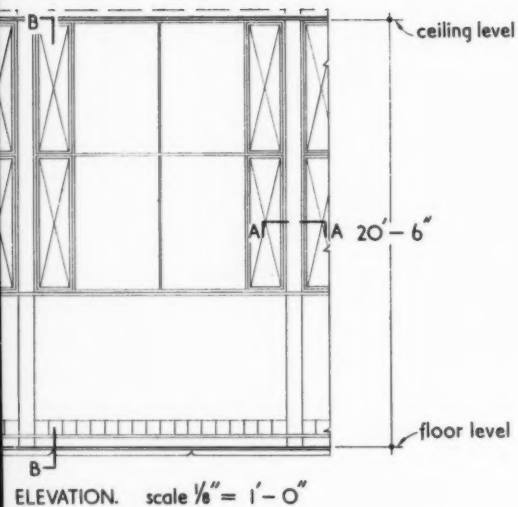


This wall incorporates a bank of lights beneath the internal sill and another concealed in a trough recessed in the ceiling at the window head. Note also the line of glass bricks to give daylight illumination at skirting level and the neat aluminium trim.

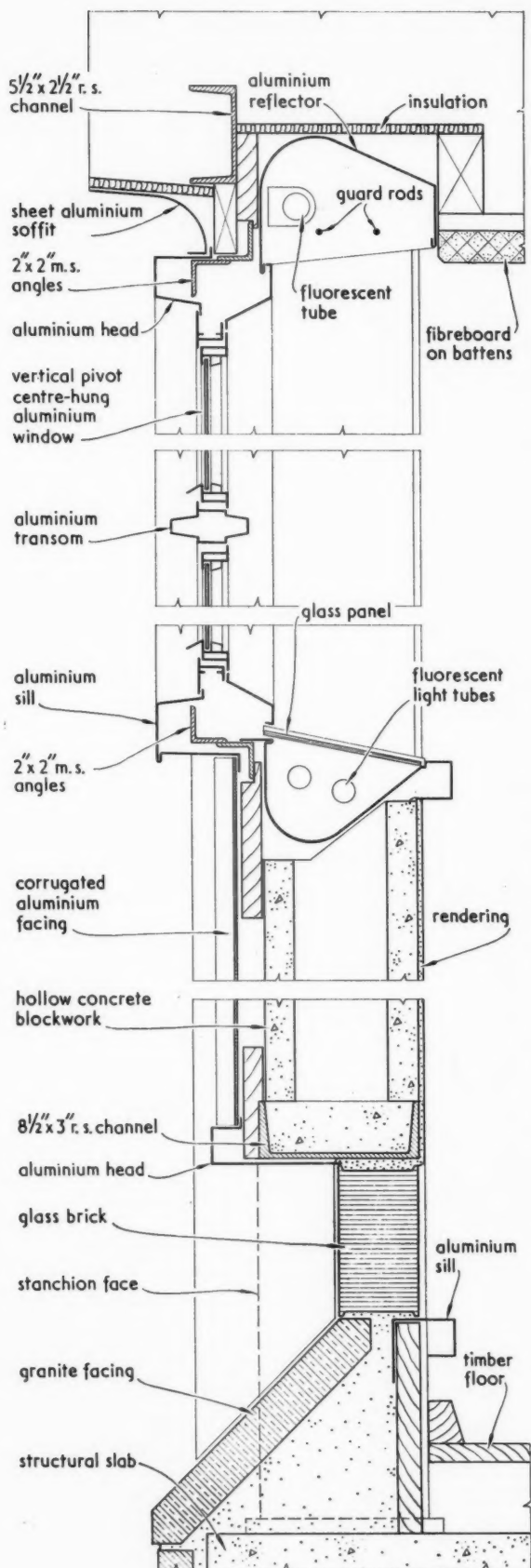
working detail

WALL: GYMNASIUM IN GENEVA

P. Waltenspühl, architect (material supplied by Dariush Borbor)

PLAN AT A-A. scale $\frac{1}{8}$ full size

WALLS AND PARTITIONS: 63



SECTION B-B.

note: figured dimensions in feet and inches are approximate



STEEL

and the modern single-storey factory

Above is shown the steel framework of a factory for Brook Motors Ltd., Barnsley.

Architect : Noel Heppenstall Esq., L.R.I.B.A., Huddersfield.

Below, steelwork for another single-storey factory, for Morphy-Richards Ltd.

*Architects : Messrs. Llewellyn Smith & Walters, FF/R.I.B.A.
Consulting Engineers : Messrs. Andrews, Kent & Stone.*

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION

B.C.S.A

Artillery House, Artillery Row,
Westminster, London, S.W.1



WALLS OF LIGHT AND . . .

*Light
diffusion*

The important diffusion properties of 'INSULIGHT' Hollow Glass Blocks mean that part of the light is directed upwards. The result is that more direct light, as well as reflected light from the ceiling, is received at points furthest from the daylight source. The diffusion of light also helps to cut down sun or sky glare.

'INSULIGHT' Hollow Glass Blocks make possible light-transmitting walls and roofs without the disadvantages of lost heat and invasion of noise. They provide in one element good light transmission with outstanding diffusion, resistance to fire, insulation against sound as well as reduction of heat losses and incoming solar heat. With their maintenance-free and weather-proof surfaces, 'INSULIGHT' Hollow Glass Blocks are the ideal material for non-load-bearing panel walls.

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

"INSULIGHT"[®]
*Hollow
Glass Blocks*

A UNIQUE MULTI-FUNCTIONAL MATERIAL

*For further information
write to the manufacturers*

**Pilkington
Brothers
Limited**

ST. HELENS · LANCs



on
papers

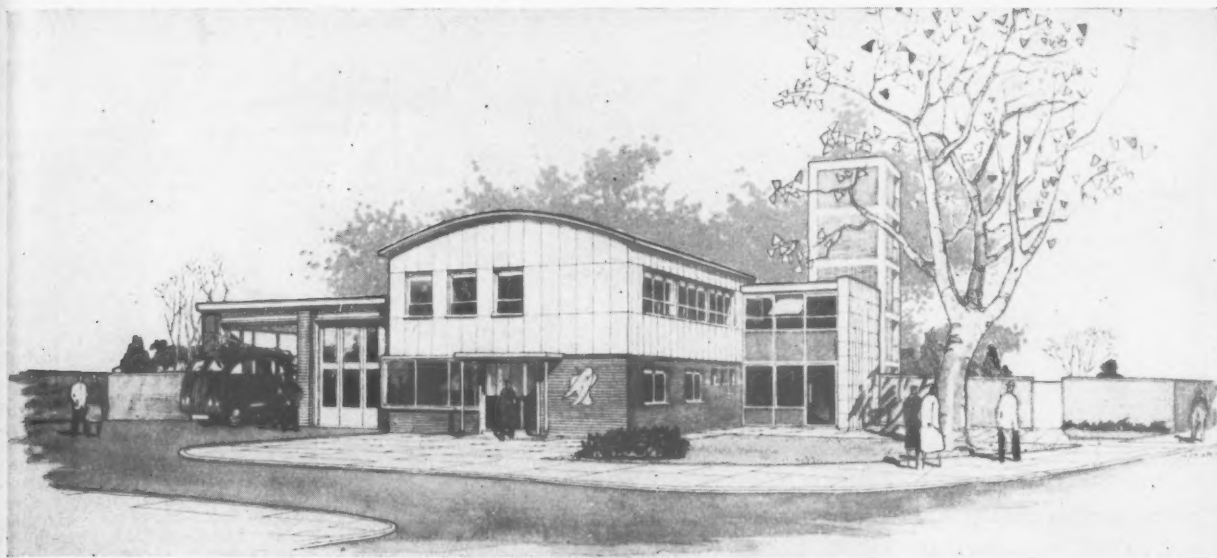
rs



F

B
co
on
to
C
S
R

FIRE STATION AT NORTHFIELD, BIRMINGHAM



Birmingham's second new District Fire Station is now under construction, at Northfield, south-west of the City centre, on a one-acre site, on a site with a cross-fall of some 8 ft. from north-east to south-west, and is on made-up ground. The building, designed by City architect A. G. Sheppard Fidler (deputy architect J. R. Sheridan-Shedden, principal architect John Watson, group leader Russell Tippetts, and assistant architects John Denby and Harry

Lees) will occupy the north corner of the site, with combined hose drying and drill tower attached to its southern wall and behind it the concrete aprons for the vehicles, hose washing strip, cycle sheds and paved drill yard. A novel feature is that the staff dormitory is on the ground floor, and all parts of the building have easy escape access by way of an open terrace to the staircase adjoining the drill tower.



CONJURING WITH SPACE!

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

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

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

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

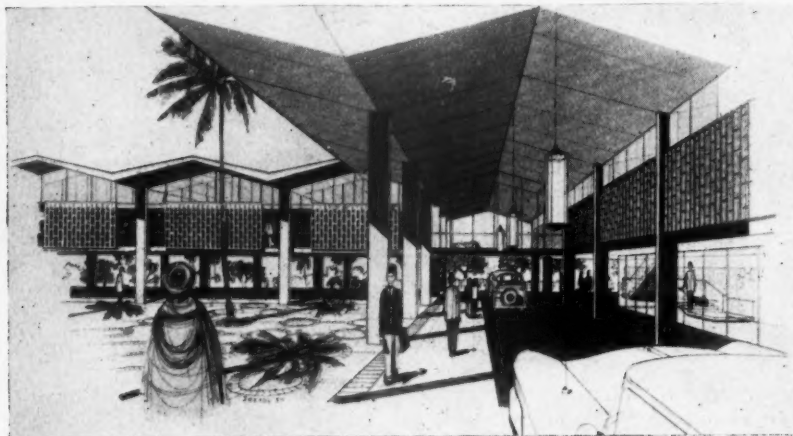
THE

ESAVIAN

PRINCIPLE

FOR FOLDING AND SLIDING DOORS, WINDOWS, PARTITIONS AND SCREENS

AMERICAN EMBASSY IN MOROCCO



The new American Embassy in Morocco was designed by Ketchum, Gina and Sharp after making an on-the-spot study of Moroccan customs, local building materials and construction techniques, and the resulting design has an attractive air of accessibility and fitting into the scene. Shown above is the main entrance with its two-storey archway and, beyond the palm-grove patio, a refreshing view across the city to the Atlantic. The offices for the embassy and consulate share a four-acre site with the ambassador's residence, the two buildings being linked by a bridge at the second floor. Both buildings will be two storeys high, domestic in scale and light in colour, and each is designed around interior patios and pools open to the sky in the Moroccan tradition.

Announcements

PROFESSIONAL

J. V. Spencer, A.R.I.B.A., has now commenced practice at 171, Albert Road, Middlesbrough.

Felix Walter, F.R.I.B.A., has opened an office in London at 4, Raymond Buildings, Gray's Inn, W.C.1 (Holborn 0535). Trade literature will be welcomed here as well as at his Suffolk office at 10, Neale Street, Ipswich (Ipswich 51321).

TRADE

Denis Kinnell, Sales Manager of Dorman & Smith Limited and D. S. Plugs Limited of Manchester and London, has been appointed to the Board of Directors of both companies.

The General Manager of the British Divisions of the Yale & Towne Manufacturing Company, Willenhall and Wednesfield, H. Gilbert Ramsell, has appointed John O. Sewell Assistant General Manager of the British Lock and Hardware Division and British Materials Handling Division. Mr. Sewell will also retain his title of Comptroller.

Leaderflush (Doors) Ltd. have appointed Messrs. George Gordon & Co. Ltd., Aberdeen Saw Mills, Aberdeen (telephone 20255), to act as sole distributors of Leaderflush doors for Kincardine, Aberdeen, Bannf, and the north of Scotland.

Correction

In our issue of June 5 (page 855) it was stated that the lighting fittings of Frederick Thomas & Co. Ltd. were imported. This is incorrect as they design and manufacture their own.

Clear headroom to apex . . .

MANY FLEXIBLE SIZES . . . EXTENDIBLE IN WIDTH AND LENGTH

If you want to enclose space, Marley 'G' Type Buildings provide a rapid, economical and effective answer.

A range of standard sizes, up to 50ft. (or more), is available in single or multiple clear spans of great strength. Bays can be left open where covered storage only is required or

infilled for totally enclosed buildings. We install foundations, erect and roof, leaving the local contractor to handle the normal building work.

There is a Marley Concrete Building for almost every purpose.



LOW IN FIRST COST · SUPPLIED AND ERECTED BY EXPERTS · SUPERB MODERN LINES
GREAT STRENGTH · HIGH FIRE RESISTANCE · RUST AND ROT PROOF · LOW MAINTENANCE

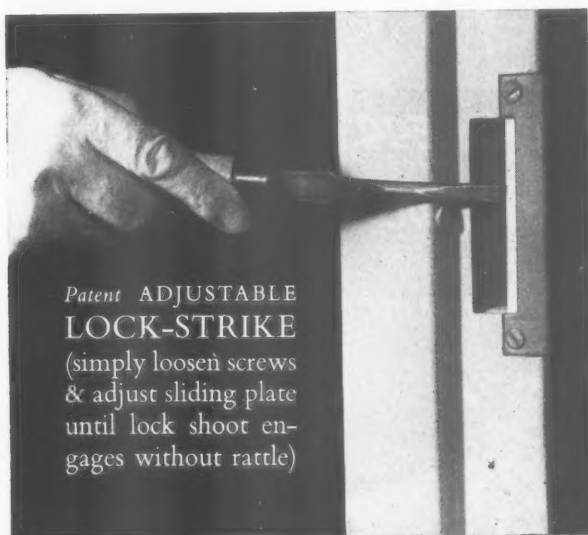
Please write to your NEAREST branch for comprehensive details or for a Technical Representative to call by appointment or visit our showgrounds at

MARLEY CONCRETE LIMITED Dept. AZ.2

PEASMARSH, GUILDFORD, SURREY.
S. OCKENDON, NR. ROMFORD, ESSEX.
SHURDINGTON, NR. CHELTENHAM.
WATERLOO, POOLE, DORSET.

Guildford 62986/7
S. Ockendon 2201
Shurdington 334/5
Broadstone 626

HOPE'S steel DOOR FRAMES



Patent ADJUSTABLE
LOCK-STRIKE
(simply loosen screws
& adjust sliding plate
until lock shoot en-
gages without rattle)

A first-class engineering
job specially designed for
the building trade

now available in 18g. steel at reduced prices

HENRY HOPE & SONS LTD

of Smethwick, Birmingham, have been making Steel Door Frames for 20 years

London Office : 17 BERNERS STREET, W.1

MEMBER OF THE METAL  WINDOW ASSOCIATION

There is no other Flooring

EQUAL TO

SURFEX

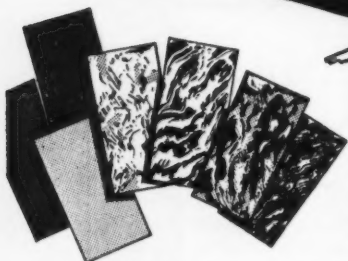
**TOUGH and
HARDWEARING**



**SEAMLESS
and
HYGIENIC**



EASY TO LAY



CHOICE OF PATTERNS AND
COLOURS
GOES DOWN ONTO ANY
FIRM SURFACE
Wood, Parquet, Concrete,
Flagstones etc.

**INEXPENSIVE • EASILY CLEANED • NON DUSTING
FIREPROOF • IMPERVIOUS TO GREASE, OIL ETC.
LASTS A LIFETIME**

INDUSTRIAL VINYL
surfex
JOINTLESS FLOORING

THE FLOORING THAT SMILES
AT **HARD WEAR**

Can be laid by your own staff or we will supply and lay.
Write NOW to the:

SURFEX FLOORING CO. LTD.

Dept. "D"

48, HIGH STREET, CAMBERLEY, SURREY
Telephone: CAMBERLEY 2263



Send also for details of -

SURFEX-SURODUR - Heavy Industrial Flooring
COLORAZZO - Super finish—hygienic
POLYFLEX-POLYVINYL - The original domestic
flooring with super veined finish

SURFEX have the perfect answer to every flooring problem



...when it's
time
to plan
your electrical
installations...

BICC

TECHNICAL ADVISORY SERVICE

through all Branch Offices

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



Valley Gardens Flats, Kirkcaldy

Discerning architects specify "Panelec" (rewirable) floor warming!

Why? In the first place Panelec, which is fully automatic, is the most efficient electric floor warming system available. Secondly the heating cables can be replaced, should this be necessary, at any time during the life of your building—which may be in use for a century or more. Finally, Panelec cuts costs. Building becomes simpler. Boiler rooms, fuel storage space and chimney stacks are eliminated. And installation costs are invariably less than for any known alternative of equal duty.

For further information write for our publication PAN A/657. You can also discuss the system with the Panelec Technical Advisory Service; the engineers will be glad to advise you.

REGISTERED

"Panelec" *for warmth
& comfort
throughout*

TRADE MARK

PANELEC (GREAT BRITAIN) LTD.
21 Bloomsbury Street, London, W.C.1
Tel: Langham 4234 Telegrams: Murelec, Westcent, London

shed a new light with **BULKHEADS** of better design

Essentially for the Architect who wishes to specify bulkhead fittings which are different from the usual type.

Here is a range to meet this requirement.

These fittings are of good design, robust construction and especially suitable for modern buildings.

Surface Type

HA 478



Surface or
Semi-Recessed Type

HA 472



Recessed Type

HA 479

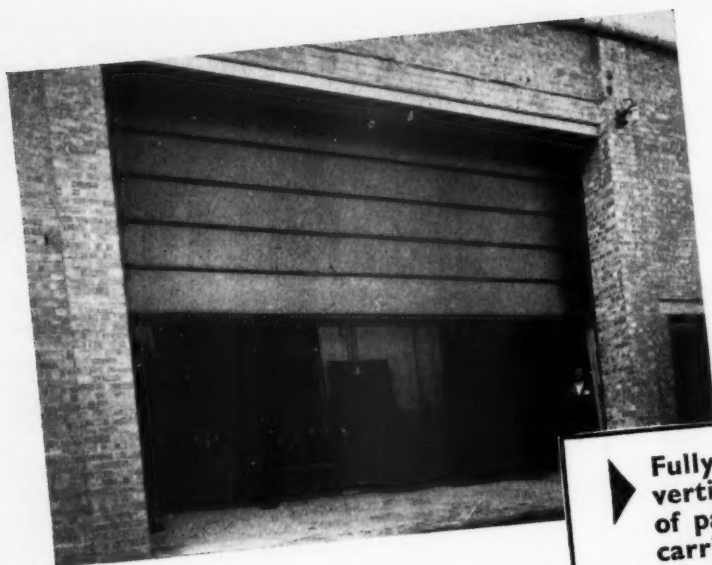


Full particulars will be sent on request

Hume Atkins & Co. Ltd.

66, Victoria Street, London, S.W.1.
Telephone: VICTORIA 0161
Works: Letchworth, Herts.

HA



**The
WELPAK
OVERHEAD DOOR**
*the modern replacement
for the Roller Shutter.*

These doors are the ideal answer for larger openings up to 24ft. wide and 18ft. high and are suitable either for hand or electrical operation.

For full particulars write to

WESTLAND ENGINEERS LTD., YEOVIL, SOMERSET.

Telephone No. Yeovil 1109

- ▶ Fully counterbalanced panels lift vertically, no rolling, no chipping of paintwork, no hinges, no weight carried by door lintel.
- ▶ Strong light alloy extrusion and 14 gauge light alloy panels give completely rigid construction.
- ▶ Interlocking panels ensure weather proof joints.

DANKS

OF NETHERTON LIMITED

BOILERMAKERS AND ENGINEERS SINCE 1840

We fabricate TANKS, CHIMNEYS, CHEMICAL & DISTILLATION PLANT in MILD, STAINLESS & CLAD STEELS.

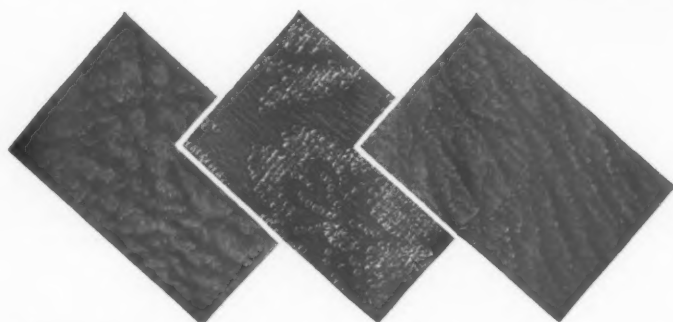
Our large Fabrication Department is fully equipped with the necessary Radiographic, Physical Inspection and Testing facilities for the manufacture of all types of Pressure Vessels required to meet the needs of the OIL & CHEMICAL ENGINEERING INDUSTRY, including vessels to Lloyds' Class I requirements.

DANKS OF NETHERTON LIMITED. P.O. BOX 22, NETHERTON, DUDLEY, WORCS.
TELEPHONE: CRADLEY HEATH 66417.
LONDON OFFICE: BANK CHAMBERS, 329 HIGH HOLBORN, W.C.1. TELEPHONE: HOLBORN 2065 & 1240.

Vicrtex

Rich gay colours and fascinating textures that go right down deep—that's the beauty of Vicrtex. And, Vicrtex is practically indestructible—it won't scuff, fray, peel or crack, is fire resistant and can be draped, pleated or folded. It's a wonderful upholstery medium.

There is a range of textures and colours—write for details now!



ZAPIDE

The new Zapide range of leathercloths combine a wide range of rich colours with a variety of distinctive grains. Zapide is easy and economical to work and has excellent wearing properties. Samples and prices will be forwarded to you immediately we receive your request.



IOCO LIMITED

Anniesland, Glasgow, W.3. Telephone : Scotstoun 5501-6



FUEL STORAGE

The problem which has a perfect answer!

Used by leading authorities in London and throughout the Country Ideal for houses and flats

FUEL STORAGE UNITS BY

LOGICOL
PATENTED



Write for illustrated folder and full details to:-

Telephone :
HUDDERSFIELD 174/4174

LOGICOL FUEL STORAGE UNITS · TAVU WORKS · WATERLOO · HUDDERSFIELD

The annual post free subscription rate payable in advance is £3.5.0 sterling; in U.S.A. and Canada \$10.50; elsewhere abroad £3.10.0.

21

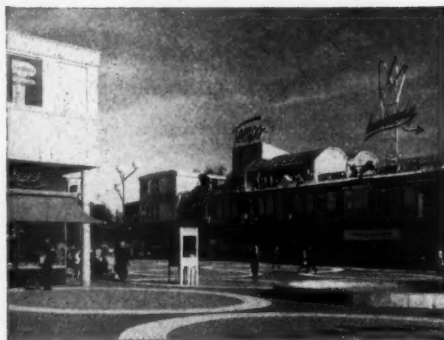
Please send me the ARCHITECTURAL REVIEW until further notice:
name _____
address _____

THE ARCHITECTURAL REVIEW
9-13 Queen Anne's Gate, Westminster, S.W.1.
Whitehall 0611

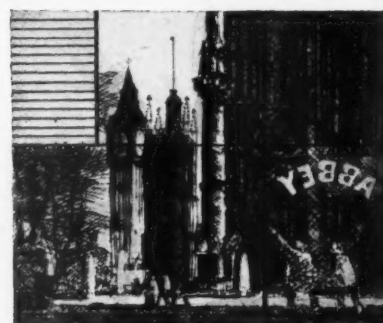
The Architectural Review's new standard binding, with alternate years bound in black and white, and alternate volumes initialled A and R, makes easier the identification of individual volumes, and their proper replacement on the shelf. The binding is buckram, and the price of binding per volume is 25s. Copies to be bound should be addressed, with the appropriate index, direct to the Architectural Press warehouse, Abbey House, 3, Victoria Street, London, S.W.1.



JUNE



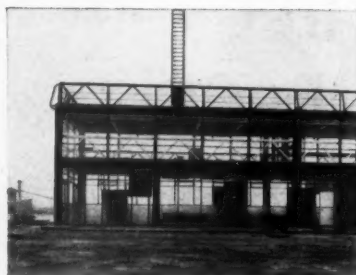
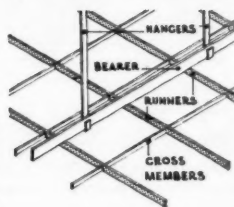
Town Centre of Vallingby, above, and the market place of Harlow New Town, right; contrasts in animation from *Hubs Without Wheels*, a survey of two important new town centres.



Building development in Victoria Street near the Abbey, touch off again the future of Westminster Precinct. This inflade of the spires of Westminster highlights Gordon Cullen's proposals in *Westminster Revisited*.

JULY

Right: overhead nomenclature; the designations of the parts of suspended ceilings, from the first of a number of articles on this new entrant in the field of prefabricated building elements. Below: Glass Cages at Gatwick; some of the new buildings at Gatwick airport are almost brutalistically solid, others are transparent glass and steel structures, all will be fully described in a special feature.

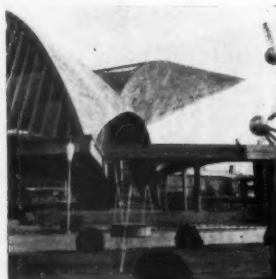


Below: Theatre in Coventry; a view across the auditorium of the newly-opened Belgrade Theatre. The interior of the National Film Theatre will also be given the full treatment in this issue.

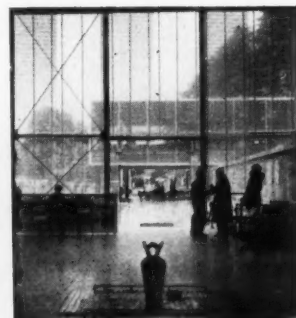
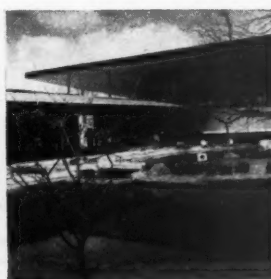


AUGUST Special Issue The Brussels Exhibition

Neotechnic dinosaur; the gigantic equilibrated structure designed by van Doosselaere and Paduart to celebrate the triumphs of civil engineering.



Japanese Garden; trees, water, sculptured objects and symbolic rocks in the traditional-modern garden adjoining Mayekawa's Japanese pavilion.



Turkish Delight; structure, space, light, air and traditional crafts combined in the pavilion by Izgi, Sensoy and Turegun.



'SUNUMINIUM' Flexible Venetian Blinds

Exceptionally robust blinds featuring an unusually rugged yet simple raising and tilting mechanism enclosed in an all-metal head. Now available with Carr's woven ladder webs and cords in wonderful new "TERYLENE" (an I.C.I. Product) or French's cotton or Plastic-coated ladder webs. The most inexpensive blind of its kind made.

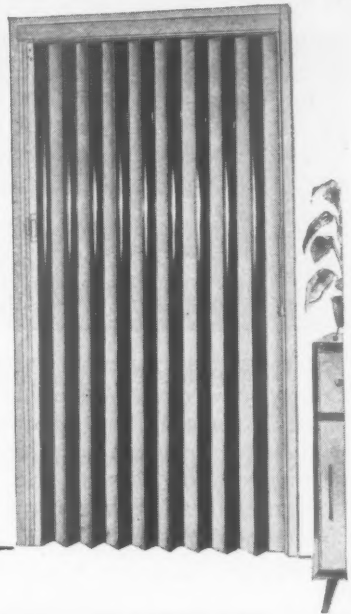
Also the ever reliable 'Accommodator' outside blind. Made from specially impregnated cotton duck in a wonderful range of colours.

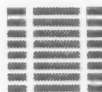
ALL BRITISH DESIGN—BRITISH MATERIALS—BRITISH LABOUR

The New 'GIRLING' Venetian Doors

Right up to the minute are the new Avery venetian doors—a wonderful idea which fits perfectly into modern interior schemes.

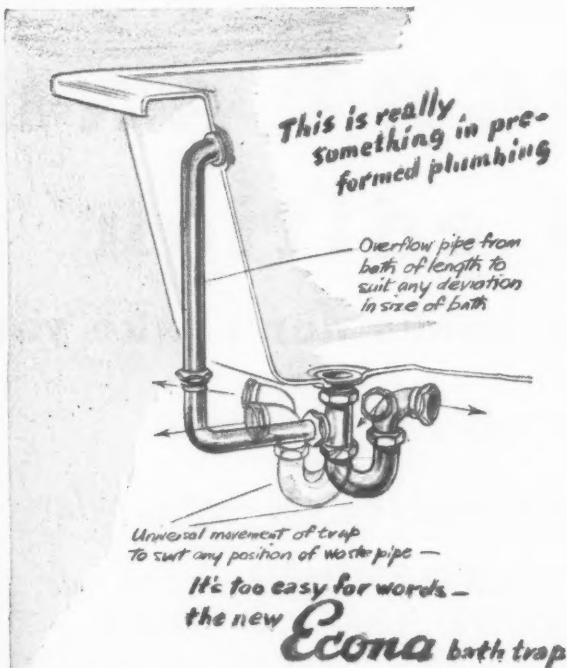
The door is extremely light in operation and can be supplied to fit any size opening. Single or centre dividing. Wide range of colours with different colours each side if required. Please write for leaflet.



Avery  **MASTERS OF
VENETIAN
TECHNIQUES**

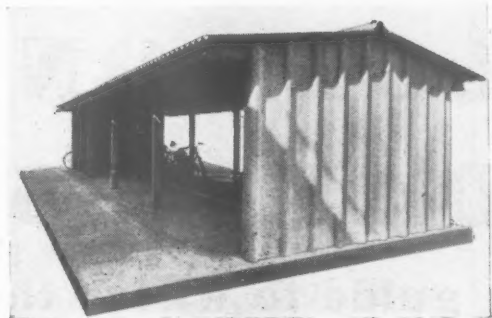
J. AVERY & CO. (Est. 1834) LTD.
81 Great Portland Street, London, W.1.
and Bournemouth.

Agents in MANCHESTER, BIRMINGHAM, GLASGOW AND ABERDEEN.



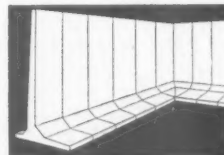
If you would like to know more—
ECONA MODERN PRODUCTS LTD Can help you—
AQUA WORKS • HIGHLANDS RD. • SHIRLEY • SOLIHULL • WARWICK • Tel-Solihull 3078

THE CONQUEST OF SPACE



MARLEY CYCLE SHEDS AND CYCLE BLOCKS offer an excellent solution to the joint problems of space and bicycle parking. With a pleasant modern appearance, they are quickly erected by unskilled labour to provide permanent protection at the lowest possible cost. They can easily be adapted for use as Covered Ways.

Full details will gladly be provided on request to your nearest branch. Also, please write for details of Marley Concrete Buildings (spans 8ft. to 50ft.), Storage Walls and Garages.



MARLEY STORAGE WALLS

For bulk storage of coke, gravel etc., Marley Storage Walls will more than treble the space available from every foot of ground area.

Write for leaflet M.C.9.

MARLEY CONCRETE LTD, Dept. W.F.2.

VISIT OUR SHOWGROUNDS AT
PEASMARSH, GUILDFORD, SURREY.
S. OCKENDON, NR. ROMFORD, ESSEX.
SHURDINGTON, NR. CHELTENHAM.
WATERLOO, POOLE, DORSET.

Guildford 62986/7
S. Ockendon 2201
Shurdington 334/5
Broadstone 626

NORTONIA

NON-MAGNESITE

a guaranteed product

A SYNTHETIC WOOD BLOCK toughened to give a durable surface simply maintained by soap and water washing. Laid in Sand and Cement, it is being widely specified for schools and technical colleges, and wherever concentrated traffic demands exceptional wear resistance.

Technical literature available on request.

THE TERRADURA FLOORING CO. LTD.

PROVIDENCE WORKS, NORTON STREET,
MILES PLATTING, MANCHESTER 10.
Tel: COLlyhurst 1059 4533. Established 1909.



The World's Best Slates

Nature made Coniston beautiful—Ruskin immortalised it. From the ruggedly beautiful mountains he knew come the Broughton Moor Westmorland Green Slates, famous for their extreme durability and colourful picturesqueness. In Light Sea Green, Olive Green and a variety of Mixed Shades they bring charm to even the plainest edifices and remain sound for centuries. IMMEDIATE DELIVERY.

LIGHT SEA GREEN and OLIVE GREEN STONE

Is eminently suitable for interior or exterior use where great durability and unique appearance are of paramount importance. Architects may specify its use for Facings, Foundation Stones, Paving and Flooring, Steps, Cills, Shop Fronts, Surrounds, Pilasters, Fireplaces, etc. Ask for these Technical Pamphlets:

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

SPECIFICATION. The roof to be covered with Broughton Moor Light Sea Green Best Quality (coarse grained) Westmorland Slates, to be obtained from the Broughton Moor Green Slate Quarries Ltd., Coniston, The Lake District, Lancs., in random sizes about 18in. to 9in. long, proportionate and random widths, laid to a 3in. lap in regularly diminishing courses from eaves to ridge. Each slate to be securely fixed by two stout copper nails and wide slates are to be used on the hips and verges.

Alternatives: Seconds, Thirds, Special Peggies Olive Green and Mixed Shades.

Ridging: "Bromoor" purpose-made of crushed and moulded slate from the same veins is recommended.

Technical information, samples and prices on request.

THE BROUGHTON MOOR GREEN SLATE QUARRIES Ltd.

CONISTON, THE LAKE DISTRICT, LANCASHIRE.

Telephone, Coniston 225/6

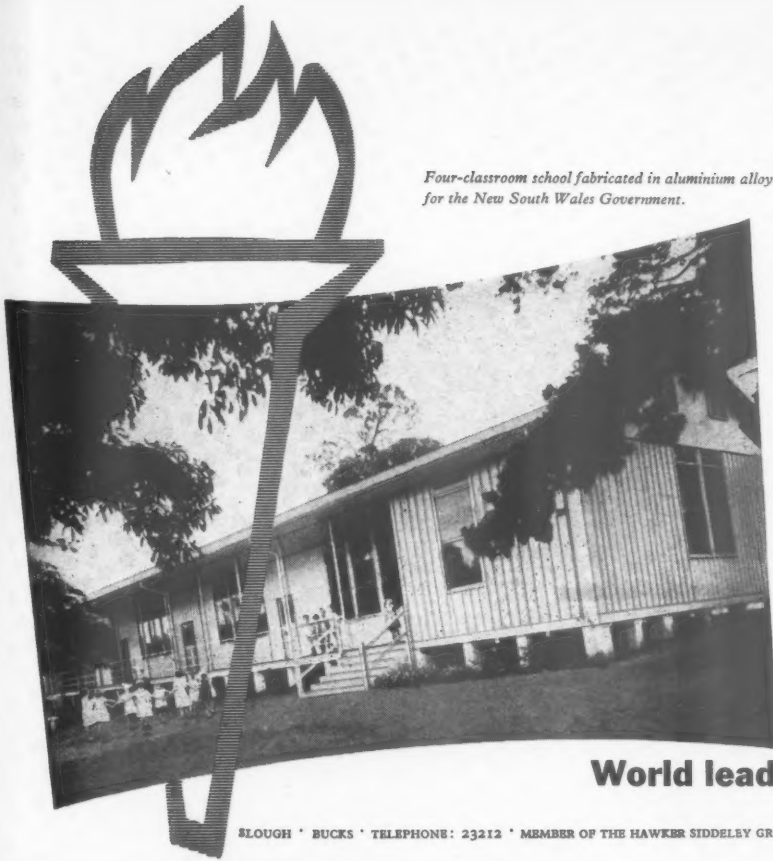
a new, fully up-to-date edition just published

LONDON NIGHT AND DAY, 1958-9 edition

a guide to where the other books don't take you

illustrated by Osbert Lancaster, edited by Sam Lambert.

The sixth, thoroughly revised edition of this, the most popular guide to the under-the-surface London of today is now on sale, still at the same price, 5s.



Four-classroom school fabricated in aluminium alloy for the New South Wales Government.

SLOUGH * BUCKS * TELEPHONE: 23212 * MEMBER OF THE HAWKER SIDDELEY GROUP

**Building schools in
the new school style**

... that's a job for

**TEMPLEWOOD
HAWKSLEY**

World leaders in aluminium structures

For Flats, Offices & Factories . . .

For flats, offices and factories the most reliable heating systems are those which rely on plentiful supplies of readily available British coal or coke used in



**UNICALOR
COAL & COKE STOKERS**

JOSHUA BIGWOOD AND SON LIMITED

Head Office : WEDNESFIELD ROAD * WOLVERHAMPTON * Tel. 24771

OUR REPRESENTATIVES:

NORTH-EAST. B. Peace, 54 Benomley Crescent, Almondbury, Huddersfield. (Tel. No.: Huddersfield 2035.)

NORTH-WEST. G. P. Houl, 295 Chester Road, Manchester, 15. (Tel. No.: BLAckfriars 9206.)

WEST MIDLANDS. E. Edwards, 'Fairwood,' Eveson Road, Norton, Stourbridge. (Tel. No.: Stourbridge 5583.)

EAST MIDLANDS. W. T. Rimer, 40 Medina Drive, Tollerton, Notts. (Tel. No.: Plumtree 39.)

LONDON. H. C. Williams, 75 Ebury Street, London, S.W.1. (Tel. No.: SLOane 6185/6.)

SOUTH-EAST. H. L. Boorne, 'The Ridge,' North Road, Bath. (Tel. No.: Bath 2545.)

SCOTLAND. I. E. Stewart, 29 Crarae Avenue, Westerton, Bearsden, Nr. Glasgow. (Tel. No.: Bearsden 0942.)

IRELAND: P. J. Casey, 38 The Rise, Mount Merrion, County Dublin. (Tel. No.: Dublin 882587.)

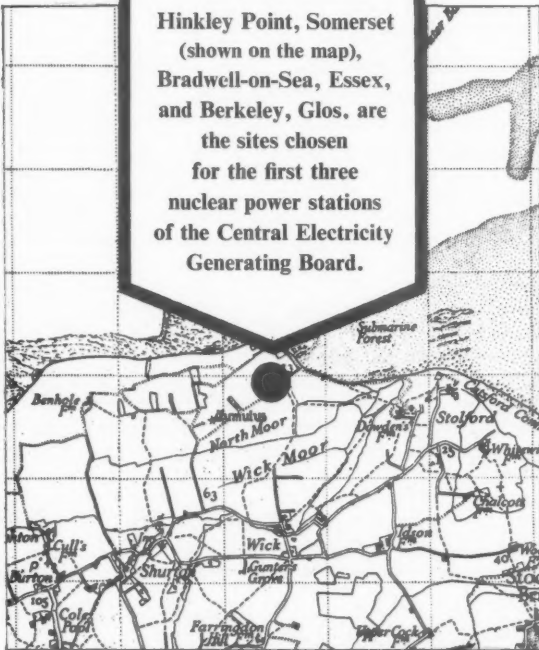


We thought you'd look at this - but try it from a distance of twelve feet

THE ENGRAVERS GUILD LTD
MAKERS OF PRINTING BLOCKS
WINDSOR HOUSE · CURSITOR STREET · LONDON · E.C.4

Electricity from Nuclear Energy

Hinkley Point, Somerset
(shown on the map),
Bradwell-on-Sea, Essex,
and Berkeley, Glos. are
the sites chosen
for the first three
nuclear power stations
of the Central Electricity
Generating Board.



Crown Copyright Reserved

The growing need for power

As Britain's industrial efficiency increases, so does the need for power. The demand for power doubles every ten years. The electricity supply industry has already met the doubled demand since 1st April, 1948, and has made provision for a similar expansion in the next decade.

Work on the first two nuclear power stations, at Berkeley in Gloucestershire and Bradwell in Essex, was started in January, 1957, and on the third in England, at Hinkley Point in Somerset, last September. These three stations will have an aggregate of some 850,000 kilowatts.

The Government's revised nuclear power station programme provides for enough nuclear power stations to be completed in the next decade to provide 5/6 million kilowatts of generating capacity. Provision is also being made for the construction of new main transmission lines.

As the demand for power grows, nuclear energy will become more and more important as a source of electric power, upon which the economic future of the country so largely depends.

THE CENTRAL ELECTRICITY GENERATING BOARD



PLASTER WON'T COME OFF, EVER!

Permanent, easy-to-use PLASTAWELD bonds gypsum plasters to any sound clean surface—saves hours of expensive labour by cutting out hacking, stippling or blinding with sand.

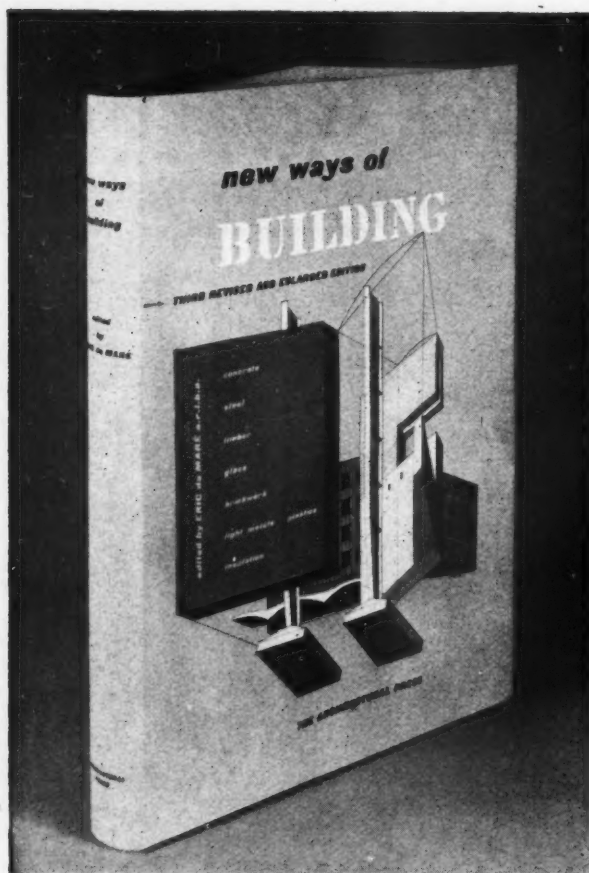
PLASTAWELD—the bonding fluid that's brushed or sprayed on to bricks, engineering bricks, smooth shuttered concrete, tiles and even asbestos—is used on Hospitals, Factories, Military and Ministry of Works establishments, and major projects everywhere. No hacking—no noise, dust or dirt—hours of expensive labour saved.



PERMANENT BONDING FLUID

Another **MANGERS** product

Problems? Write or 'phone our Technical Department, K6
574 KINGSLAND HIGH STREET, LONDON, E8 (GLISSOLD 5387)



just published

NEW WAYS OF BUILDING

edited by ERIC DE MARÉ ARIBA; contributors:

DR. K. HAJNAL-KÓNYI and H. TOTTENHAM on *concrete*

DR. H. GOTTFELDT on *steel*

PHILLIP O. REECE on *timber*

K. CHEESMAN on *glass*

W. B. MCKAY on *brickwork*

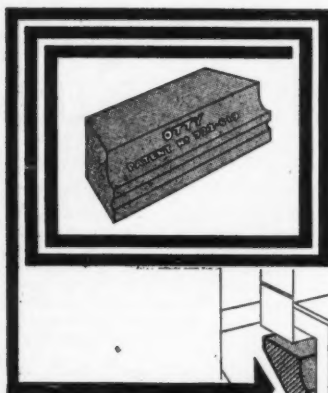
BRIAN GRANT on *light metals and plastics*

C. C. HANDISYDE on *insulation*

THIS, THE THIRD EDITION of a book already well known to practising architects and architectural and building students, has been very extensively and thoroughly revised. The chief revisions include the following: many new technical developments in the use of *Concrete* are discussed; the chapter on *Steel* has been almost entirely re-written by a new member of the team of specialist authors; considerable changes and additions have been made to the chapter on *Glass*, notably concerned with that important new application—the curtain wall; a valuable new section on designed load-bearing walls has been added to the *Brickwork* chapter; *Light Metals* has been almost entirely re-written. In addition to these extensive textual revisions, approximately half the illustrations are new: as in previous editions the new illustrations have been carefully chosen to stimulate the designer's visual imagination, as well as to inform on recent technical developments. Size 10 ins. by 7½ ins. 264 pages, over 240 photographs, plans and drawings. 45s. net, postage 1s. 9d.

THE ARCHITECTURAL PRESS

9-13 Queen Anne's Gate Westminster SW1



“**O** ^{The} **TTY**”

Throat
Restriction
Unit

COMPLETES THE FIREPLACE

PROTECTS THE TILES AND INCREASES
THE EFFICIENCY OF THE FIREPLACE
Patented

Simple—inexpensive—in patterns for all
surrounds. For better and speedier fixing—
use an “Otty”. Write for full details.

The “OTTY” Patented Fireback Hood is manufactured by:
BOWENS (REFRACTORIES) LTD., STOURBRIDGE. Tel: Brierley Hill 7269, 7260

M-W-59



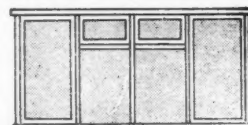
NORRIS
‘PLYDOR’

A Quality Product
guaranteed for 12 months
at competitive prices
with quick delivery.

And don't forget we carry
large stocks of standard panel
doors too. Remember standard
doors we can supply imme-
diately, specials take a little
longer.

NORRIS
‘WEATHERTITE’ WINDOWS
Prov. Patent No. 13865/57

The wood windows designed for
positive weatherproofing and to give all types of opening
lights within the same framework, giving the architect
greater flexibility of design at mass production prices.



MASS PRODUCTION JOINERY SPECIALISTS
A Bungalow or Multi-Story Flats we can
supply all your Joinery requirements. We
have a special department to assist you in
the design stage if required.

C.W. NORRIS
LTD.

Catalogue free on request
FARNWORTH, NEAR BOLTON, LANCASHIRE.

**OVER
2½ MILLION
TONS**

First in the field, 'Sirapite' (Anhydrous) is still the most popular plaster finishing coat. Since its introduction in 1891, over 2½ million tons have been used.

'SIRAPITE' (Anhydrous) PLASTER

has been intensively developed for over sixty years, and is unrivalled for producing an even, jointless, durable finish on walls and ceilings. Because of its chemical and physical stability, when used in accordance with the manufacturers' recommendations, it may be relied upon to provide a perfect base for any form of decoration. It is therefore

The Ideal

PLASTER FINISHING COAT

Also available, produced to the same high standard: 'Sirapite' Browning, Board Finish and Lightweight Plasters, including a Perlited 'Sirapite' (Anhydrous) Finish. Full technical information and literature on request.

THE GYPSUM MINES LTD.

MOUNTFIELD • ROBERTSBRIDGE • SUSSEX

Phone: Robertsbridge 80

And at Kingston-on-Soar, Nottingham

Siscomatte

the finest wall-paint yet for steamy atmospheres



Resists steam—won't peel or flake.

Ideal for kitchens and bathrooms, restaurants, canteens and other industrial premises, where steam is a major problem.

Calcarium

the best water-paint for indoor and outdoor surface decoration



Strongly recommended by architects, professional painters, builders and decorators.

For hotels, factories, industrial buildings and private residences—town, coast and country.

Two famous paints, now available from the same source

Sissons

Sissons Brothers & Co. Ltd., Bankside, Hull
(Incorporating A. T. Morse Sons & Co. Ltd.
Plaistow, London, E.13. Tel: Albert Dock 5151)

the perfect combination for
insulation and protection



above ZYLEX
Slaters Felt

As a secondary roof under tiles or slates, Zylex prevents damage due to roof defects and at the same time substantially reduces heat loss. Because of its exceptionally high quality, Zylex performs both functions supremely well. Available Reinforced for open rafters, Standard for boarded roofs.

below ASTOS
100% Permanent
Dampcourse

Astos, the original asbestos/bitumen dampcourse, has been widely specified for many years because of its proven ability to withstand foundation settlement and its ease of identification on site. More than meets the requirements of B.S. No. 743 of 1951. Standard or lead-lined.

RUBEROID



THE RUBEROID COMPANY LIMITED,
2 COMMONWEALTH HOUSE,
1-19 NEW OXFORD STREET, LONDON, W.C.1.
Z48c

**solving
your
constructional
problems**



Whatever your problem—ground exploration, foundations, materials, design or construction methods—the Terresearch organisation can help. Terresearch specialists have a wide, practical experience in all branches of building and civil engineering, and full resources for carrying out investigation and research by established and advanced techniques.

Their engineers have been engaged on site and constructional problems of

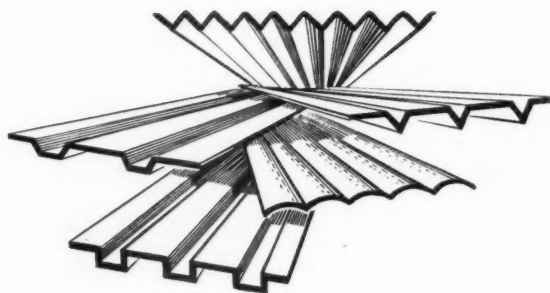
Atomic and Thermal Power Stations. Airfield Works. Railway Works. Bridges. Road Works. Marine and Hydraulic Works. Multi-storey Offices and Apartments, Factories, etc.

Full details of the services available from Terresearch Limited are given in an informative brochure, a copy of which will be sent on application.

Terresearch
LIMITED

BUILDING AND CIVIL ENGINEERING
LABORATORY AND PILING AND FOUNDATION ENGINEERS
RUISLIP ROAD · NORTHOLT · GREENFORD · MIDDLESEX
TELEPHONE: WAXLOW 6241-2

**FACIA
SHEETINGS**



To Special Design or in a
range of Standard Designs

**ALUMINIUM
COPPER
STAINLESS STEEL**

Enquiries to:

WM. ROME (FABRICATIONS) LIMITED
Thornliebank Industrial Estate, GLASGOW

the PERSPECTIVIST

By R. Myerscough-Walker.
The making of a perspective is a highly skilled task, and can often be the deciding factor when an architect submits a scheme. In this unique book, the author not only covers every aspect of the subject (including costing, copy-right and architect-client relationships), but goes further and presents his own deeply philosophical attitude to his art. The clarity and impact of his writing and the countless illustrations make this a rare and unusual book. From booksellers, 60s. net.

PITMAN

Parker St., Kingsway, London, WC2

For the Maximum Reliability

DECORATIVE PARSOLAC ENAMEL

—the perfect finish for all exterior and interior work is highly resistant to sun, weather and chemical influences. Has brilliant gloss and excellent opacity. Dries to a smooth, hard, dirt-resisting finish. Alkyd resin base ensures quick drying with a high degree of elasticity. Supplied in a wide range of colours and in black and white.

PARSYMUL EMULSION PAINT

Has high opacity and is easy to use; Dries to a tough, durable and washable finish; Has no residual odour when dry; Is quick drying—Two coats can be applied in one day where necessary. Supplied in white and a wide range of colours.

specify

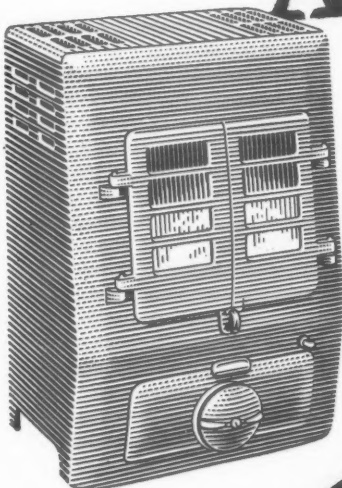


paints

THOS PARSONS & SONS LTD.
ESTD. 1802

70 GROSVENOR ST., LONDON W.1 MAYFAIR W9 1
BRANCHES THROUGHOUT THE COUNTRY

APPROVED



- ▶ By Ministry of Power
- ▶ By the Gas Council
- ▶ By the Council of Industrial Design
- ▶ By many thousands of householders in the U.K. and overseas

Courtier Stoves give radiant and convected warmth on coal or smokeless fuel. The wide firebox design achieves remarkable efficiency, and the range of models (some with boilers), designs and coloured enamel finishes, meets the needs of almost every home.

Please write for current literature.

Courtier
STOVES

MITCHELL, RUSSELL & CO LTD
Bonnybridge, Scotland



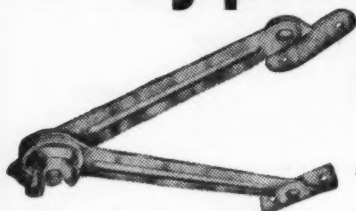
PAVE THE WAY FOR HARDER WEAR

For factory and other floors exposed to heavy traffic, impact and corrosion, Accrington 'Nori' Paving Bricks may be specified with the utmost confidence. Made from the same material as the famous Accrington Engineering Bricks. Samples on request.

THE ACCRINGTON BRICK & TILE CO. LTD., ACCRINGTON
Telephone: Accrington 2684

ACCRINGTON 'NORI' PAVING BRICKS

The Stayput Movement Check



ONE ACTION... IT "STAYS PUT"

FOR HOLDING FIRMLY IN POSITION ANYTHING ON HINGES.

Including Doors, Casement Windows, Fanlights, Garage Doors, Cupboards, Box Lids, etc.

Made in four sizes:
No. 00. No. 0 No. 1 No. 2
Arms 2½" 4" 5½" 7"

Write for brochure to
RHODES CHAINS LTD
8 Southampton Row, London, W.C.2
Chancery 9377 (3 lines)
Rhodespac, Norphone, London

Nikolaus Pevsner

The Englishness of English Art

THE 1955 REITH LECTURES, re-written to almost twice their original length, and fully annotated. With 150 illustrations in line and half-tone. 8½ in. by 5½ in. 308 pages. Price 16s. net. postage 1s. 2d.

THE ARCHITECTURAL PRESS, 9-13 QUEEN ANNE'S GATE, S.W.1.

MARLEY MULTIPLE CONCRETE GARAGES

Of unsurpassed appearance and spacious dimensions, these fire-proof, rot-proof garages are virtually maintenance free. Choice of superb 'Welrise' up-and-over doors or traditional timber.

Supplied, delivered and erected by Marley experts at very competitive prices. Let us quote you..

Visit our Showgrounds at

MARLEY CONCRETE LIMITED. Dept. X B 19

PEASMARSH, GUILDFORD, SURREY Guildford 62986 - SOUTH OCKENDON, NR. ROMFORD, ESSEX S. Ockendon 2201
SHURDINGTON, NR. CHELTENHAM Shurdington 334/5 - WATERLOO, POOLE DORSET Broadstone 626



THE ACME FLOORING & PAVING COMPANY (1904) LTD

ESTABLISHED 1864

River Road - Barking - Essex

THE COMPANY WILL GLADLY SEND

on request their latest

TECHNICAL BROCHURE

on IMMOVABLE-ACME HARDWOOD FLOORS for Public Buildings, Offices etc.,
and ACME PAVING for heavy duty factory floors.

Telephone:
RIPpleway 2771 (7 lines)

Telegrams:
Dowelled-Easph one-London

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

50s. per inch; each additional line, 2s. 6d.

LONDON COUNTY COUNCIL
ARCHITECTS' DEPARTMENT

Vacancies for (1) ARCHITECTS, Grade III, starting salary up to £1,090 a year. (2) ARCHITECTURAL ASSISTANTS, starting salary up to £860.

Full and interesting programme of Houses, Flats, Schools and General Buildings.

Application form and full particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council, The County Hall, S.E.1, quoting Ref. AR/EK/21/58. (795) 9375

AIR MINISTRY WORKS Design Branch requires in LONDON and PROVINCES ARCHITECTURAL ASSISTANTS experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries in LONDON up to £1,015 p.a. for men and £925 p.a. for women. Somewhat lower in PROVINCES. Starting pay dependent on age, qualifications and experience. Long-term possibilities with promotion and pensionable prospects. Five-day week, three weeks three days leave a year. Liability for overseas service. Normally natural born British subjects. Write stating age, qualifications, employment details including type of work done to any Employer Exchange quoting Order No. BOBOUGH 100. 9535

GOVERNMENT OF NORTHERN IRELAND
ASSISTANT ARCHITECT CLASS II

Applications are invited for pensionable posts in the Chief Architect's Branch, Ministry of Finance. Candidates must be Registered Architects by examination, with at least two years' experience in an Architect's Office in the preparation of working drawings. Salary scale £780 (at age 25)–£1,055 (age 34 and over)–£1,215. Transfer of existing Pension rights may, in certain circumstances, be approved. Preference will be given to ex-Servicemen. Application forms may be obtained from the Secretary, Civil Service Commission, Stormont, Belfast. 9540

LINDSEY COUNTY COUNCIL

ONE ASSISTANT QUANTITY SURVEYOR, Special Grade £750–£1,030. Applicants should be A.R.I.C.S. In special circumstances consideration will be given to starting salary above minimum of the grade.

N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any Member or Senior Officer of the Council.

Applications giving age, qualifications, experience, present post and salary, and the names of at least two persons to whom reference can be made to be sent not later than 27th June, 1958, to the County Architect, County Offices, Lincoln. 9700

NEWCASTLE REGIONAL HOSPITAL BOARD
ASSISTANT ARCHITECT—Grade £700–£1,015.

(P. H. KNIGHTON, M.B.E., A.R.I.B.A., Regional Architect)

In connection with a large new hospital project, the Board invites applications for the above permanent (superannuable) appointment on the Headquarters' Staff of the Regional Architect in Newcastle.

Applicants must be Registered Architects. The commencing salary, within the Grade £700 × £25 (3) × £30 (1) × £35 (6)—£1,015, will be fixed by reference to relevant experience and to age. The post offers opportunity for gaining all-round general, as well as hospital, experience and for doing good-class work in an expanding department.

Applications stating age, qualifications, past and present appointments, present salary and details of experience and training, together with the names of three referees (of whom at least two should be architects), should be forwarded to the Secretary of the Board, Benfield Road, Newcastle-upon-Tyne, 6, not later than 4th July, 1958. 9733

HUDDERSFIELD COLLEGE OF
TECHNOLOGY

Principal: Dr. W. E. SCOTT, M.B.E.

Required September, 1958, Grade "B" ASSISTANT (Male) in ARCHITECTURE. Degree or Diploma in Architecture and/or A.R.I.B.A. qualification.

The salary (Burnham Scale) rises to a maximum of £1,025 plus allowances for graduate status (£75 or £125) and training (£25 to £75). The commencing salary will depend upon qualifications and experience and may include up to 12 increments in respect of approved service in industry.

Further particulars and forms of application, which must be returned as soon as possible, obtainable from the Principal, College of Technology, Queen Street South, Huddersfield.

H. GRAY,
Chief Education Officer. 9780

17th June, 1958.

BOROUGH OF MAIDSTONE
APPOINTMENT OF SENIOR ASSISTANT
ARCHITECT IN BOROUGH SURVEYOR'S
DEPARTMENT

Applications are invited from qualified Architects to fill the above vacancy in the Architectural Section, at a salary in accordance with the "Special Grade," commencing at £910 and rising to £1,030, subject to satisfactory service.

Applicants should have had experience in a senior capacity, and the post offers good opportunities to those seeking to augment such experience.

The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act, 1953, the passing of a medical examination, and one month's notice on either side. Canvassing will disqualify. Where circumstances warrant, consideration will be given to the provision of housing accommodation.

Applications, on forms to be obtained from the Borough Surveyor, must be sent to the Borough Surveyor, Palace Avenue, Maidstone, not later than the 8th July.

T. SCHOLES,
Town Clerk.

13, Tonbridge Road,
Maidstone.

19th June, 1958.

9721

ARCHITECTURAL ASSISTANTS

required by

MINISTRY OF WORKS

For employment in London and Provinces on design and detailing work on construction and maintenance of all types of public buildings.

Salary Range £650 (age 21) to £870 p.a. London (slightly less elsewhere).

Five-day week; 33 weeks annual leave initially. Starting pay according to age, qualifications and experience. Good prospects of promotion with salaries of £1,015 p.a. and above.

Opportunities for permanent posts leading to pensions (non contributory).

Interviews at Regional Offices where possible. Applicants should be of Inter. R.I.B.A. standard. State age, training and experience to Chief Architect, Ministry of Works, Abell House, John Islip Street, S.W.1. 9720

COUNTY BOROUGH OF BURNLEY

Applications are invited for the under-mentioned appointments in the Borough Engineer & Surveyor's Department:—

(a) SENIOR ARCHITECTURAL ASSISTANT, Special Grade (£750–£1,030).

(b) ARCHITECTURAL ASSISTANTS, Special Grade (£750–£1,030).

(c) JUNIOR QUANTITY SURVEYING ASSISTANT, Grade I (£575–£725).

Applicants for appointment (a) must hold appropriate qualifications and must have had considerable experience in Municipal work. The commencing salary for a suitable applicant would be at or near the lowest of the grade.

Applicants for appointment (b) should preferably hold appropriate qualifications but the successful candidates may be placed in the A.P.T. Grade range up to and including Special Grade according to qualifications and experience.

Applicants for appointment (c) must have a sound knowledge of building construction and experience in the preparation of quantities and the measurement of building work is essential.

Provision of housing accommodation may be considered if required in respect of appointments (a) and (b).

Forms of application may be obtained from the Borough Engineer, 22-24, Nicholas Street, Burnley, to whom they should be returned not later than Saturday, 12th July, 1958.

C. V. THORNLEY,
Town Clerk.

9783

SUNBURY-ON-THAMES URBAN DISTRICT
COUNCIL

APPOINTMENT OF ASSISTANT ARCHITECT

The Council invite applications for the above-mentioned post in the Architect and Engineer's Dept., at a salary in accordance with the N.J.C. scheme for the grading of special classes of officers, viz., £750 × £40–£1,030 per annum, plus London Allowance.

Candidates must hold a qualification appropriate to the post as required by para. 21(8)(ix)(c) of the Scheme of Conditions of Service.

Applications giving full particulars, and the names and addresses of two referees, to reach the Council's Architect and Surveyor at the address below by Saturday, 5th July, 1958.

Canvassing will disqualify.

T. L. WATTS,
Clerk of the Council.

Council Offices,

Sunbury-on-Thames.

18th June, 1958.

9758

CITY OF LANCASTER

ASSISTANT QUANTITY SURVEYOR

Applications are invited for the above post in the City Engineer's Department on N.J.C. Special Grade. Candidates must have passed Final R.I.C.S. (Quants).

Applications, stating age, present post and salary, qualifications and experience (with dates) and names of two referees, to reach L. Lyons, Esq., B.Sc., City Engineer, Town Hall, Lancaster, not later than 10 a.m., Tuesday, July 1st, 1958.

Housing accommodation may be made available to person appointed if required.

J. D. WADDELL,
Town Clerk.

Town Hall,

Lancaster.

10th June, 1958.

9711

COUNTY BOROUGH OF DARLINGTON

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the Appointment of an ASSISTANT ARCHITECT. Salary in accordance with the Special Grade of N.J.C. Scales (£750–£1,030), starting point according to experience.

The Department has a large programme including Secondary and Primary Schools, Housing, Welfare Schemes, and Municipal Offices. Preference will be given to candidates experienced in this class of work, and who are members of the R.I.B.A.

Housing accommodation will be made available, if required.

Applications giving full particulars of age, qualifications, present appointment with salary, previous appointments with dates, and the name and address of three referees to be received by E. A. Tornbohm, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than first post on Thursday the 17th July, 1958.

H. HOPKINS,
Town Clerk. 9757

UNIVERSITY OF DURHAM

KING'S COLLEGE, NEWCASTLE UPON TYNE
APPOINTMENT OF COLLEGE RESIDENT
ARCHITECT/ENGINEER/SURVEYOR

The Council of King's College invite applications for the post of Resident Architect/Engineer/Surveyor, the exact title being dependent upon the qualifications of the person appointed.

The Resident "Officer" will be responsible to the Bursar and through him to the Council of King's College and their General Purposes Committee. He will have special responsibility to advise on the development of the College estates and to implement the Building Programme. He will be required to devote his whole time to the duties of the post.

Candidates must have a recognised qualification of a Professional Body in Architecture, Engineering or Surveying.

The starting salary will be fixed according to the experience and qualifications of the person appointed and will be on the scale of £1,500 × £75–£2,075 × £25–£2,100 a year. The person appointed will be required to join the Federated Superannuation System for Universities. Child Allowance will be paid.

Further particulars may be obtained from the undersigned to whom applications for the post should be submitted not later than 14th July, 1958.

G. R. HANSON,
Registrar of King's College. 9760

COUNTY BOROUGH OF SWANSEA

BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the post of SENIOR ASSISTANT QUANTITY SURVEYOR—Salary A.P.T. IV, £1,025 × £50–£1,175.

Applicants must be Associates of the R.I.C.S. (Quantities) and have had considerable experience in taking off quantities for large contracts and in the supervision of technical staff.

The commencing salary in the grade will be in accordance with ability and experience.

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

The appointment will be subject to the provisions of the Local Government Superannuation Acts and may be terminated by one month's notice on either side. The successful applicant will be required to pass a medical examination. Housing accommodation will be provided, if required.

Forms of application may be obtained from the Borough Architect, The Guildhall, Swansea, to whom they must be returned not later than Monday, 7th July, 1958.

Canvassing disqualifies.

T. B. BOWEN,
Town Clerk.

The Guildhall,

Swansea.

16th June, 1958.

9759

CORPORATION OF LONDON

Applications invited for temporary appointment for three years of ARCHITECTURAL ASSISTANT in the Housing Section of City Engineer's Department.

Salary £1,275 p.a. rising after one year's satisfactory service to a maximum of £1,325 p.a.

Candidates suitably qualified must have had experience in Local Authority housing improvements works.

Medical examination; local act superannuation.

Applications with names of two referees to: The City Engineer, Guildhall, London, E.C.2, by 7th July, 1958. 9743

ST. PANCRAS BOROUGH COUNCIL

APPOINTMENT OF TWO TEMPORARY
ARCHITECTURAL OR SURVEYING
ASSISTANTS

Applications invited for above appointments in Borough Engineer & Surveyor's Dept. in connection with conversion and improvement of requisitioned properties purchased by Council.

A.P.T.V. (£1,175–£1,325). Commencing salary £1,175 plus £30 London weighting allowance if over 26. Applicants must have passed Final of R.I.B.A. or R.I.C.S. (Building Sub-Division) and be experienced in preparing schemes, estimates, specifications and bills of quantities for this class of work. Appointments for period of 2/3 years. Application forms and further particulars from undersigned. Closing date 4th July.

R. C. E. AUSTIN,
Town Clerk.

St. Pancras Town Hall,

Euston Road, London, N.W.1.

9774

URBAN DISTRICT COUNCIL OF EAST BARNET

Applications are invited for the following appointments:

- (a) ASSISTANT ARCHITECT, Grade A.P.T. II (£725 to £945 per annum), Grade
- (b) ARCHITECTURAL ASSISTANT, Grade A.P.T. I (£575 to £725 per annum), Special
- (c) SENIOR ASSISTANT ENGINEER, Grade (£750 to £1,030 per annum), Grade
- (d) DRAUGHTSMAN (Architectural), Grade A.P.T. I (£575 to £725 per annum), Grade
- (e) DRAUGHTSMAN (Engineering), Grade A.P.T. I (£575 to £725 per annum), Grade

The above salaries will be increased by London weighting of £10, £20 or £30 per annum according to age.

Conditions of Appointment and Forms of Application, returnable by the 14th July, 1958, may be obtained from the Engineer & Surveyor, Town Hall, Station Road, New Barnet, Herts. 9773

BIRMINGHAM REGIONAL HOSPITAL BOARD

ARCHITECTURAL APPOINTMENTS

(a) ASSISTANT ARCHITECT, £680 × £25 (3) × £30 (3) × £35 (1) × £30 (1) × £35 (3) to £985 according to age and experience. Applicants must be Registered Architects having passed requisite examinations. Experience of hospital planning and construction an advantage. Sound knowledge specifications essential.

(b) ARCHITECTURAL ASSISTANT, £510 × £20 (5) × £30 (1) × £20 (1) × £25 (2) to £710. Point of entry according to experience. Intermediate R.I.B.A. essential.

(c) ASSISTANT QUANTITY SURVEYORS, £680 × £25 (3) × £30 (2) × £35 (1) × £30 (1) × £35 (3) to £985 according to age and experience. Final R.I.C.S. and experience in taking off and preparing bills of quantities and settling final accounts essential.

All appointments superannuable. Apply, naming two referees, to Secretary, R.H.B., 10, Augustus Road, Birmingham 15, by 14th July, 1958. 9772

CITY AND COUNTY OF THE CITY OF EXETER

Applications are invited for the appointment of STRUCTURAL ENGINEERING ASSISTANT on the establishment of the City Architect's Department, at a salary within the Special Grade, i.e., £750 to £1,030 per annum.

Applicants must be Associate Members of the Institution of Structural Engineers, or hold equivalent qualifications, and must have had considerable experience in the design of reinforced concrete and steelwork structures, such as for Schools, Public Buildings, etc.

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Acts 1937-53. The successful applicant will be required to pass a medical examination. Canvassing will disqualify and applicants must disclose whether to their knowledge they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience and the earliest possible date when available, should be sent to H. B. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Municipal Offices, Exeter, not later than 7th July, 1958.

C. J. NEWMAN,
Town Clerk.

Exeter, June, 1958. 9771

CITY OF PORTSMOUTH

Applications are invited for an appointment as DEVELOPMENT ASSISTANT (TOWN PLANNING) on the Technical Staff of the City Development Department. The vacancy is on A.P.T. Grade I (£575-£725).

Applications stating age, present position, qualifications and experience, together with names of two referees, must be delivered to City Development Officer, 1, Western Parade, Portsmouth, not later than Monday, the 14th July, 1958.

V. BLANCHARD,
Town Clerk.

9782

BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the post of ASSISTANT ARCHITECT, salary range £934-£1,146. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination, housing available in due course. Apply by 9th July, 1958, giving age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (A.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. 9764

URBAN DISTRICT COUNCIL OF CORBY APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT

Applications are invited for this appointment from registered architects with considerable experience in design, construction and contract administration as applied to contracts for public buildings and local authority housing.

Salary in accordance with Special Scale (£750 × £40-£1,030), the commencing point to be fixed in accordance with experience and present grading. Housing accommodation will be made available to the successful candidate, if married.

Forms of application may be obtained from the undersigned, to whom they should be returned by not later than Monday, 7th July, 1958. Testimonials will be required only from applicants selected for interview.

G. B. BLACKALL,
Clerk of the Council.

Council Offices, Corby, Northants. 17th June, 1958. 9763

THE NATIONAL COAL BOARD SOUTH WESTERN DIVISION

Invite applications for the post of ARCHITECTURAL ASSISTANT, Grade 1 in their Divisional Production Department. Architects' Branch, Cambrian Buildings, Mount Stuart Square, Cardiff.

Applicants should have passed the Intermediate examination of the R.I.B.A., and have not less than three years' subsequent experience, or have passed the appropriate Final examination, and have had not less than one year's subsequent experience.

Salary Scale: (Male) £715 × £25-£850 per annum. (Female) £610 × £25-£720 per annum. Applicants of exceptional ability and experience may, in special circumstances, be given up to £150 above the scale maximum in the grade.

Please quote Staff Vacancy No. 199/40.

Full particulars of age, qualifications, experience and positions held, together with details of present post and salary, should be sent to the Divisional Chief Staff Officer, National Coal Board, Cambrian Buildings, Mount Stuart Square, Cardiff, by 4th July, 1958. 9770

HUYTON-WITH-ROBY URBAN DISTRICT COUNCIL

Population 50,000

ARCHITECTURAL AND HOUSING DEPARTMENT

Applications are invited for the post of CHIEF ASSISTANT ARCHITECT. Salary Scale A.P.T. V, £1,175 to £1,325.

Applicants must be members of the R.I.B.A.; must have had a wide architectural experience including the design of multi-storey housing, and must possess administrative ability.

The commencing salary will depend upon the qualifications and experience of the successful applicant. Housing accommodation will be provided, if necessary.

Applications, stating age, qualifications, details of previous appointments and experience, and giving the names and addresses of two referees to—The Architect, "Grasscroft," Archway Road, Huyton, Lancashire, not later than the 4th July, 1958.

D. WILLGOOSE,
Clerk of the Council.

Council Offices, Huyton, Lanes. 20th June, 1958. 9762

LANCASHIRE COUNTY COUNCIL

PLANNING ASSISTANTS required at BLACKPOOL and LIVERPOOL. Applicants should be studying for or possess a qualification in planning, architecture, civil engineering or surveying and appropriate experience is desirable. N.J.C. Conditions of Service. Salary rising to £1,030 per annum (N.J.C. Special Scale) for qualified applicants. Candidates not fully qualified will be appointed on the appropriate grade and subject to satisfactory service will progress to Special Scale on obtaining final qualification. Applications stating appointment applied for, giving age, qualifications, present appointment and two referees to County Planning Officer, East Cliff County Offices, Preston, by 9th July, 1958. 9795

CITY ARCHITECT'S OFFICE MANCHESTER

Applications invited for appointment on the permanent staff of ASSISTANT ARCHITECT. Salary Special Scale £750 to £1,030 per annum. The commencing salary will be fixed according to qualifications and experience. Forms of application from the City Architect, P.O. Box 488, Town Hall, returnable by July 12th, 1958. 9794

BOROUGH OF WEMBLEY

APPOINTMENT OF ASSISTANT ARCHITECT. Applications are invited for the above established appointment within the Architect's Special Salary Scale of £750-£1,030 per annum plus London weighting allowance, to work on a full and varied programme. Housing accommodation not provided.

Application forms, to be returned by 12th July, 1958, are obtainable from the Borough Engineer and Surveyor, Town Hall, Wembley.

KENNETH TANSLEY,
Town Clerk.

Town Hall, Wembley, Middx. 9784

EAST ANGLIAN REGIONAL HOSPITAL BOARD

ARCHITECTURAL ASSISTANT. Candidates must have passed Intermediate Examination of R.I.B.A. or equivalent. Salary £525 (at 21 or over)-£730 per annum; entry point may be fixed above minimum but will not exceed £605. Applications stating age, qualifications, experience and details of present position with names of three referees to Secretary of Board, 117, Chesterton Road, Cambridge, by 5th July, 1958. 9735

COUNTY BOROUGH OF WOLVERHAMPTON

APPOINTMENT OF ASSISTANT ARCHITECT. Assistant Architect required. Salary Special Scale (£750-£1,030, p.a.). N.J.C. Conditions of Service. Commencing salary in accordance with experience and qualifications.

Applications stating age, training, qualifications, previous experience and naming two referees to the Borough Engineer, Town Hall, Wolverhampton, in envelope endorsed "Assistant Architect" by Friday, 11th July, 1958. 9781

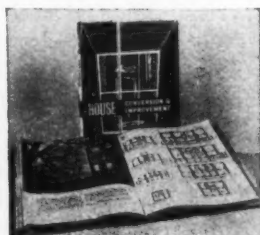
Architectural Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

ASSISTANT, passed Intermediate, required for interesting and varied work with fair measure responsibility. London practice. Box 9510.

TREHEARNE & NORMAN, PRESTON & PARTNERS have vacancies for ASSISTANTS. Salary according to experience and qualifications.—Apply: 83, Kingsway, W.C.2 (HOL. 4071). 9550

QUALIFIED ASSISTANT required. London private practice, varied work, prospects. Box 9509.



Felix
Walter
F.R.I.B.A.

HOUSE CONVERSION AND IMPROVEMENT

THE FIRST comprehensive illustrated book on the subject of the conversion and improvement of all kinds of house property. It is designed to help architects, local housing authorities and private owners. Mr. Walter thoroughly illustrates and describes a large variety of successful conversions, from luxury Belgravia terrace houses to remote rural cottages, giving full details of building costs, rent and rates for most of them. And specialist authors contribute chapters on law, finance, management and town planning.

Size 9½ by 7½ in. 258 pages including over 420 illustrations. 42s. net, postage 1s.9d.

THE ARCHITECTURAL PRESS 9-13 QUEEN ANNE'S GATE WESTMINSTER S.W.1

RONALD WARD & PARTNERS require ARCHITECTURAL ASSISTANTS with contemporary outlook, and willing to use own initiative. Salary range £600 to £900. Congenial working conditions; five-day week. Apply 29, Chesham Place, Belgrave Square, S.W.1. Telephone Belgrave 3361. 9614

CO-OPERATIVE WHOLESALE SOCIETY LTD. ARCHITECTS' DEPARTMENT, MANCHESTER. APPLICATIONS are invited for the appointment of ASSISTANT ARCHITECTS with experience of work on commercial and industrial projects, capable of preparing working drawings from preliminary details. Five-day week in operation. Applications stating age, experience, qualifications and salary required to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 1, Balloon Street, Manchester, 4. 9585

W. H. WATKINS, GRAY & PARTNERS require ASSISTANTS for interesting hospital work, pension scheme in operation. Write to phone, 57, Catherine Place, S.W.1. Victoria 761. 9672

INTERMEDIATE ARCHITECTURAL ASSISTANT required by City Firm, capable of controlling small contracts of industrial character. Salary £600-£800. Box 9571.

ASSISTANT required in busy practice in West End in early twenties, Intermediate R.I.B.A. standard. Excellent opportunities for gaining all-round experience. Holiday arrangements respected. Box 9673.

ARCHITECTURAL ASSISTANT required, approaching or at Intermediate stage, with office experience—one day per week for studies. Write, with details of education and experience, D. Plaskett Marshall, 59, Gordon Square, W.C.1. 9651

ARCHITECTURAL ASSISTANTS with experience required. Apply in writing only, stating age, qualifications and salary required to Stephenson, Young & Partners, 6, Bluecoat Chambers, Liverpool 1. 9629

ARCHITECTURAL ASSISTANT (Intermediate R.I.B.A. standard) required by Architect in Wimborne, Dorset. Applicants should have a sound knowledge of basic building construction and have had some office experience. Reply stating age, experience and salary required to Box 9732.

SENIOR ASSISTANT required for a small private busy practice. Experience in houses and flats essential. Please state full particulars, previous experience, training, etc., and salary required to Box 9727.

ARCHITECT'S ASSISTANT required for the London Office of a firm of Architects with interests throughout the country, must be of Intermediate R.I.B.A. or R.I.C.S. standard. Superannuation scheme. Apply to: Cotton, Ballard & Blow, 5, Baker Street, W.1. 9725

ASSISTANT ARCHITECT required for varied work, should be qualified or near Final standard. Pension scheme available. Write with details training and salary required. T. H. Johnson & Son, F.R.I.B.A., 20, Priory Place, Doncaster. 9704

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have vacancies in their Welwyn Garden City Office for experienced architectural staff. Write stating age, salary and experience to the above at Midland Bank Chambers, Howardsgate, Welwyn Garden City, Herts. 9694

EXPERIENCED ARCHITECTURAL DRAUGHTSMEN required for office in Epsom, Surrey. Preference will be given to those who have passed the Intermediate examination of the R.I.B.A. Five-day week; pension scheme. Apply in writing to Personnel Manager, W. S. Atkins & Partners, 159, Victoria Street, S.W.1. 9692

DRAUGHTSMAN (Architectural). Male Assistant of Intermediate standard to prepare structural schemes and finished projects under supervision required for Drawing Office in large Multiple Firm. Knowledge of shopfitting an advantage. Pension Scheme and Staff Restaurant. Reply stating age, experience and salary required to Box 9713.

BOOTH, LEDEBOER AND PINKHEARD require ASSISTANT in London office to specialise in contract supervision. Salary according to qualifications and experience. TRAFALGAR 1866. 9715

PROBATIONER R.I.B.A. with at least three years' experience, required by City Firm. Commencing salary £350 to £500. Apply Box 9749.

COUNTRY Office (Surrey) requires ARCHITECTURAL ASSISTANT for expanding practice. Salary according to experience. Car allowance. Five-day week. Box 9696.

CHELTONHAM Architects require experienced ASSISTANT able and willing to take responsibility. Commencing salary about £800, according to capabilities. Box 9714.

LOUIS DE SOISSONS, PEACOCK, HODGES & ROBERTSON have a vacancy for an ASSISTANT, preferably with experience in design and presentation of sketch schemes, etc. Write stating age, salary and experience to the above at 3, Park Square Mews, Upper Harley Street, London, N.W.1. 9768

SENIOR ASSISTANT required for expanding practice in Nottingham. Salary range £900-£1,000 according to experience. Box 9801.

ASSISTANT wanted for detailing and designing exhibition stands, shop fitting, etc. Telephone Miss Smith, Conran Contracts, Fulham 9651, for appointment. 9754

ARCHITECTURAL ASSISTANT required for a small busy office mainly commercial and industrial. Must have office experience and capable of preparing sketch schemes, working drawings and details, but not necessarily qualified. Permanent position for man able to cope with responsibility. Salary £750 to £800 p.a. Write full details to A. F. Hare, F.R.I.B.A., 24, Baker Street, London, W.1. 9767

TWO ASSISTANTS required by Architects and Designers, one Senior, one Junior (minimum L.R.I.B.A.), Manchester Square area, for new buildings and interiors. Salary dependent on age, qualifications and experience. Apply Box 9766.

SENIOR ASSISTANT required immediately for busy Private Practice near London. Should be Qualified, experienced and preferably car owner/driver. Full particulars and salary required to Box 9765.

ARCHITECTURAL ASSISTANT required by NYASALAND P.W.D. on contract for four of 2-3 years in first instance. Salary according to age and experience in scale £325 rising to £1,465 a year. Candidates with the minimum qualifications would qualify for a commencing salary of £385 a year. Gratuity at a rate of 10 per cent. of total substantive salary drawn. Outfit allowance £30. Free passages. Liberal leave on full salary. Candidates, preferably under 35, must have passed Inter. R.I.B.A. or equivalent and have over 5 years' all-round experience in an Architect's office. They should be good draughtsmen with sound knowledge of construction and be capable of carrying out site surveys including topographical work. Experience of architecture in tropical climates an advantage. Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, full qualifications and quote M2B/49965/AG. 9761

QUALIFIED ASSISTANT required by architects, Five Ways, Birmingham. Projects of contemporary and varied nature, but in this instance assistant would be required to commence immediately on large City scheme. J. Seymour Harris & Partners, 3/4, Greenfield Crescent, Five Ways, Birmingham, 15. 9787

ARCHITECTURAL ASSISTANT required for a small office, Inter. standard, good draughtsman and good office experience, for principally estate development and private domestic work. Please reply stating briefly age, salary, required and general experience. Booth & Booth, Leighton House, Pottery Bar, Middlesex. 9786

ARCHITECT'S DRAUGHTSMEN up to Inter. Standard required in progressive Architects' Office, Chester. Salary by arrangement depending upon experience. Reply giving full details of experience, qualifications, age, etc., to Box 9785.

ANSELL & BAILEY require ASSISTANTS. Interesting and varied work. 5-day week. Luncheon vouchers. Holiday arrangements respected. Applicants should write, stating experience, age and salary required to No. 12, Gray's Inn Square, London, W.C.1. 9788

ASSISTANT required for small office dealing with wide variety of Industrial, Commercial and Domestic work. About Inter. standard; preferably with office experience. Excellent opportunity to widen experience in all aspects of Architectural Practice. Write stating age and previous experience to Bostock & Partners, Central Hall Buildings, Station Approach, Southall, Middlesex. 9775

EXPERIENCED QUALIFIED ASSISTANT for small busy South West London Office with wide general practice. Unfurnished living accommodation if desired. Please state age, qualifications, experience and salary required. Box 9776.

ARCHITECTURAL ASSISTANTS required in Architect's Department dealing with new office buildings, alterations and adaptations. Write giving details of age, experience and salary required to Chief Architect, Co-operative Permanent Building Society, New Oxford House, Bloomsbury Way, London, W.C.1. 9777

ASSISTANT (30-40 years) for Contracts Manager, Surrey Estate Developers. Thorough background house building, use of level and some experience in dealing with clients. Car allowance or transport provided. Salary about £800. Reply to the Secretary, H. B. Kingston Ltd., 145, London Road, Kingston-upon-Thames. 9797

ARCHITECTURAL ASSISTANT required for work upon interesting multi-storey projects. Must have experience of similar work and have passed INTER. Salary £600-£750. Five-day week. W.1. Apply: David Stern & Partners. HUN. 0451. 9800

GOTCH, SAUNDERS & SURRIDGE, of Kettering and Corby new Town, have vacancies in their offices for a SENIOR and JUNIOR ASSISTANTS. Opportunities for contemporary work in Industrial, Educational and Residential design. Pension scheme. Apply in writing to Bank Chambers, Kettering. 9799

ASSISTANT ARCHITECTS required. Applicants should be A.R.I.B.A.'s, with at least three years' office experience; some school training, and an interest in interior design an advantage. Permanent and superannuated appointment.—Apply, Benskin's Watford Brewery, Ltd., P.O. Box 105, Watford, Herts. 9665

ASSISTANT required by firm of Architects and Surveyors in Beds. and Herts. General practice. Apply stating experience, salary, etc., to Box 9695.

Architectural Appointments Wanted

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

ENERGETIC and widely experienced Associate seeks PARTNERSHIP, or position leading shortly thereto, in live firm with contemporary tendencies. Box 9756.

LONDON Senior Assistant, A.R.I.B.A., Dip. T.P. (36), 10 years qualified, varied experience, seeks responsible post leading to PARTNERSHIP. Own car. Box 9755.

Other Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

TRANSLATORS (free-lance) required by translation bureau. Architectural, building, civil engineering, affiliated subjects. Please state language(s), experience, fees. Box 9752.

ARCHITECTURAL METAL SHOP FOREMAN/CHARGEHAND for Shopfitting Specialists in JOHANNESBURG, SOUTH AFRICA. Previous experience essential. Salary £1,320 p.a. Passage assistance. Write for details to O.T.S., 5, Welton Crescent, Harrow, Middlesex, quoting ref. OSS. 114/2. 9753

SHORTHAND-TYPIST required by Architect's office in Gray's Inn. Commence early August. State age, previous experience and salary required. Box 9751.

OLD-ESTABLISHED MUTUAL LIFE ASSURANCE HOUSE wants a few men of initiative and integrity to act as AGENTS for life assurance. Architects and Surveyors have the necessary contacts to make business most profitable to us and them. Full details from Box 123.

JUNIOR TAKER-OFF required in Quantity Surveying section of West End Architects' practice. Interesting work with good prospects. Please reply stating age, experience and salary required to Box 9792.

CELOTEX LIMITED, the largest manufacturers of fibre building boards in the United Kingdom, wish to employ a well educated REPRESENTATIVE, resident in or near London, who will be expected to undertake a task of considerable importance in which aptitude for technical matters is desirable. Although the successful candidate will undergo a course of intensive training, he will be expected to have had at least two years' sales experience. This is a permanent post for a man between the ages of 25/40 with drive, ambition and the will to succeed. It carries excellent remuneration, superannuation, car and expenses. Write, giving full details of career, earnings, etc., to Manager, Standard Products Sales, Celotex Limited, North Circular Road, Stonebridge Park, London, N.W.10. 9778

OUTSIDE SUPERVISOR for Surrey Estate Developers. Ex carpenter and joiner or bricklayer, but conversant all trades. Age 40-45. Salary about £750. Car allowance or transport provided. Apply by letter to the Secretary, E. B. Kingston Ltd., 145, London Road, Kingston-upon-Thames. 9799

THE ACME FLOORING & PAVING CO. (1904) LTD., River Road, Barkin, Essex, invite applications from gentlemen with personal established connection with Architects, Consulting and Civil Engineers, also Quantity Surveyors to represent them in the Midlands and the North, to sell Hardwood Block and Strip Flooring and to sell Factory Paving. Please write in confidence to the Managing Director, giving full history, past experience and terms of remuneration. 9796

Other Appointments Wanted

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

SENIOR QUANTITY SURVEYOR, 35, £1,200 per annum, willing to take on more responsibility, requires position where progress can be made. Box 9765.

STRUCTURAL ENGINEER with extensive experience of reinforced, precast and prestressed concrete and timber design and construction and soil investigation, in Britain and abroad, seeks association with architectural firm. Box 9793.

Services Offered

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

"DON" ARCHITECTURAL MODEL MAKERS. We offer the highest grade work with speed and reliability.—Please Phone Erith 3843 or Hastings 1366. 1673

THE SITE SURVEY COMPANY
Blackheath, S.E.3. Tel.: LEE Green 7444-5
Fully equipped to undertake urgent Engineering and Architectural surveys in any part of the country and abroad. Specialists in 3 in. scale detailed surveys for extensive city development areas. 1896

HIGH standard of workmanship, speed in execution at a competitive cost will be provided by Westdean Architectural Model Service. LEE Green 1748. 9623

LAND Surveys, Levelling and Contouring for Housing Schemes, Offices, Factories, Schools, etc. Also Measured Drawings of Buildings for conversion and extension.—Box 9645.

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. 9706

A.R.I.B.A. long and wide experience, offers any form of professional assistance to London Architects. Box 9570.

TUITION.—Studio Master and Practising Architect will coach students in the London/Home Counties area for all R.I.B.A. requirements, examination subjects, designs and thesis. Place and fees by arrangement. Lee Green 7506. 9779

For Sale and Wanted

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

MOTOR CAR TURN-TABLE. Avoids reversing, indispensable in limited spaces. Write for terms.—Oscar Chess, Limited, Port Talbot, Glam. 9567

FULL-SIZE DRAWING BOARD, 4 ft. 6-in. by 3 ft., with Straight Edge Pulleys and Tee Square. Perfect condition. £5 10s. 0d. Phone Mrs. Vockins, GROS. 4343 (day), PUTney 9589 (evenings). 9791

FOR SALE—Double Elephant Dyeline PHOTO-COPIER (Halden). Regularly serviced by manufacturer. £50 o.n.o. Telephone: Regent 5489. 9790

GRANT PHOTO-COPIER. Addressograph 600. Cowley Level, Nig Dyeline Machine. Royal 6644. 9789

Miscellaneous

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. 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.

ARCHITECTURAL METALWORK of all types supplied and fitted. Gates, doors, balustrades, staircases, steel structures. Design staff available.—Claydon & Bamber, Ltd., Carters Road, Waltham Abbey, Essex. 5883

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. 9429

“REFRIGERATION SIMPLIFIED” embracing an earlier book “Construct your own Refrigerator” revised and brought up to date. Deals with all aspects of Domestic, Commercial and Deep Freeze Refrigeration in language which the layman can understand. The only book of its kind. 10s. post free from:—Robert C. Scutt, 52, Hadley Way, London, N.21. 9680

TO LET—Suite of Offices on third floor in West End comprising three rooms. Rent £250 inclusive and share staff with another Architect. Box 9769.

Educational Announcements

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. 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./F.I.B.A., M./A.M.T.P.I., prepare Students by correspondence. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

R. I.B.A. Inter. and Final EXAMS. **TUITION, BY POST.**—C. W. BOX, F.R.I.B.A., 115, Gower Street, W.C.1. Tel.: EUS. 3906. 1942

COURSES for all R.I.B.A. EXAMS.

Postal tuition in History, Testimonies, Design, Calculations, Materials, Construction, Structures, Hygiene, Specifications, Professional Practice, etc. Also in general educational subjects.

ELLIS SCHOOL OF ARCHITECTURE

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A. 103B OLD BROMPTON RD., LONDON, S.W.7 and at Albany House, Worcester

The 'number seven' range also includes Gloss, Interior Flat and Eggshell.

You are invited to write for an illustrated

(free) catalogue of

BOOKS on architecture, planning,

and kindred subjects to *The Architectural*

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

BROAD-ACHESON
BLOCKS for
unvarying quality

PRODUCTION OF ALL SIZES NOW
CENTRALISED AT GREENWICH WORKS
BROAD & CO. LTD. PADDINGTON, W.2

MODELS
for Architects & Civil Engineers
by **John B. Thorp**
EST. 1883
98 GRAY'S INN ROAD, LONDON, W.C.1.
Tel.: HOLborn 1011

WHITE FACING BRICKS

(S. P. W. BRAND)

Telephone: BULwell 127-8237 B 9 • Telegrams: "Maclime", Bulwell, Nottingham

M. McCARTHY & SONS, LTD
BULWELL • NOTTINGHAM

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

TUCK IN THIS END

Alphabetical index to advertisers

	PAGE	CODE
Accrington Brick & Tile Co., Ltd.	104	0003
Acme Flooring & Paving Co. (1904) Ltd.	104	0004
Adhead Ratcliffe & Co., Ltd.	66	0009
Aero Research, Ltd.	29	0010
Anderson, D., & Son, Ltd.	70	0021
Architectural Press, Ltd.	94, 106	0086
Association of Vermiculite Exfoliators	31	0707
Avery & Co., Ltd.	95	0039

Banister, Walton & Co., Ltd.	42	0043
Bayliss, Jones & Bayliss, Ltd.	11	0960
Beves & Co., Ltd.	60	0706
Bigwood, Joshua & Son, Ltd.	97	0910
Bilston Foundries, Ltd.	23	0614
Boulton & Paul, Ltd.	73	0072
Bowater Sales Co., Ltd., The	46, 47	0074
Bovens Refractories, Ltd.	100	0616
Briggs, William, & Sons, Ltd.	41	0082
British Bitumen Emulsions, Ltd.	66	0739
British Constructional Steelwork Assoc.	85	0086
British Electrical Development Association	48	0088
British Insulated Callenders Cables, Ltd., The	90	0091
Broad & Co., Ltd.	108	0784
Brooks Ventilation Units, Ltd.	22	0110
Broughton Moor (Green Slate) Quarries, Ltd.	96	0111

Central Electricity Generating Board, The	99	0129
Chloride Batteries, Ltd.	45	0134
Colt Ventilation, Ltd.	3	0146
Colt, W. H. (London), Ltd.	32	0668
Costain, Richard, Ltd.	82	0157
Croghan & Co., Ltd.	62	0167
Crompton Parkinson, Ltd.	61	0168

Danks of Netherton, Ltd.	92	1026
Dorman Long (Steel), Ltd.	51	0186
Douglas, Robert M. (Contractors), Ltd.	18	0836
Durasteel, Ltd.	108	0196

Econa Products, Ltd.	95	0201
Ellis School of Architecture	108	0212
English Electric Co., Ltd.	16	0215
Engravers Guild, Ltd., The	98	
Esavian, Ltd.	87	0216
Evoide, Ltd.	5	0939
Expanded Metal Co., Ltd.	12	0219

Ferodo, Ltd.	76	0229
Finlay, Alex & Co., Ltd.	74	0233
Freeman, Joseph, & Sons, Ltd.	108	0244
Furse & Co., Ltd., W. J.	108	0248

Gardiner, Sons & Co., Ltd.	25	0249
Greenwood & Hughes, Ltd.	56	0630
Gyproc Products, Ltd.	4	0262
Gypsum Mines, Ltd.	101	0264
Gypsum Plasterboard Development Assoc.	24	0263

Hallam, Vic, Ltd.	68	0704
Harris & Sheldon, Ltd.	33	0976
Haskel, Robertson & Co., Ltd.	2	0277
Henderson, P. C., Ltd.	78	0284
Hills (West Bromwich), Ltd.	72	0292
Hollis Brothers, Ltd.	63	0295
Holoplast, Ltd.	49	0827
Hope, Henry & Sons, Ltd.	89	0302
Hume, Atkins & Co., Ltd.	91	0846

Ideal Boilers & Radiators, Ltd.	52, 53	0306
Imperial Chemical Industries, Ltd.	26	0309
Ioco, Ltd.	93	0317

Jones, T. C., & Co., Ltd.	19	0323
---------------------------	----	------

Kenyon & Sons, Ltd., Wm.	56	0705
Kerner, Greenwood & Co., Ltd.	13	0325

Laing, John, & Son, Ltd.	112	0333
Leaderflush, Ltd.	6	0336
Leyland & Sons, Ltd.	71	0803
Logical Fuel Storage Units, Ltd.	93	0325

McCarthy, M., & Sons, Ltd.	108	0361
M. K. Electric, Ltd.	8	0392
Mallinson, Wm., & Sons, Ltd.	79	0367
Manger, J., & Son, Ltd.	99	0369
Marley Concrete, Ltd.	88	0370
Marley Concrete (Cycle Shed)	95	0370
Marley Concrete (Garages)	104	0370
Mellor, Bromley & Co., Ltd.	111	0378
Merchant Adventurers, Ltd.	81	0379
Mitchell, Russell & Co., Ltd.	103	0391
Modular Concrete Co., Ltd.	30	0761
Montgomerie, Stobo & Co., Ltd.	15	0396
Morris, Singer Co., Ltd.	40	0399

Newall's Insulation Co., Ltd.	9	0409
Norris, C. W., Ltd.	100	0982

Olsson, Martin, & Sons, Ltd.	14	0422
------------------------------	----	------

Panelco (Gt. Britain), Ltd.	91	0424
Parsons, Thomas & Son, Ltd.	103	0698
Phoenix Timber Co., Ltd.	65	0934
Pierhead, Ltd.	38	0438
Pilchers, Ltd.	57	1001
Pilkington, Bros., Ltd.	20, 21	0818
Pilkington, Bros., Ltd.	86	0816
Pitman, Isaac & Sons, Ltd., Sir	103	1027
Potterton Division	84	0176

Quicktho (1928), Ltd.	69	0703
-----------------------	----	------

Ranalah Gates, Ltd.	62	0457
Rapid Floor Co., Ltd.	75	0459
Rawlings Brothers, Ltd.	2	0460
Rhodes Chains, Ltd.	104	0645
Riley, A. J., & Son, Ltd.	34	0734
Riley (I.C.) Products, Ltd.	39	0469
Rippers, Ltd.	58	0470
Robertson Thain	27	0473
Rome, William, Ltd.	102	1028
Rubberware, Ltd.	54	0478
Ruberoil Co., Ltd.	102	0479
Runnymede Rubber Co., Ltd.	83	0481
Ryjack Products, Ltd.	17	0483

Sankey, J. H., & Son, Ltd.	59	0492
Seaboard Lumber Sales Co., Ltd.	55	0496
Secomastic, Ltd.	108	0501
Sissons Brothers, Ltd.	101	0514
Smith, Thomas & Son, Ltd.	44	0521
Sound Control, Ltd.	50	0794
Steel Radiators, Ltd.	68	0530
Stott, James, Ltd.	77	0535
Surflex Flooring, Ltd.	90	0742

Templewood, Hawkesley, Ltd.	97	0892
Terradura Flooring Co., Ltd.	96	0546
Terresearch, Ltd.	102	1010
Thames Plywood Manuf., Ltd.	35	0677
Thorn, J., & Sons, Ltd.	37	0550
Thorp, John B.	108	0552
Tomo Trading Co., Ltd.	43	0653
Tretol, Ltd.	7	0558
Trussed Concrete Steel Co., Ltd.	80	0563

Walpamur Co., Ltd., The	10	0588
Ward & Co.	108	0589
Washington Engineering, Ltd.	67	0594
Wednesbury Tube Co., Ltd.	36	0599
Westland Engineers, Ltd.	92	0893
Wheatly & Co., Ltd.	28	0600
Wimpey, George, Asphalte	64	0986

Zinc Alloy Rustproofing Co., Ltd.	111	0610
-----------------------------------	-----	------

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property, Land and Sales, see 105, 106, 107, 108.

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 _____

E
4
8
4
8
1
8
6
27
6

93

57
59
60
45
34
69
70
73
28
78
79
81
83

492
496
501
514
521
794
530
535
742

892
546
010
077
550
552
653
558
563

588
589
594
599
893
600
986

0610



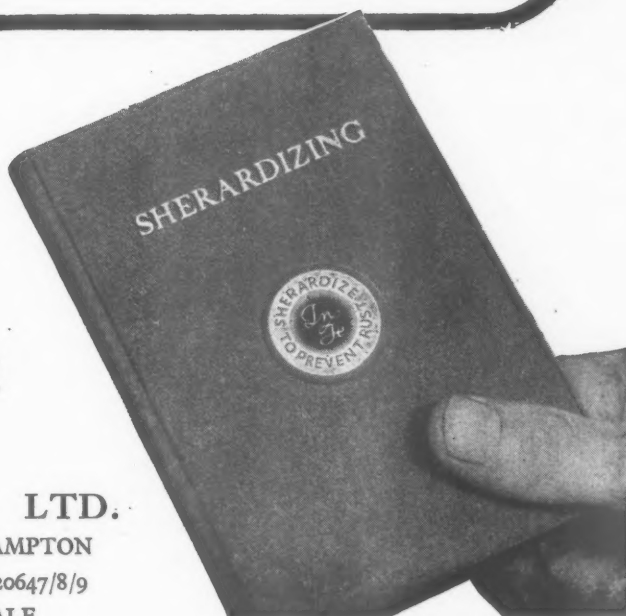
HE
EN



MEL

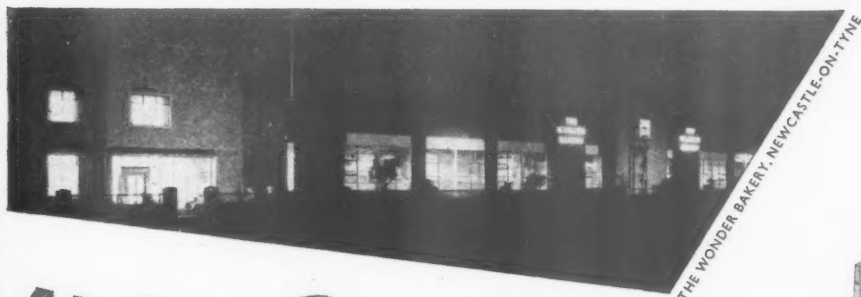
YOURS *for the Asking*

This book shows that maintenance considerations for the after-treatment or prevention of rust need not arise, where Sherardizing is specified. May we send you a copy together with a reprint of the Architects' Journal Information Sheet, reference Corrosion prevention 40 B1?



SHERARDIZING

**ZINC ALLOY
RUST-PROOFING CO. LTD.**
SHAKESPEARE STREET, WOLVERHAMPTON
TELEPHONE: WOLVERHAMPTON 20647/8/9
ALSO AT LONDON & ROCHDALE

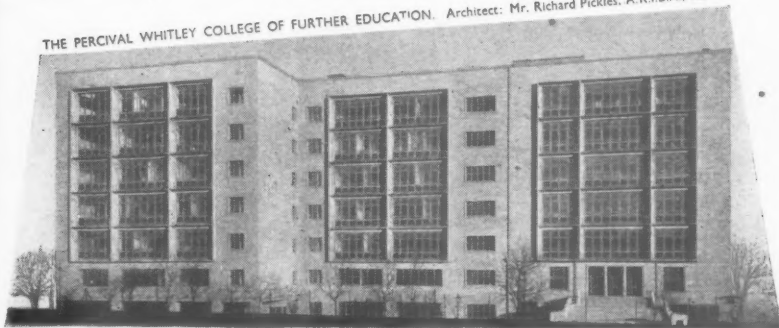


THE WONDER BAKERY, NEWCASTLE-ON-TYNE

Mellor Bromley

**HEATING, VENTILATING AND AIR CONDITIONING
ENGINEERS AND CONTRACTORS**

THE PERCIVAL WHITLEY COLLEGE OF FURTHER EDUCATION. Architect: Mr. Richard Pickles, A.R.I.B.A., Halifax



WOOL INDUSTRIES RESEARCH ASSOCIATION, TORRIDON, LEEDS
Consultants: Messrs. Rosser & Russell, Leeds

MELLOR BROMLEY (AIRCONDITIONING) LTD., BARKBY ROAD, LEICESTER (Member of the Bentley Group)

Telephone Leicester 66651 AC 28



Architects: Basil Spence and Partners

Progress at Coventry Cathedral

SUBSTANTIAL PROGRESS is being made on the superstructure for the new Cathedral Church of St. Michael, Coventry. The monumental outer walls, formed of massive blocks of pinky-grey Staffordshire sandstone, are steadily rising towards their eventual height of 80 feet. The stone mullions surrounding the lower panes of the curved baptistery window are already in place. Decorative carved stone slabs are being set in the internal walls. The historic craft of the masons will be complemented by the modern technique in constructing the copper-faced concrete shell roof and the lace-like concrete canopy which will overhang most of the 420-foot nave of the new cathedral.

LAING

Building and Civil Engineering Contractors

JOHN LAING AND SON LIMITED • GREAT BRITAIN • CANADA • UNION OF SOUTH AFRICA • RHODESIA

