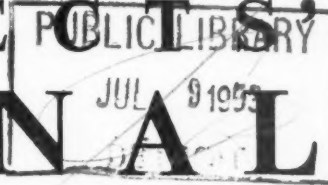


THE ARCHITECTS' JOURNAL



standard contents

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

NEWS and COMMENT

- Diary*
- News*
- Astragal's Notes and Topics*
- Letters*
- Societies and Institutions*

TECHNICAL SECTION

- Information Sheets*
- Information Centre*
- Current Technique*
- Questions and Answers*
- Prices*
- The Industry*

PHYSICAL PLANNING SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

*Architectural Appointments
Wanted and Vacant*

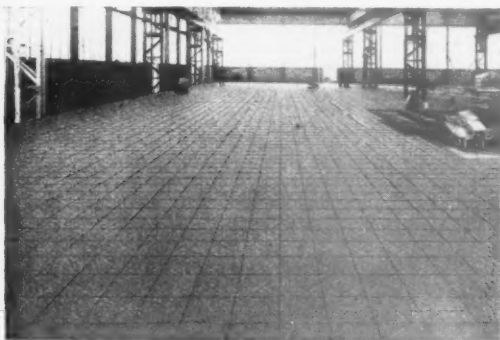
No. 3043] [Vol. 117
THE ARCHITECTURAL PRESS
9, 11 and 13, Queen Anne's Gate, Westminster,
S.W.1. 'Phone: Whitehall 0611

Price 1s. 0d.
Registered as a Newspaper.

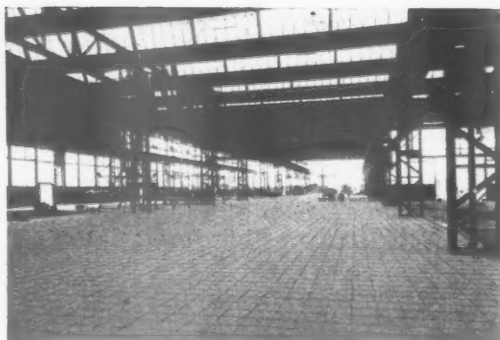
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

- IGE Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Sloane 8266
- IHVE Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. Sloane 3158/1601
- IIBD Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston 2450
- ILA Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783
- I of Arb Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071
- IOB Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176
- 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
- IWA Inland Waterways Association. 14, Great James' Street, W.C.2. Chancery 7718
- LIDC Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175
- LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891
- MARS Modern Architectural Research Group (English Branch of CIAM) Secretary: Gontran Goulden, Building Centre, 26, Store Street, W.C.1. Museum 5400
- MOA Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400
- MOE Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400
- MOH Ministry of Health. 23, Saville Row, W.1. Regent 8411
- MOHLG Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300
- MOLNS Ministry of Labour and National Service, 8, St. James' Square, S.W.1. Whitehall 6200
- MOS Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. 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. 37, Onslow Gardens, S.W.7. Kensington 8161
- NCBMP National Council of Building Material Producers, 10, Princes Street, S.W.1. Abbey 5111
- 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. 13, Suffolk St., S.W.1. Whitehall 1693
- NHBRC National House Builders Registration Council. 82, New Cavendish Street, W.1. Langham 4341
- NPL National Physical Laboratory. Head Office, Teddington Molesey 1380
- NSA National Sawmilling Association. 14, New Bridge Street, E.C.4. City 1476
- NSAS National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1. Abbey 1359
- 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. Edinburgh 20396
- RIBA Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721
- RICS Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322/9242
- RFAC Royal Fine Art Commission. 22A, Queen Anne's Gate, 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
- RSI Royal Sanitary Institute. 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
- SCR Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8. Western 1571
- 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 Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616
- SIA Society of Industrial Artists. 7, Woburn Square, W.C.1. Langham 1984
- 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 5051
- WDC War Damage Commission. 6, Carlton House Terrace, S.W.1. Whitehall 4341
- ZDA Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988

**YOU CAN
GET MORE WEAR
PER £**



A FERROGRAN FLAG FLOORS IN AN ALUMINIUM EXTRUSION MILL.



A LARGE AREA OF FERROGRAN FLAGS LAID IN A NEW ENGINEERING SHOP.

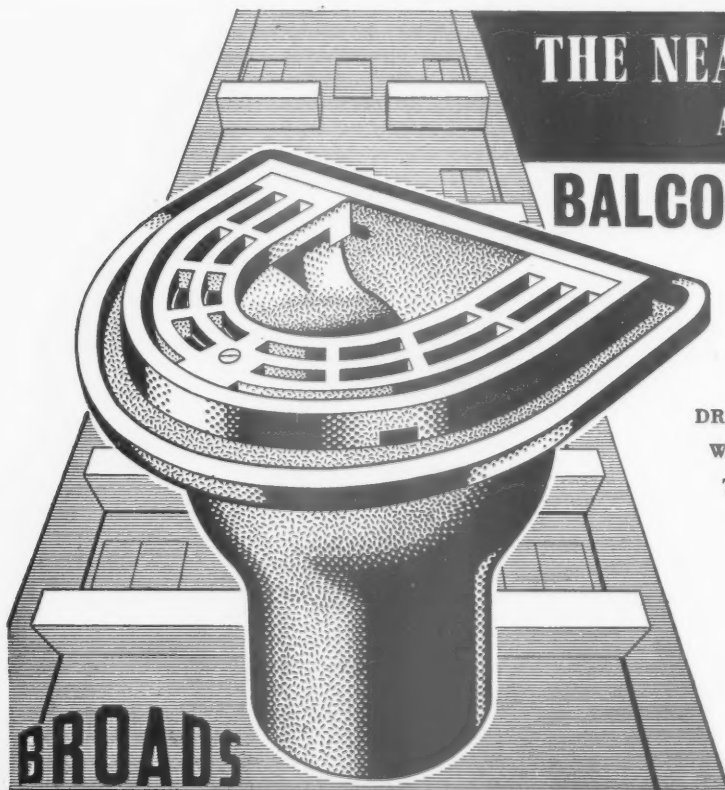
**BY USING FERROGRAN
STEEL FACED FLAGS FOR
YOUR FACTORY FLOORS**

- HEAD OFFICE • EAGLE WORKS WEDNESBURY
- TELEPHONE • WED · 0284 · 5 LINES
- LONDON OFFICE • ARTILLERY HOUSE · ARTILLERY ROW · LONDON · S.W.1.
- TELEPHONE • ABBEY · 3816 · 5 LINES

A Product of—



SPECIALISTS IN INDUSTRIAL FLOOR SURFACES FOR OVER A QUARTER OF A CENTURY



**THE NEAT AND SIMPLE
ANSWER TO
BALCONY DRAINAGE**

BROADS PATENT COMBINATION BALCONY DRAINAGE UNIT IS DESIGNED TO SIMPLIFY THE DRAINAGE OF BALCONIES THROUGH WHICH THE DOWN PIPE PASSES, THUS PROVIDING A NEAT AND UNOBTRUSIVE APPEARANCE.

Manufactured in various sizes to suit rain-water pipe.

(PATENT APPLIED FOR)

INFORMATION SHEET SENT ON REQUEST

BROADS

MANUFACTURING CO., LTD. 4 SOUTH WHARF, PADDINGTON, LONDON, W.2. TEL: PAD. 7061 (20 lines)

S

E

JURY

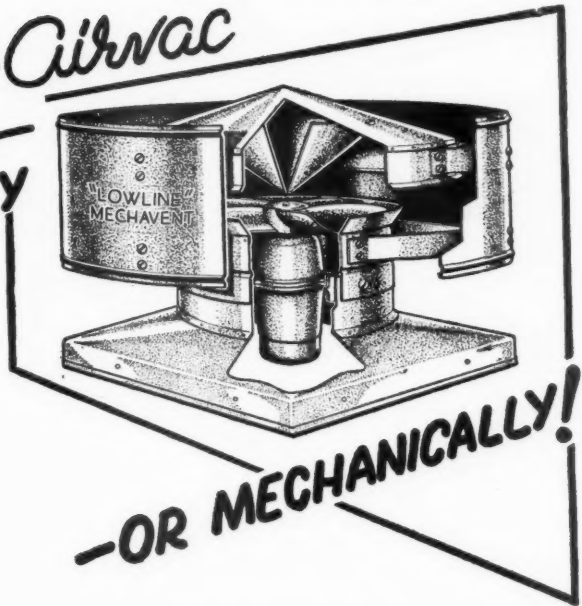
The
GRE
' LO
offer



The
for

G
DE S
B
CHA

Greenwood-Airvac
Ventilation -
NATURALLY



The
GREENWOOD-AIRVAC
'LOWLINE MECHAVENT'

offers these outstanding features:

- NATURAL OR MECHANICAL EXTRACTION AT THE TOUCH OF A SWITCH
- PERFORMS EFFICIENTLY IN BREEZE OR GALE
- CAPACITIES FROM 332 C.F.M. UPWARDS
- BASES TO SUIT FLAT, RIDGE OR SLOPING ROOFS

The 'LOWLINE MECHAVENT' Extractor forms yet another link in the chain of GREENWOOD-AIRVAC ventilating equipment for every application, including ductwork and kitchen canopies.

Send your ventilation problems to:

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD.
DESIGNERS AND MANUFACTURERS OF VENTILATING EQUIPMENT FOR BUILDINGS, VEHICLES AND VESSELS
BEACON HOUSE ● KINGSWAY ● LONDON W.C.2
CHANCERY 8135/67 "AIRVAC," LONDON

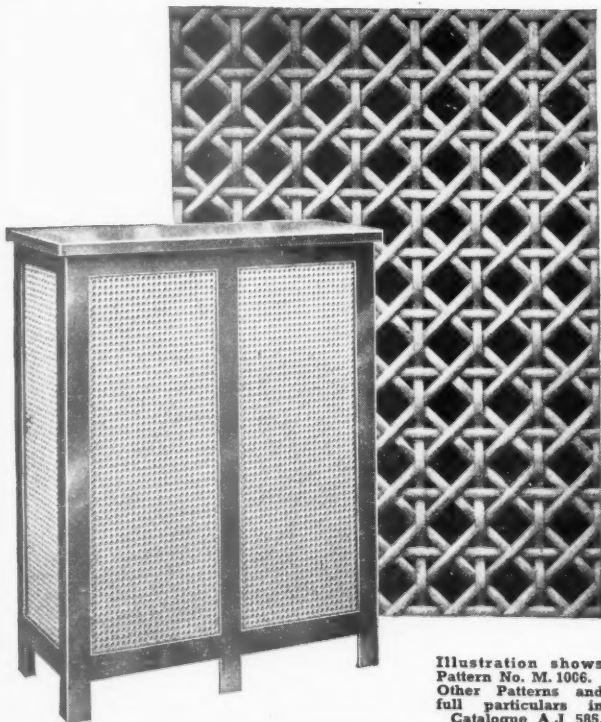


Illustration shows
Pattern No. M. 1006.
Other Patterns and
full particulars in
Catalogue A.J. 585.

HARCO PATENT METALACE

**PRODUCED IN ROLLS OF 25'
TO 100' LONG BY 2'11" WIDE.**

The artistic effect of Harco Patent Metalace renders it particularly suitable for use where care of design and appointment are of major importance. Architects will appreciate that it not only screens the unsightly, but allows free circulation of air. The patterns in which Metalace can be woven, make it the perfect selection for Lift Shaft Enclosures, Ventilating Panels, Radiator Covers, Electric Heater Covers, etc.

Harvey

G. A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7

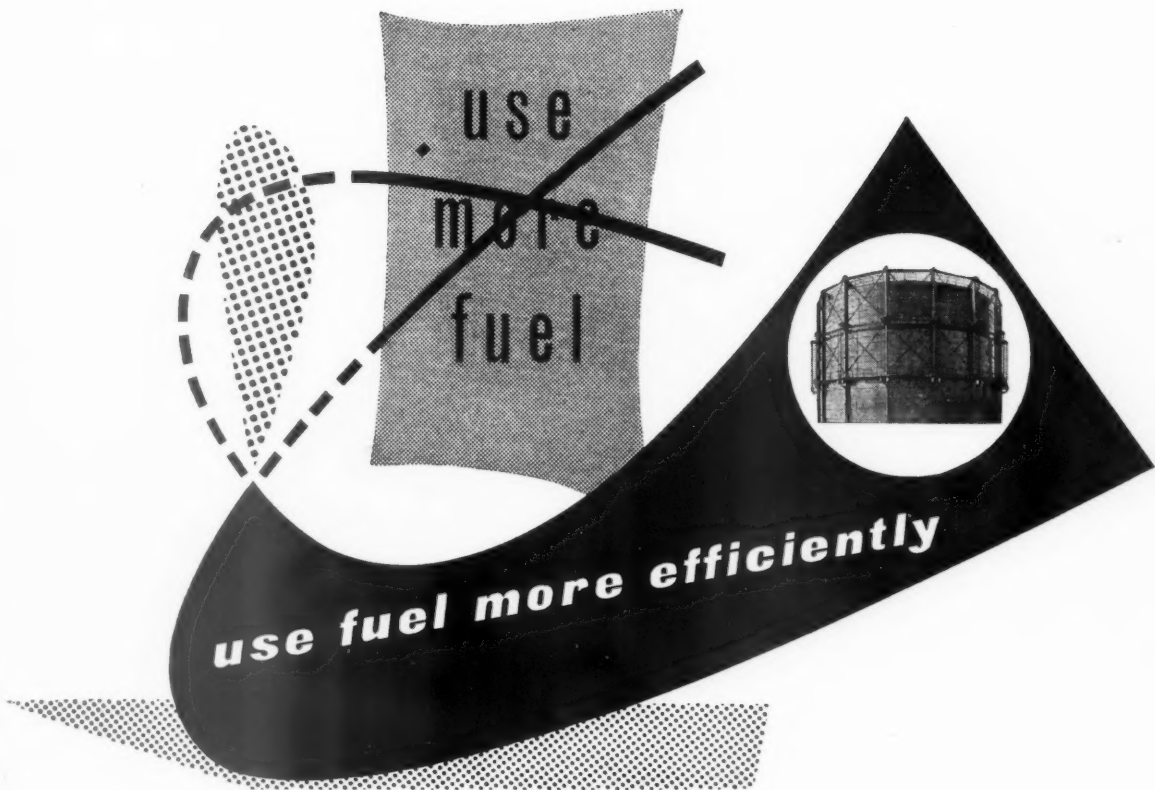


Getting **THE RIGHT ANGLE...**

The sweeping lines of modern architecture call for a new approach to structural steelwork design and fabrication if strength is not to be sacrificed for appearance sake. The Horseley Group has experienced nearly two centuries of adaptation to "new" conceptions both in industrial and civil development so that the meeting of the most revolutionary constructional ideas comes as a second nature.

The **HORSELEY**
Group

HORSELEY BRIDGE AND THOMAS PIGGOTT LTD., TIPTON, STAFFS.
CARTER-HORSELEY (ENGINEERS) LTD. WADDON, CROYDON, SURREY
AND ASSOCIATED COMPANIES



Cut-throat salesmanship has little relevance to present day publicity for a fuel industry. If there is to be any possibility of achieving the improved standards of heating visualised in post-war building studies and reports, the resources of each fuel industry must be used to solve those parts of the total problem of fuel usage to which they can make the most effective contribution.

The recommended uses of Gas in the domestic field are clear cut. It is normally complementary to solid fuel for general winter space heating and water heating, representing the greatest economy in fuel when used for supplementary and intermittent space heating, summer water heating, all-the-year-round cooking, clothes washing and drying, and refrigeration. Used for these purposes it makes the most efficient use of the coal required to produce it.

When it comes to larger buildings, the choice of fuel is inevitably decided to a greater or lesser extent by such factors as: the number of hours a day, and days a week, for which heating is required; the flexibility of control required; the amount of space available for fuel storage; and the importance which is attached to the question of labour-saving.

But, whether it is the heating of individual houses or large public buildings, Gas and Coke have their parts to play and the Gas Industry is anxious to co-operate to the full with those who desire to find the best way of achieving improved standards of heating with the most economical use of basic fuel resources.

Where to go for information about Gas

If you are considering the use of Gas, however tentatively, your first move should be to get in touch with the Gas Undertaking serving the area in which the job is situated. Through it you have access to the combined technical resources of the entire Gas Industry. The following list gives the addresses and telephone numbers of the Area Boards. Where there is any uncertainty as to which Area Board is concerned, The Gas Council will be pleased to give you the correct address.

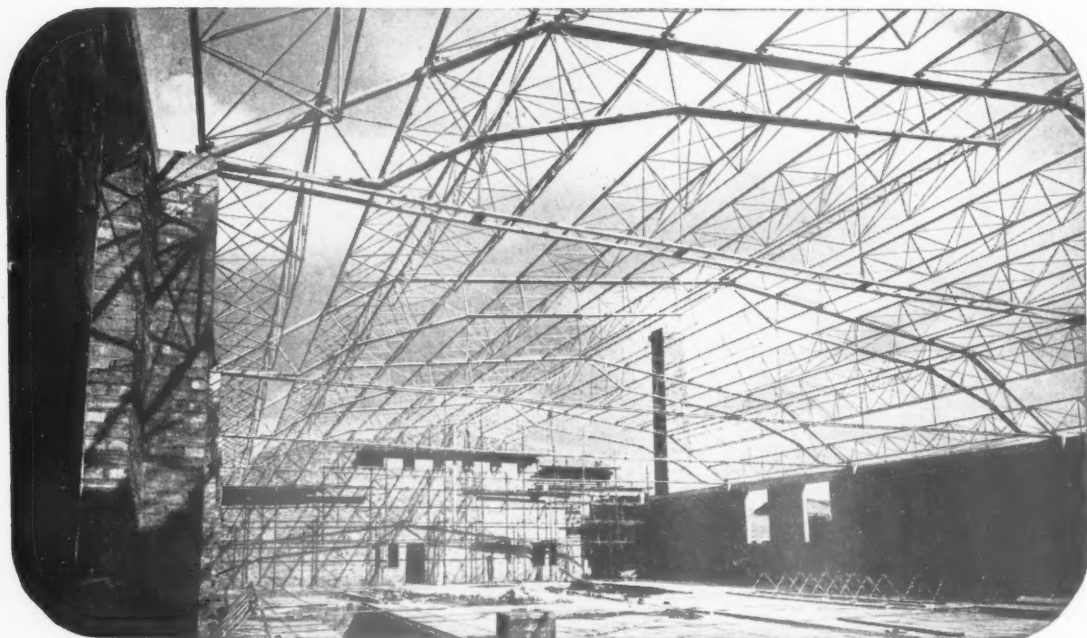
Scottish Gas Board: 26, Drumsheugh Gardens, Edinburgh, 3. Edinburgh 34331/5. *Northern Gas Board:* 30, Grainger Street, Newcastle-upon-Tyne, 1. Newcastle-upon-Tyne 26101. *North Western Gas Board:* Bridgewater House, 60, Whitworth Street, Manchester, 1. Manchester Central 8121. *North Eastern Gas Board:* Bridge Street, Leeds, 2. Leeds 32571/8. *East Midlands Gas Board:* Beverley House, University Road, Leicester. Leicester 23201/5. *West Midlands Gas Board:* 6, Augustus Road, Edgbaston, Birmingham, 15. Edgbaston 3616. *Wales Gas Board:* 1 and 2, Windsor Place, Cardiff. Cardiff 28621. *Eastern Gas Board:* 2, The Abbey Garden, London, S.W.1. Trafalgar 5373/7. *North Thames Gas Board:* 30, Kensington Church Street, London, W.8. Western 8141. *South Eastern Gas Board:* Katharine Street, Croydon, Surrey. Croydon 4466. *Southern Gas Board:* 164, Above Bar, Southampton. Southampton 76362. *South Western Gas Board:* 9a, Quiet Street, Bath. Bath 60411/5.

Issued by The Gas Council, 1 Grosvenor Place, London, S.W.1.

Telephone: Sloane 4554

WELDED TUBULAR CONSTRUCTION

-by the originators of tubular scaffolding!



WESTFIELD AUTO CAR COMPANY NEW WORKSHOPS

Architects : Messrs. Cairns & Ford, F.R.I.B.A.

Welded tubular construction does the job with less steel, skilful design saving up to 60%. Its clean modern appearance pleases the eye of the architect. The simple shapes which arise from the method of construction are easy to protect against corrosion.

SCAFFOLDING (GREAT BRITAIN) LTD.
MITCHAM SURREY

Telephone : MITCHAM 3400 (18 LINES)

Telegrams : SCAFCO, MITCHAM

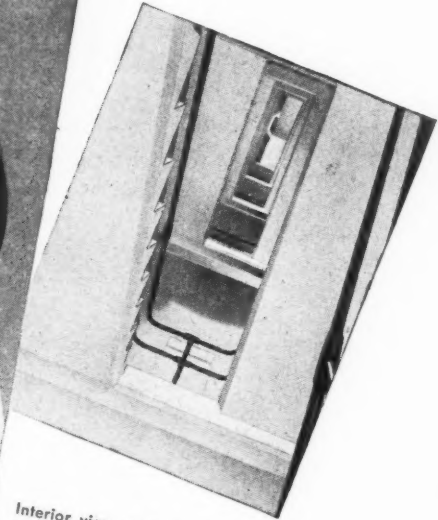
Branches at : ABERDEEN • BIRMINGHAM • BOURNEMOUTH • BRIGHTON • BRISTOL
CAMBRIDGE • CARDIFF • DOVER • DUBLIN • DUNDEE • EDINBURGH • EXETER
GLASGOW • HULL • LEEDS • LIVERPOOL • MANCHESTER • NEWCASTLE • NOTTINGHAM
OXFORD • PLYMOUTH • PORTSMOUTH • SOUTHAMPTON • STOKE-ON-TRENT • SWANSEA



SGB Welded Structures Division

FROM THE SNOWCEM FILE:—

**Willow Brook Water Tower,
Corby, Northants.**



Interior view of tower showing the light-reflecting properties of SNOWCEM.

Built with Blue Circle cement for the Mid-Northants Water Board, this reinforced concrete tower was finished with two coats of Snowcem inside and out. Cream Snowcem was chosen for the outside of the tank, the access shaft and columns being finished in silver grey.

Contractors: CONCRETE STRUCTURES LTD., SLOUGH.

SNOWCEM is easily applied to concrete, cement rendering or suitable brickwork by brush or spray. In seven colours: White, Cream, Deep Cream, Buff, Pink, Silver Grey and Duck Egg Green. Our Technical Department is at your service

SNOWCEM WATERPROOF
CEMENT PAINT

Decorates and protects at LOW cost

BRITISH CEMENT IS THE CHEAPEST IN THE WORLD



ith
the
ex-
gs in
bright
quired.

This watery
does not brush, peel or flake off

THE CEMENT MARKETING COMPANY LIMITED
Portland House, Tothill Street, London, S.W.1
or G. & T. EARLE LTD., CEMENT MANUFACTURERS, HULL.
THE SOUTH WALES PORTLAND CEMENT & LIME Co. Ltd.,
Penarth, Glam.

Architects... VESPASIAN
A.D. 70
...DOMITIAN
A.D. 82

Building Contractor ... ?



... who built the Colosseum

The Colosseum, designed by Titus and Vespasian for the site of Nero's "Golden House," still dominates Rome as it did in the 2nd Century A.D. Although the vast arena is now silent, the amphitheatre still stands as a magnificent symbol of a proud civilisation. There is no record now of the thousands who must have laboured to perfect it—only the superb evidence of their efforts remains. A similar devotion and skill is obvious in our own time in the work of Townsons the Builders, who bring alive and perpetuate the dreams of the architect of today.

HIGHER SWAN LANE
BOLTON

Telephone: Bolton 1840/4

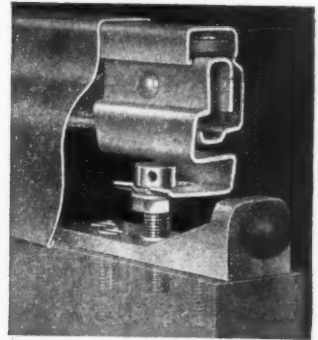
WILLIAM
TOWNSON
AND SONS LIMITED

ELLARD

SLIDING DOOR GEAR ESTATE FOR INTERNAL DOORS



ELLARD "Estate" Sliding Door Gear has again been specified for a large housing estate. The photograph on the left shows an interior of a typical two-bedroom type house on the People's Houses Estate, Canterbury, Kent. ELLARD "Estate" Sliding Door Gear combines smooth effortless action with pleasing appearance, and offers maximum economy in use of space.



An exclusive "snap-on" pelmet conceals all fittings and will harmonize with picture rail or panelled effect. ELLARD gear is approved by the L.C.C. and is stocked by hardware firms throughout the British Isles and in many countries overseas.

RADIAL FOR THE DOMESTIC GARAGE

For easy access and efficient action, garage doors should be fitted with ELLARD "Radial" Sliding Door Gear. The illustration on right shows a typical domestic garage with sliding doors running on ELLARD "Radial" Door Gear. Excellence of design, incorporating grease packed ball bearings with no maintenance worries, make this door gear an inevitable choice wherever garage sliding doors are indicated. Doors are allowed to pass around one or both of the side walls. ELLARD "Radial" Sliding Door Gear is also eminently suitable for use in most light industrial buildings.



ELLARD Sliding Door Gear has been specified for flats and housing schemes by: London County Council; Canterbury and Peterborough Corporations; Eston, Mexborough, Rushden, Sawbridgeworth and Wellingborough U.D.C.s; Easington and Sedgfield R.D.C.s; and for British Railways Housing Estate, Southall; Coronation Bungalows, South Shields; Kytes Settlement Estate, Watford; Newton Aycliffe and Stevenage New Towns.

WRITE FOR FULL DETAILS:

CLARKE ELLARD ENGINEERING CO. LTD.

SEE OUR EXHIBITS AT THE BUILDING CENTRE, 26 STORE STREET, LONDON, W.C.1
and THE SCOTTISH BUILDING CENTRE, 425-427 SAUCHIEHALL STREET, GLASGOW, C.2

Works Road,
Letchworth,
Herts. Tel. 613/4



No. 2. THE WEAVER BIRD.

Travellers in South Africa often come across what looks like a native hut at a distance. A closer scrutiny reveals that the hut is really anything from a hundred to two hundred birds' nests all joined together, and formed of finely woven grass.

These huge colonies of nests are built by the social, or gregarious, weaver bird. The woven grass is skilfully reinforced with twigs, and a good nest should last year after year with only a few minor repairs being necessary.

There are, however, other kinds of weaver birds whose nests are not quite so spectacular in appearance but

who nevertheless build their homes with a deft skill which it would be difficult to match.

Tendrils and very fine roots are taken and woven securely together and a strong rope is made to attach the nest to the bough. This rope opens out into a globe-shaped chamber which terminates in a tube, several inches long, through which the birds come and go.

The finished nest looks rather like an inverted chemist's retort and the ingenious little builder cunningly places a bar across the entrance to prevent the eggs falling out.

THOMAS BLACKBURN & SONS LTD.

PRESTON · LANCASHIRE

London Office Address : 8 Bloomsbury Square, W.C. 1 Tel. : Holborn 8638

Fabricators in Steel · Constructional Steelwork · Iron Castings · Railings and Gates
Metal Windows · Farm Implements

Z

ill

n
ch
a
e,
ld

's
es

•

es

■





“Keep the Rome fires burning,” ordered Nero

“We must have the fieriest furnaces of all time if we’re going to prevent production from declining and falling. But I wish I hadn’t to fiddle about with these old-fashioned fuels—they’re neither safe nor efficient. We’re just

playing with fire. If only I had oil fuel to work with and—Shell-Mex and BP to tell me how best to use it! It peeves me to think that those backward Britons are going to have the last word in industrial heating.”



CONTROLLED HEAT WITH OIL FUEL



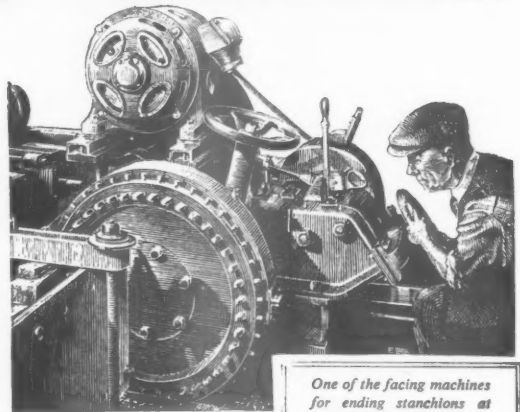
INDUSTRIAL SERVICE



**Musicians
all!**



We too are musicians "Wherever there is order and proportion, there is music" said Sir Thomas Browne . . . and most certainly order and proportion are the keynotes of all good engineers.



One of the facing machines for ending stanchions at Banister, Walton's works at Trafford Park, Manchester.

Banister, Walton build in steel

LONDON, S.W.1.—82 Victoria Street.

MANCHESTER 17.—Trafford Park.

BIRMINGHAM 18.—61-63 Western Road.



MYTON

PERMANENT HOUSES IN THE NEW TRADITION

The Myton New Traditional House is the result of a building technique which effects a considerable saving of scarce materials and site labour, yet maintains the aesthetic appeal of the best traditional architecture. Enquiries are invited for specifications, bills of quantities and plans.

MYTON LIMITED, Building and Civil Engineering Contractors

HEAD OFFICE: Newland, HULL. Branches at LONDON, BIRMINGHAM and SUNDERLAND

DUCTUBE

and now

DRAINAGE-

6"
9"
12"

SURFACE WATER DRAINAGE

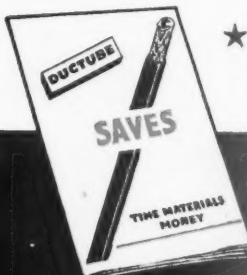
The first occasion on which 6" "Ductube" was used for surface water drainage in concrete haunching, was at St. John's Hill, Shaftesbury, by the Roads and Bridges Department of the Dorset County Council.

"Ductube" Pneumatic Tubing, the most economical method of forming ducts in concrete, is now available in the following diameters:— $\frac{1}{2}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ", 1 $\frac{3}{4}$ ", 2", 2 $\frac{1}{2}$ ", 3", 3 $\frac{1}{2}$ ", 4", 5", 6", 7", 8", 9", and 12", and CONTI-DUCT from 12" to 48"

A free brochure "DUCTUBE SAVES" will be sent on request.

★ CERTAIN DIAMETERS OF "DUCTUBE" CAN NOW BE HIRED

Photograph by courtesy of J. J. Leeming, Esq., B.Sc., M.I.C.E., M.I.Struct.E. County Surveyor.

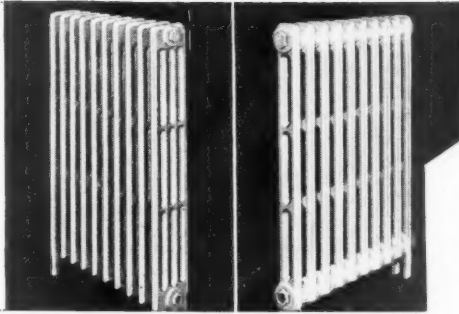


DUCTUBE Company Limited

REGENT HOUSE · 235-241 REGENT ST · LONDON · W-1

Telephone REGENT 2592/3/4

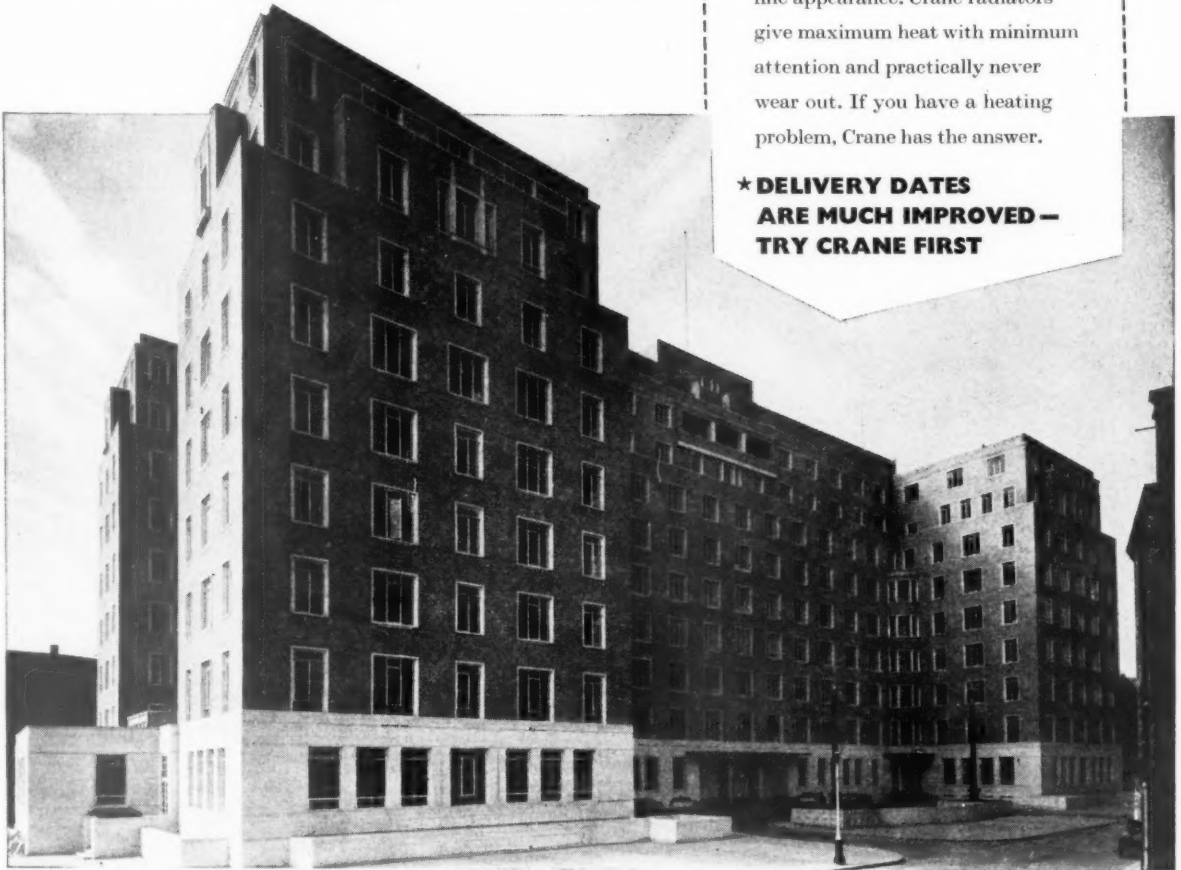
The Crane Pall Mall radiator, fitted in the British Electricity Authority offices, is a most adaptable design. It is available in either 2, 4 or 6 columns, with four different heights and can be stood on the floor or fitted on wall brackets. Its graceful lines look well in either contemporary or period interiors.



This fine new office block of the British Electricity Authority in London is heated throughout by Crane cast iron radiators—800 of which have been installed together with Crane valves and malleable iron fittings. The approval of Crane radiators, indicated by such large contracts as this, is due to their durability, scientific design and fine appearance. Crane radiators give maximum heat with minimum attention and practically never wear out. If you have a heating problem, Crane has the answer.

**★ DELIVERY DATES
ARE MUCH IMPROVED—
TRY CRANE FIRST**

Once again, radiators by Crane...



Acknowledgements: Heating Engineers: Z. D. Berry & Sons Ltd., Westminster, S.W.1. Architects: W. Curtis Green, R. A., Son & Lloyd. General Contractors: Sir Robert McAlpine & Sons Ltd., London, W.1.

CRANE BOILERS, RADIATORS, VALVES AND FITTINGS

CRANE LTD., 45-51 LEMAN STREET, LONDON, E.1. WORKS: IPSWICH

BRANCHES: BIRMINGHAM, BRENTFORD, BRISTOL, GLASGOW, MANCHESTER.

B.5.

BIGWOOD

COAL & COKE STOKERS

During a period of over twenty years, the Technicians and Engineers of Joshua Bigwood & Son Ltd. have progressively developed a range of Mechanical Stokers. Each passing year has augmented their experience of fuels and of application to different types of boiler. Each year has seen improvements in manufacturing methods and enlargement of their manufacturing plant.

Even during the war years progress continued, indeed was accelerated, with the successful solution of the many problems of Industrial Furnace firing which were encountered during that period.

CONFIDENCE may therefore be placed in the robust design, accurate manufacture, skilful application and maintenance in service of BIGWOOD Coal and Coke Stokers.

UNICALOR

UNDERFEED

COAL STOKERS

MAGNACALOR

(NO WEARING PARTS)

COKE STOKERS

JOSHUA BIGWOOD & SON LIMITED

Head Office: WEDNESFIELD ROAD · WOLVERHAMPTON

Telephone: 24771

NORTH-EAST. B. Peace, 54 Benomley Crescent, Almondbury, Huddersfield. (Tel. No. Huddersfield 2035)

NORTH-WEST. W. E. Bradley, 5 Higher Downs, Altrincham, Cheshire. (Tel. No. Altrincham 2165)

WEST MIDLANDS. E. Edwards, 'Fairwood,' Eveson Road, Norton, Stourbridge. (Tel. No. Stourbridge 5583)

EAST MIDLANDS. R. L. MacGregor, 88 Westcotes Drive, Leicester. (Tel. No. Leicester 65372)

LONDON. H. C. Williams, 41/42 Parliament Street, London, S.W.1. (Tel. No. Whitehall 0748)

SOUTH-WEST. H. L. Boome, 'The Ridge,' North Road, Bath. (Tel. No. Bath 2545)

SCOTLAND. J. Paton, Smail Sons & Co. Ltd., 62 Robertson Street, Glasgow C.2. (Tel. No. Glasgow Central 0421)

IRELAND. P. J. Casey, 38 The Rise, Mount Merrion, County Dublin. (Tel. No. Dublin 82587)



Listen!

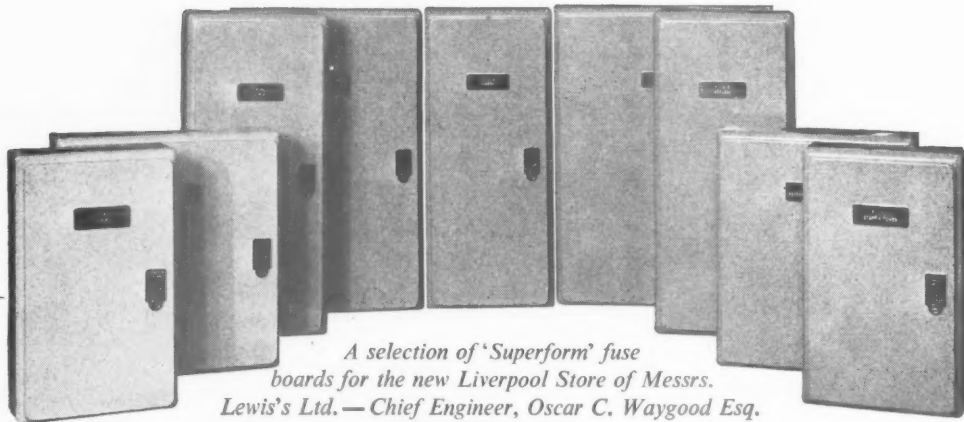
Knock two clay roofing tiles together and they will speak for themselves. The metallic ring tells of a series of carefully controlled operations satisfactorily completed. Listen, and you will hear a promise of long and honourable service—a promise which has been faithfully kept for centuries.

The 'Ring of Truth' speaks volumes for
Clay Roofing Tiles

"The Clay Tile Bulletin", published quarterly, post free on request.
Issued by The National Federation of Clay Industries, Drayton House, W.C.1

'SUPERFORM'

Distribution Fuse Boards



A selection of 'Superform' fuse boards for the new Liverpool Store of Messrs. Lewis's Ltd. — Chief Engineer, Oscar C. Waygood Esq. O.B.E., M.I.E.E.

'ENGLISH ELECTRIC' takes the lead in distribution fuse board design with the introduction of the new 'Superform' range.

Smooth in contour and with no external projections, the 'Superform' fuse board has spring-loaded door fitted with resilient grommet and the door catch (cylinder lock optional) is push-button operated.

This new range is specially suitable for hospitals, stores, hotels, laboratories, schools and similar buildings.

Write today for descriptive publication FG/125 direct to Fusegear Works.

'ENGLISH ELECTRIC'

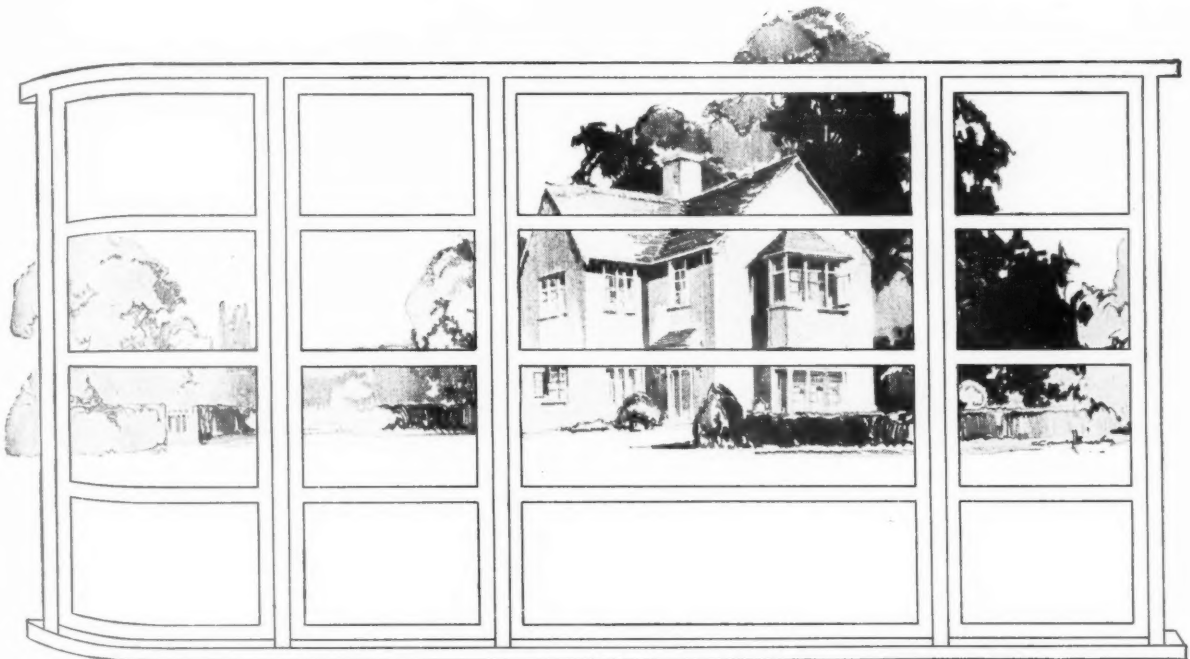
fusegear

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

Fusegear Works, East Lancashire Road, Liverpool, 10

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

We can deliver from stock to
your site most—if not all—types
of window frames you are
likely to need. Please write to
us for full particulars of the
standard house joinery.



Midland Woodworking

→ Standard Joinery where you want it, when you want it

THE MIDLAND WOODWORKING COMPANY LIMITED, MELTON MOWBRAY.
C.R.C. 15

Fine building stone was quarried at Ketton before 1594, the date of this legal document which bears the Great Seal of the first Queen Elizabeth. The document relates to the one-time ownership of a part of the Ketton estate now the property of this company which today still quarries Ketton Freestone and makes Ketton Portland Cement



KETTON PORTLAND CEMENT CO. LTD

KETTON, NR. STAMFORD. Lincs.

SOLE DISTRIBUTORS · THOS. W. WARD LTD · SHEFFIELD

WHEATLY

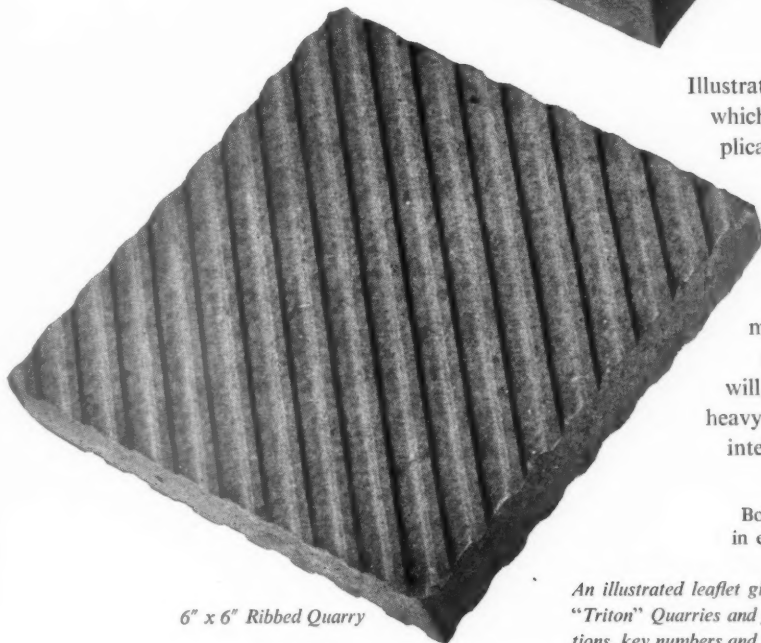


triton QUARRIES

*for high performance floors
under all conditions —*



9" x 4½" Shot-faced Quarry



6" x 6" Ribbed Quarry

Illustrated are two non-slip Quarries which have a wide range of application, particularly in industry.

The ribbed pattern is ideally suited for floors where water has to be drained away since the grooves provide ready-made conduits to channels and drains. The shot-faced quarry will give high performance under heavy traffic conditions but is not intended to stand up to trucking with iron-shod wheels.

Both patterns made specially to order in either Red or Russet Brown colour.

An illustrated leaflet giving full details of the wide range of "Triton" Quarries and fittings, together with correct descriptions, key numbers and principal dimensions is freely available on request.

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

WHEATLY & COMPANY LIMITED

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

W.H. 58



1. MANUFACTURE

We make steel. Our steel plants supply sections for our own constructional departments and can vary rolling programmes to meet special needs for urgent contracts.

3. FABRICATION

We fabricate for either riveted or welded construction using the most up-to-date plant and equipment. Special attention has been given to developments in welded Portal Frame buildings and the company has carried out many contracts of this type.



Cargo

Fleet



fold service in steel



2. DESIGN

We are designers of all types of structural steelwork and offer an advisory service available to all. Broad Flange Beams, used in much of our design, reduce costs and weight of metal.

4. ERECTION

We employ our own Erection Staff—hand-picked men with reputations for speed and efficient work who are available for quick and economic erection of structures in any part of the Country.



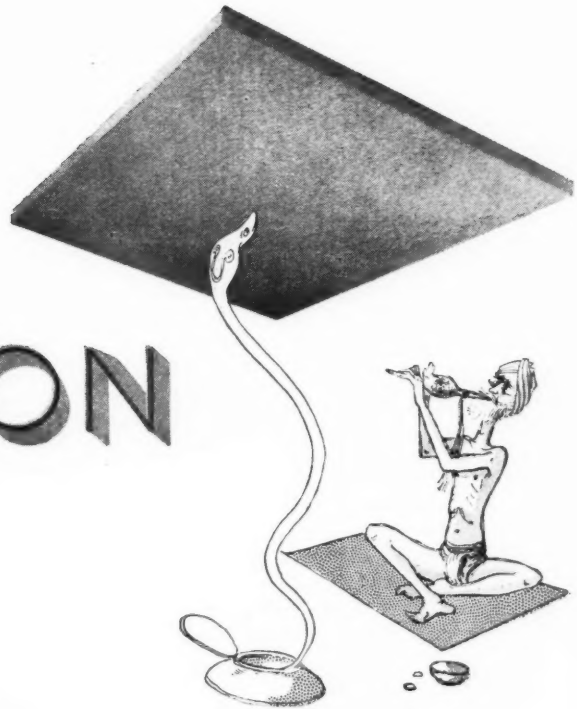
* 4 fold . . . FOUR SERVICES IN ONE . . . manufacture, design, fabrication and erection. At Cargo Fleet every phase of structural steelwork is effected within the resources of our own organisation. Four specialist departments contribute to the contract as a whole, but over all, there is top-level supervision which plans progress and ensures that work goes smoothly. In this way, handling costs are kept to a minimum, design is economical and steel gets to the site on time. If you consider "4 fold service" offers advantages, then contact Cargo Fleet for your next requirements in structural steel.

Cargo Fleet Iron Co. Ltd.

Central Constructional Office:
Malleable Works, Stockton-on-Tees.
Tel: Stockton-on-Tees 66117.

INSULATION

and no more?



Not such a very common requirement, all by itself. As a rule, there are other important factors to be borne in mind; and with "Asbestolux" it is often possible to cover them completely, as well as the need for thermal insulation. "Asbestolux" is incombustible, for example, and never deteriorates. It is highly resistant to acids, steam, humidity, rot, fungi and insects. It is light and exceptionally easy to work: it can be nailed without cracking; it stands up well to

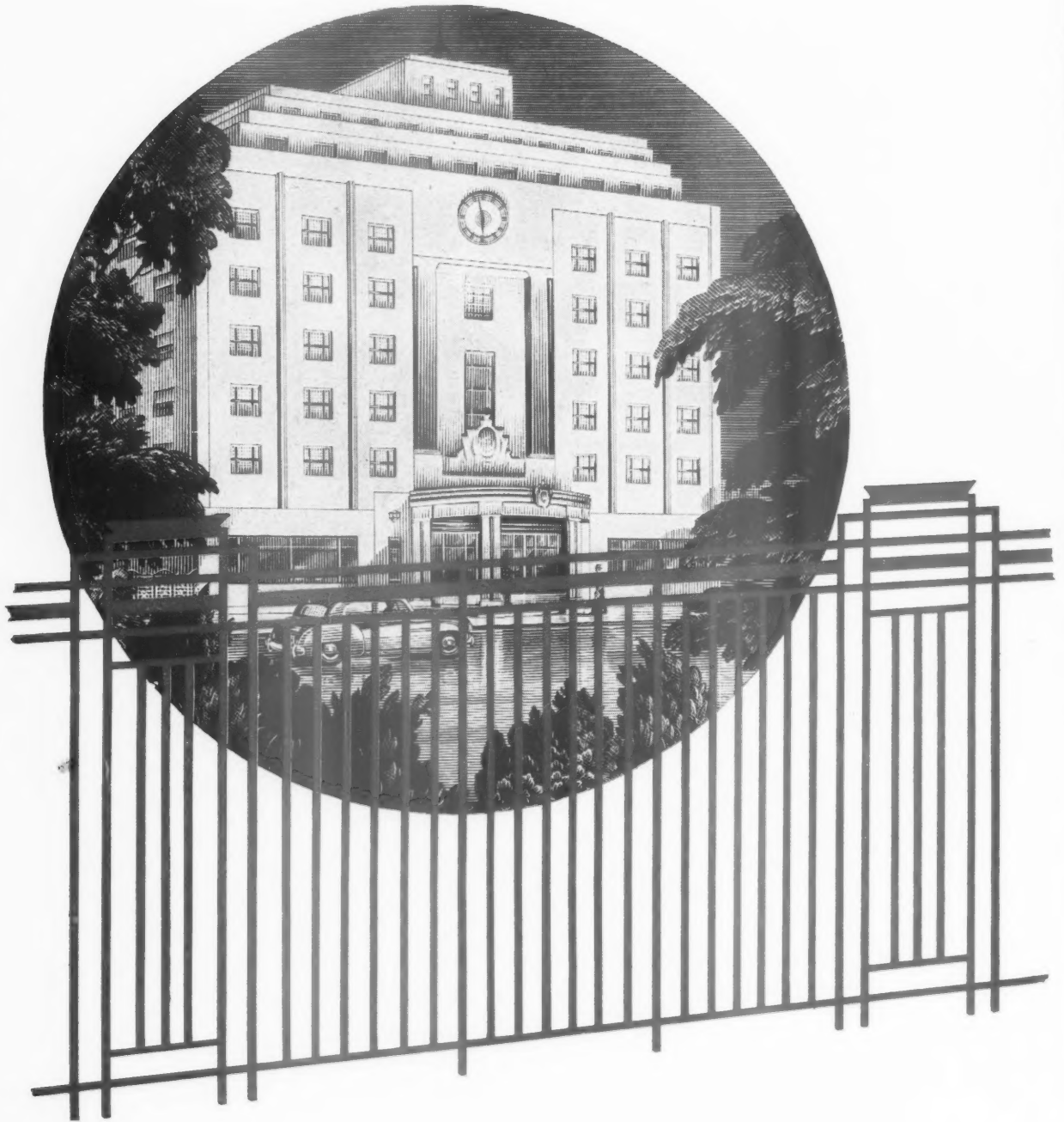
handling; and it will not swell or twist. This combination of properties springs, partly, from the type of asbestos used — the uniquely long-fibred Amosite, from the Cape Asbestos Co. Ltd's own mines — which gives it an open cellular structure otherwise impossible to achieve. Another reason is the special high-pressure steam-curing process to which it is subjected. "Asbestolux" is, in fact, worth knowing all about. May we send you details?

ASBESTOLUX **INCOMBUSTIBLE INSULATION BOARD**

THE CAPE ASBESTOS COMPANY LIMITED
 114-116 Park Street, London, W.1. Tel: GROsvenor 6022



V.A. 6186



Railings round an office block. Balustrades to
grace a staircase. Gates to dignify a forecourt.



BAYLISS, JONES & BAYLISS LIMITED

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

£60 million project roofed with



When these Large Hot and Cold Strip Mills (revolutionary in design and layout) were constructed by The Steel Company of Wales Ltd., the roof presented many difficult and unusual problems.

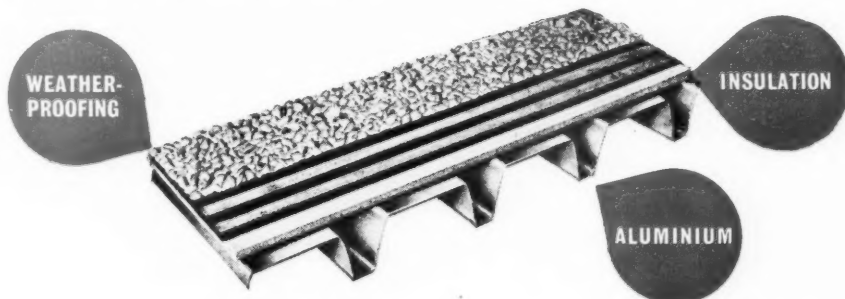
It had to protect valuable machinery indefinitely against all weathers, and yet be free from maintenance. It had to be quickly erected, light in weight yet strong, rigid yet ductile. It had to

provide high thermal insulation and a clean attractive ceiling.

Bitumetal Roofing fulfilled all these exacting requirements.

To-day so many architects are specifying this modern, efficient method of roof construction that it has rapidly become an accepted building principle.

Please ask our nearest Resident Manager for the latest information about Bitumetal.



WILLIAM BRIGGS & SONS LTD., Vauxhall Grove, London, S.W.8. Regd. Office: DUNDEE

ABERDEEN BEDFORD ROAD NORWICH TROWSE MILLGATE LIVERPOOL KIRKBY TRADING ESTATE LEICESTER BELGRAVE ROAD STATION
GLASGOW 200 OLD DUMBARTON ROAD BRISTOL STILLHOUSE LANE, BEDMINSTER EDINBURGH MURRAYFIELD STATION

For *everything* to do with **ROOFS** in *every* part of the kingdom



**INDUSTRIAL
ENGINEERING**
LIMITED

Industrial Engineering Limited—Sheeters, Glaziers and Roof Waterproofing Engineers — specialise in the maintenance, repair, waterproofing and reconstruction of all types of industrial roofs.

British Railways, Government Departments, Nationalised Industries, principal Industrial Undertakings and Factories, and Architects enjoy the co-operation of Industrial Engineering Limited, who are pleased to survey and estimate throughout Great Britain, without cost, for the repair, reconstruction and waterproofing of industrial roofs by the MASTICON Process.

Head Office:

MELLIER HOUSE, ALBE MARLE ST., LONDON, W.1 (HYDe Park 1411)

Branch Offices:

BRISTOL, WOLVERHAMPTON, MANCHESTER, BELFAST, CARDIFF, SHEFFIELD, GLASGOW, KETTERING, DUBLIN, NEWCASTLE-ON-TYNE, BIRMINGHAM, HALIFAX



BY APPOINTMENT
BRICKMAKERS TO
THE LATE
KING GEORGE VI

MORE KILNS- MORE BRICKS

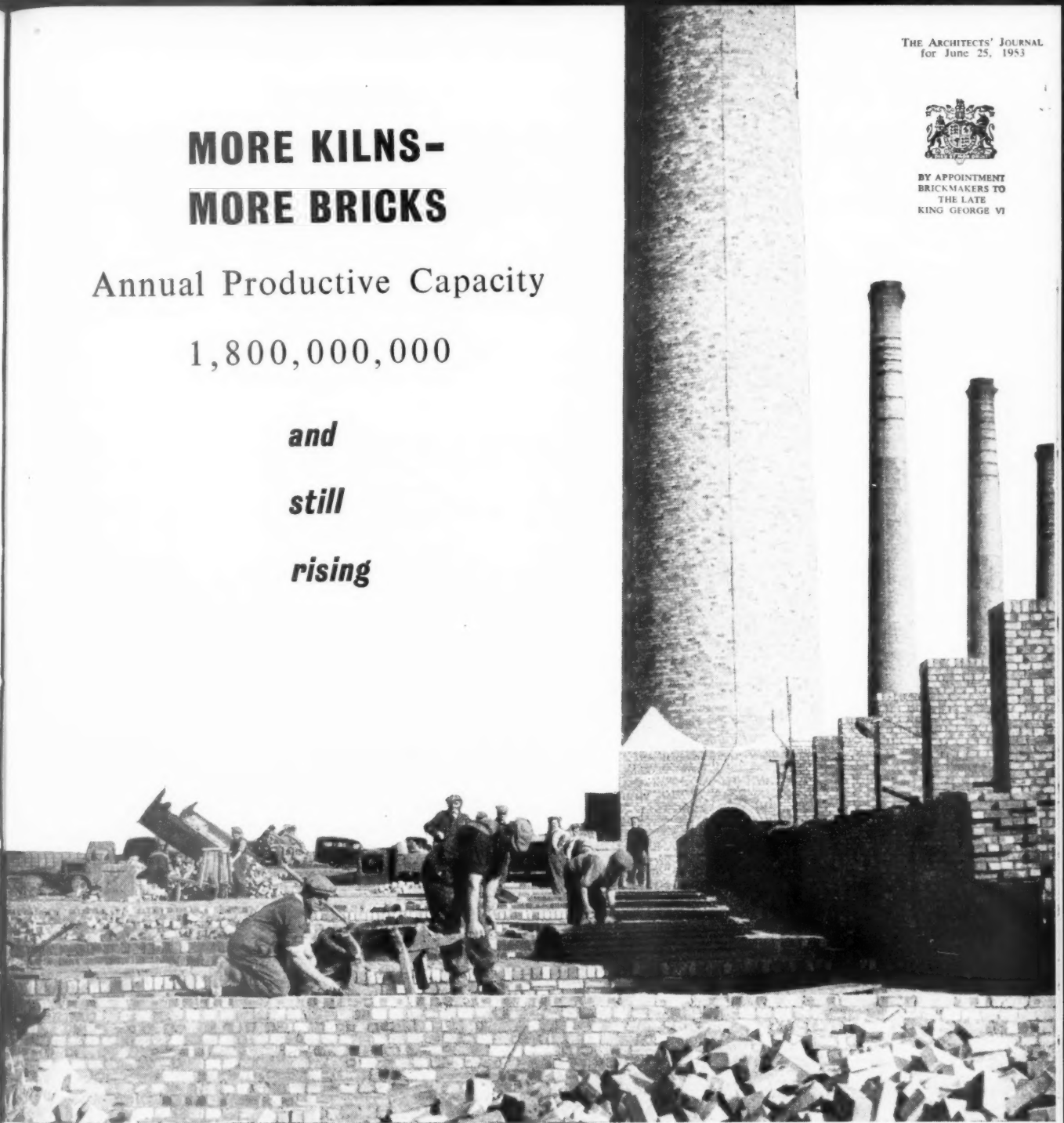
Annual Productive Capacity

1,800,000,000

and

still

rising

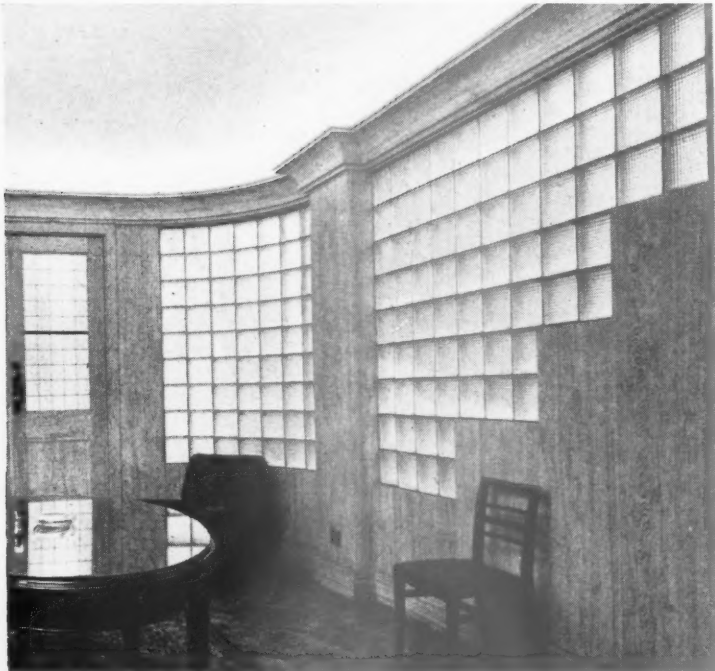


LONDON BRICK COMPANY LIMITED *The largest brickmakers in the world.*

Head Office: AFRICA HOUSE, KINGSWAY, LONDON, W.C.2 *Telephone:* Holborn 8282 *Midland District Office:* Prudential Buildings
St. Philip's Place, Birmingham, 3. *Telephone:* Colmore 4141. *South Western District Office:* 11 Orchard Street, Bristol, 1
Telephone: Bristol 23004/5. *Northern District Office:* Gascoigne Street, Boar Lane, Leeds, 1. *Telephone:* Leeds 20771. LBC 21



Many Problems solved by GLASS



Reception Hall at 9, St. Helen's Place, E.C., for Messrs. John I. Jacobs (Shipping Merchants).
Contractors: Messrs. Falkus Bros. Ltd., 23, Folgate St., London, E.1.
Installation in PB32 Light Diffusing type Hollow Glass Blocks.

The Glass Block and the 'Ventiblock' offer unlimited scope, and provide an effective solution to many problems.

Light Transmission and Diffusion

As an alternative to ordinary glazing, for windows, screens, partitions, borrowed lights and countless other purposes, they can be used with advantage in most types of building. The depth of light penetration is greatly in excess of that permitted by normal transparent glazing.

Decorative Value

Glass Blocks strike a modern note and their high aesthetic quality is an inspiration to the designer. Used in conjunction with artificial light, they are a particularly valuable medium for exhibition and display work.

Insulating Properties

Glass Blocks provide efficient thermal and sound insulation.

Ventilation

Permanent or controlled ventilation can be provided without sacrificing the symmetry of glass block installations by means of the Clark-Eaton All-Glass 'Ventiblock'. These units are also ideal for use independently for combined lighting and ventilating purposes.

ENQUIRIES for literature and technical service are invited.

JAMES CLARK & EATON LTD.

GLASS FOR ALL STRUCTURAL AND DECORATIVE PURPOSES
SCORESBY HOUSE, GLASSHILL ST., BLACKFRIARS,
LONDON, S.E.1 Phone: WATERloo 8010 (20 lines)
CANTERBURY · BOURNEMOUTH · EASTBOURNE · READING · OXFORD



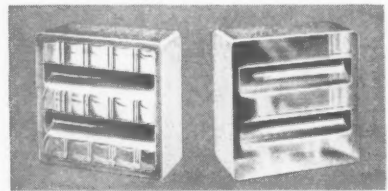
in the form of

**'INSULIGHT' HOLLOW
GLASS BLOCKS**

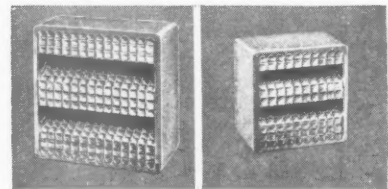
and the

**CLARK-EATON ALL-
GLASS 'VENTIBLOCK'**

Separately or in combination



'Ventiblock' Type 3—7½" × 7½" × 3½"



'Ventiblock' Type 32—
7½" × 7½" × 3½"

'Ventiblock' Type 2—
5½" × 5½" × 3½"

The Clark-Eaton All-Glass 'Ventiblock' is made in three types, to match 'Insulight' Hollow Glass Blocks.

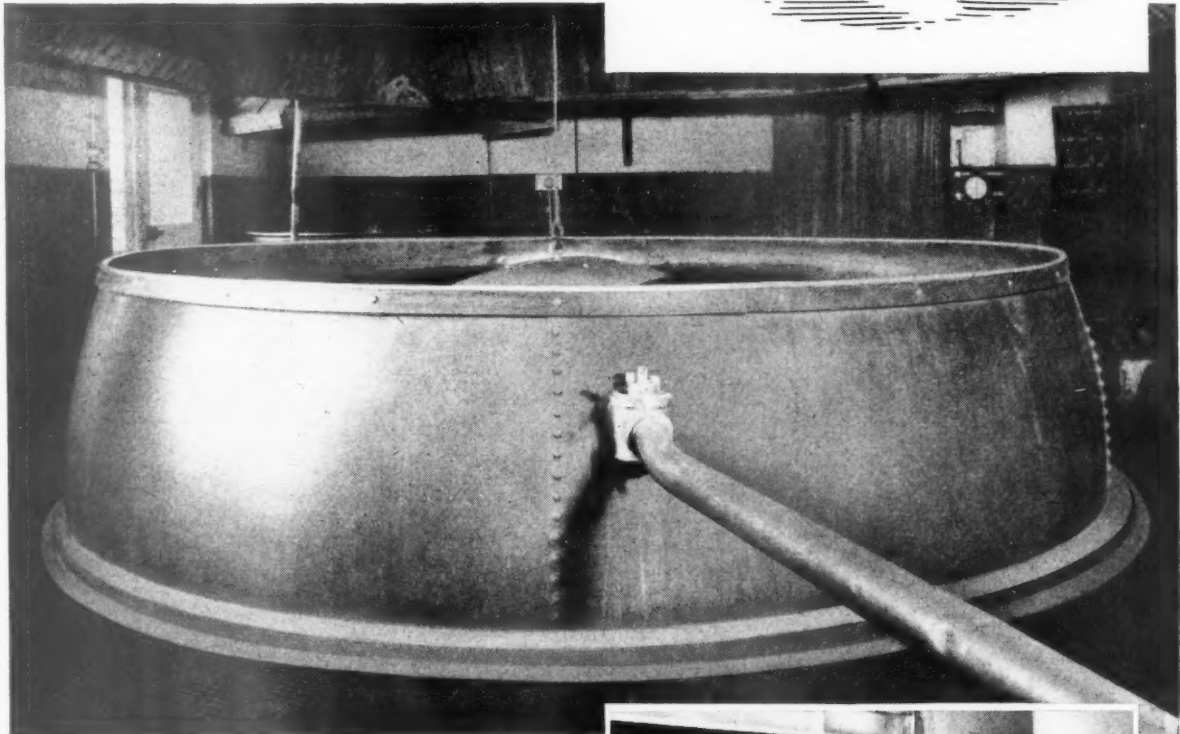


The 'Ventiblock' can be supplied with Shutter or Fly Screen, face-fitting or internal fitting pattern.



For larders and other purposes, the 'Ventiblock' can be used singly or in series to provide light and ventilation.

NO TROUBLE BREWING with RILEY STOKERS



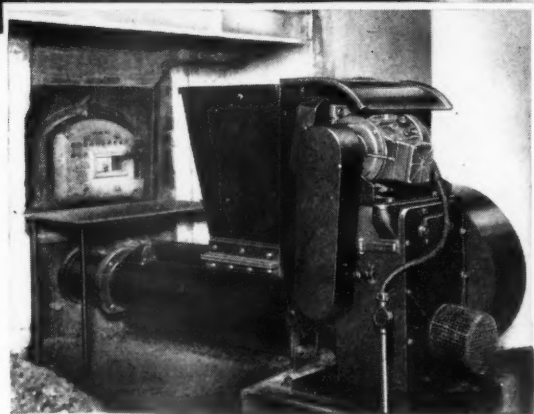
This brewer's copper at an Edinburgh brewery is fired by a Riley Industrial Robot Stoker (lower picture).

Wherever installed — in breweries, factories, hospitals and buildings of every kind — Riley Stokers work with efficiency and complete reliability. All Riley underfeed and chain grate stokers promote smokeless combustion with small bituminous coals. Close control of temperature or pressure is achieved by automatic adjustments of coal and air to suit boiler load.

Send for Booklet R416; it shows how Riley Stokers can help you.

Fuel saving is automatic with

RILEY STOKERS



RILEY STOKER COMPANY LIMITED

Member of the International Combustion Organisation · NINETEEN WOBURN PLACE · W.C.1 · TERMINUS 2622

★ **ADASTRA** ★
GALVANISED SECTIONAL STEEL
LIGHTING STANDARDS

**FOR ALL EXTERIOR
LIGHTING INSTALLATIONS**

THIS COLUMN
HAS BEEN
APPROVED BY THE
COUNCIL OF
INDUSTRIAL
DESIGN



HEXAGONAL COLUMN
FOR 25FT. MOUNTING HEIGHT
WITH POST TOP LANTERN



CATALOGUES FOR COMPLETE RANGE OF "ADASTRA" PRODUCTS ON APPLICATION

A MEMBER OF CONSTRUCTORS GROUP

POLES LTD TYBURN ROAD BIRMINGHAM 24
TELEPHONE · ERDINGTON 1616 ERDINGTON TELEGRAMS · POLES · BIRMINGHAM



THREE "GYPROC" PLASTERS

were used in this building

ST. BRIDGET'S HOUSE, BRIDEWELL PLACE, E.C.4

Architects: Trehearne and Norman, Preston and Partners, F/A.R.I.B.A.

General Contractors and Building Owners: Trollope and Colls Ltd.

Plastering Contractors: Eaton Contractors Ltd.

The three "GYPROC" Plasters used were:—

"PARISTONE" Metal Lathing Plaster.

"PARISTONE" Wall Finishing Plaster.

"CRETSTONE" Concrete Bonding Plaster.

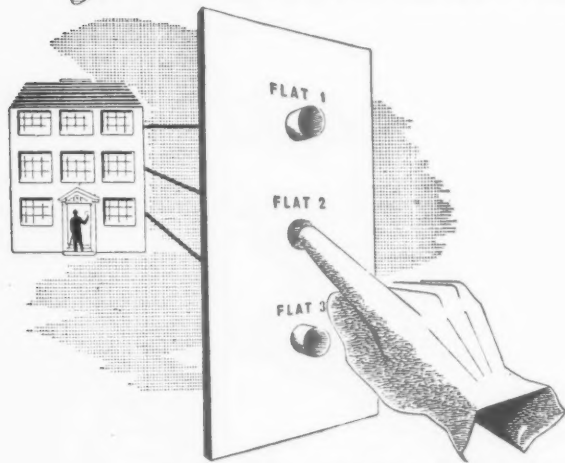
All these plasters are retarded hemihydrate gypsum plasters conforming to B.S. 1191; 1944

Makers of PARISTONE Browning Plaster (Haird, Unhaird and Metal Lathing Grades), PARISTONE Wall Finishing Plaster, CRETSTONE Concrete Bonding Plaster, GYPSTONE Board Finishing Plaster, ZONAPLAX Vermiculite Insulating Plaster (Undercoat and Finishing Grades).

GYPROC PRODUCTS LIMITED

Head Office: Westfield, Upper Singlewell Road, Gravesend, Kent. Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend. Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.1. Telephone: Govan 2141-3. Telegrams: Gyproc, Glasgow. Midland District Sales Office: East Leake, near Loughborough. Telephone: East Leake 231. London Office: Morris House, 1-5 Jermyn Street, London, S.W.1. Telephone: Whitehall 8073-4.
CP3

A complete all-in-one service
for CONVERSION SCHEMES



Rawlings Bros.' experience, particularly with the older types of houses, can be of immense assistance when conversion schemes are being planned. For many years, Rawlings Bros. have specialised in domestic building work, and today have the building equipment, materials, specialised craftsmen and a comprehensive stock of fittings, etc., to complete any conversion scheme.

This "all-in-one" service saves time and money—why not let us quote you? Better still, call at our showrooms for a discussion.

RAWLINGS BROS
LIMITED

KENSINGTON: 85 Gloucester Road, London, S.W.7.

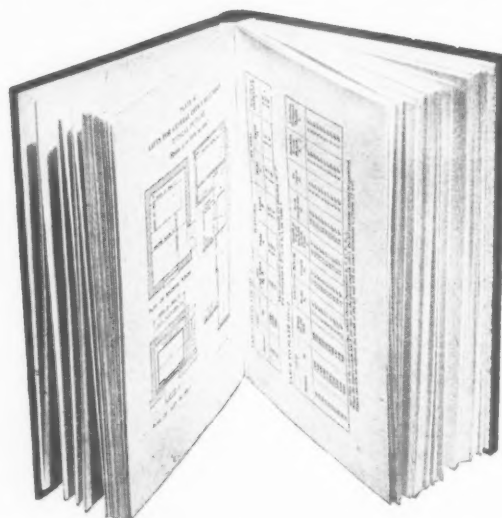
Phone: FRObisher 8161 (10 lines)

EALING: 37-38 Haven Green, Ealing, London, W.5.

Phone: PERivale 1013/4

MARRYAT-SCOTT LIFTS

'Lifts' A collation of British Legislation and official recommendations on Lift Design with notes on Lift Planning. This valuable reference is profusely illustrated with plans and photographs.



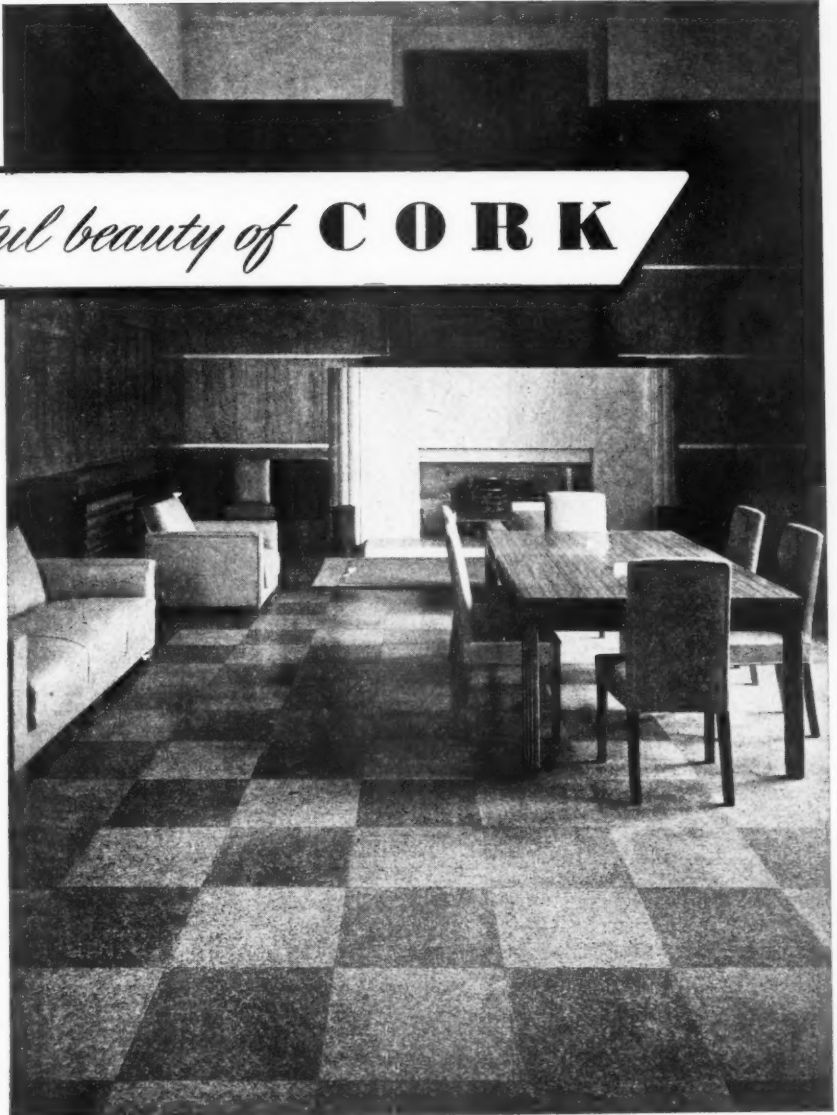
Available free on request to practising Architects from :—

MARRYAT & SCOTT LTD., The Lift Manufacturers

Wellington Works, Hounslow, Middlesex Telephone: Hounslow 6284 Telegrams: Marryat, London
or from any of the following Branch Offices:

LONDON, 40 Hatton Gdn. E.C.1 • BIRMINGHAM, 41 Water St. • LIVERPOOL, 15 Tithebarn St. • BRIGHTON, 34 Chesham Rd.
BRISTOL, 117/123 Redcliffe St. • BELFAST, 6/7 Queen St. • DUBLIN, 38, Dawson St. • GLASGOW, Moncur St.

The quiet restful beauty of **C O R K**



for **WALL**
or **FLOOR**

For dignity in the boardroom, comfort in the home, distinction and prestige in the office or reception room. Attractive and lasting, Armstrong's Cork Tile is a naturally beautiful surface material for floors and walls. Appropriate to any setting, its rich colouring and subtle random shading needs only waxing to maintain its original inherent beauty. Quiet, soft, but firm underfoot, Armstrong's Cork Tile is made from selected cork granules, bonded together by their natural resins under heat and pressure.

Armstrong's **C O R K T I L E**

Available in standard sizes, 12" x 12", 36" x 12" and 36" x 6". Other sizes can be cut to special order up to a maximum of 36" x 12". $\frac{1}{8}$ " and $\frac{3}{16}$ " Coved skirting is also available.



ARMSTRONG CORK COMPANY LTD. Flooring Dept., BUSH HOUSE, ALDWYCH, W.C.2. Tel: CHAncery 6281



WATERLOO MANSIONS, DOVER
(By courtesy of Dover Harbour Board)

Olivette

HIGH GRADE ENAMEL PAINTS

These paints represent the finest quality decorative materials and have proved their outstanding resistance to the ravages of atmosphere and light in coastal districts—the most exacting test. Even pale shades, so often fugitive, possess excellent colour and gloss retention. A short range of Olivette Exterior "Superfast" Greens of proved excellence for exterior work is also available.

Olivette High Grade Enamel Paints are available in both Exterior and interior qualities. Each range provides the finest finish, maximum protection and greatest durability.

.....defiant of wind and weather

W. & J. LEIGH LIMITED

TOWER WORKS • BOLTON • LANC'S

Telephone: Bolton 4277 (3 lines)
London Office: 15 St. Helen's Place, E.C.3
Glasgow Office: 163 Gt. Vincent Street, C.2

Telegrams: "Fabrique Bolton"
Phone: London Wall 1457/9
Phone: Central 2079

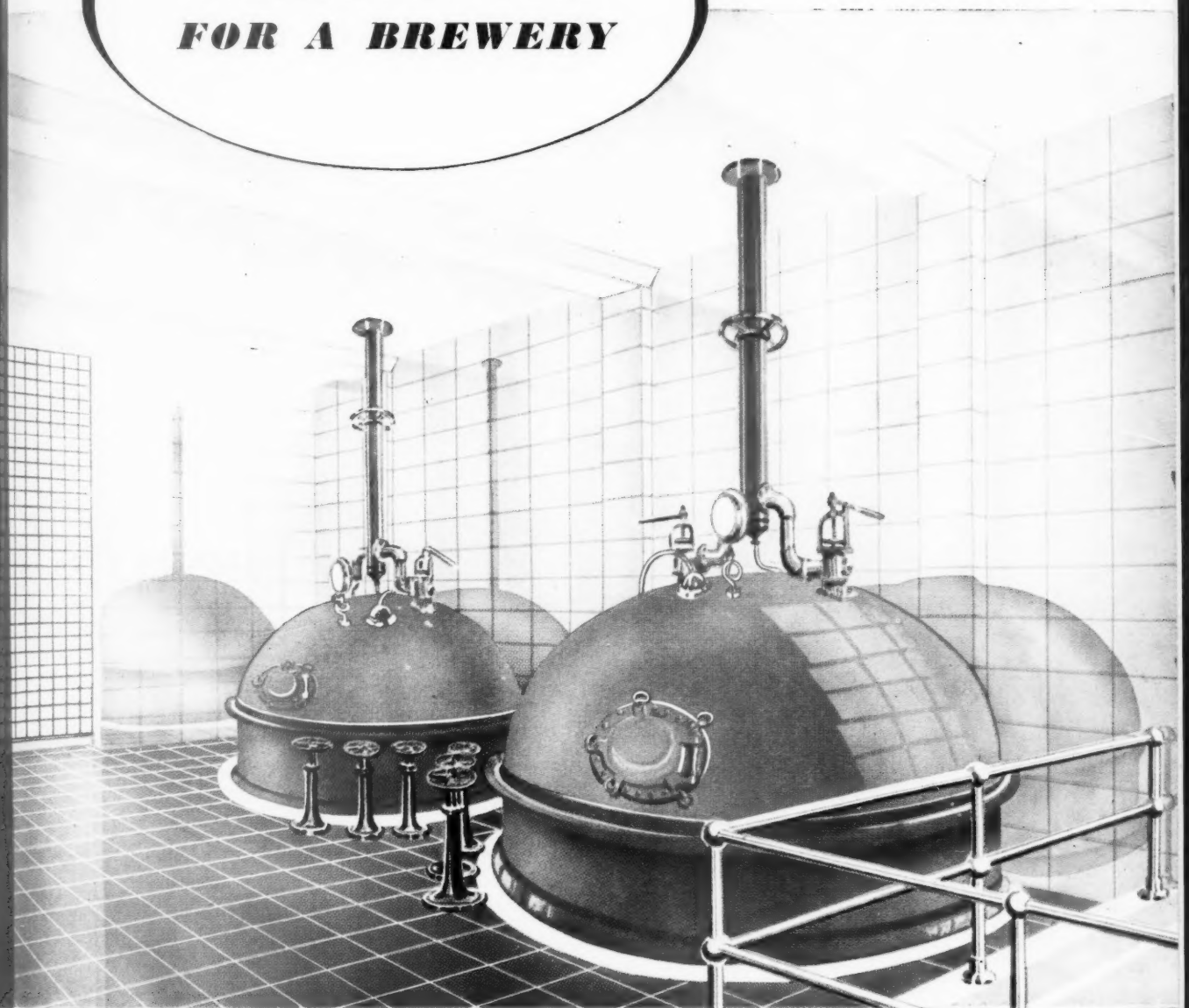


ER
rd)

S



'VITROLITE' PLAN FOR A BREWERY



There is a place for "VITROLITE" in all industrial premises, and in this brewery it would be proper to specify "VITROLITE". It is suggested that the walls should be lined with "VITROLITE" ashlar 18"x12" in Green and White. "VITROLITE" colours

available are: Pearl Grey, Primrose, Green, Green Agate, Turquoise, Eggshell, Cream, Ivory, Black and White. Part of the end wall could also contain a panel of "INSULIGHT" Hollow Glass Blocks, to give well diffused light without sun glare and with privacy.

"VITROLITE"

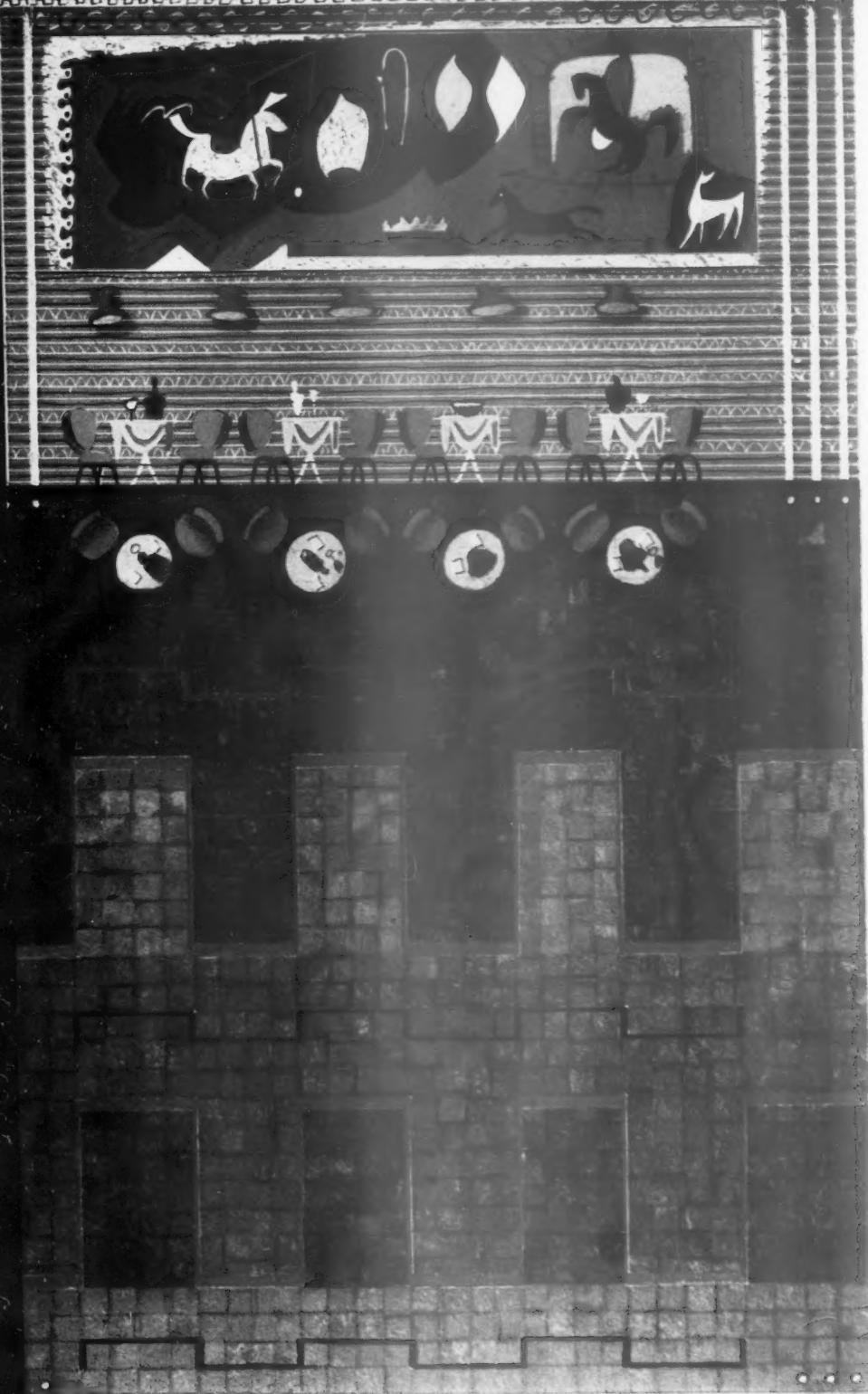
Consult the Technical Sales and Service Department at St. Helens, Lancs., or Selwyn House, Cleveland Row, St. James's, London, S.W.1. Telephones: St. Helens 4001; Whitehall 5672-6

"VITROLITE" is the registered trade mark of Pilkington Brothers Limited. "INSULIGHT" is the British registered trade mark of Pilkington Brothers Limited. Supplies are available through the usual trade channels.

PILKINGTON BROTHERS LIMITED

ST HELENS LANCs.





CINEMA RESTAURANT by R. Myerscough Walker.

We now offer **MARLEYFLEX** floor tiles in
the new "COLORTONE" range with the
confidence that the aesthetic aspect of floor
tiling has been studied with more thoroughness
than has hitherto obtained



Cock o'
the walk

The Marley Tile Company Ltd., Riverhead, Sevenoaks, Kent. Tel.: Sevenoaks 2251
Scotland: Bishopbriggs 1093. Wales: Pencoed 376. N. Ireland: Belfast 24447. Eire: Dublin 51794

MARLEY

The Beam

Regarding the sensitive needle (described in No. 3 of this series) as a beam of colours, a shape emerges not unlike a compass needle in which the centre is wide, tapering off to two points at either end of the beam. The new Marley colours consist of up to six - three on either side of the beam. The colours at the tips of the needle are the strongest and the colours are mixed together in complement giving neutral colours as they approach the centre of the beam. The tone of the colours also goes in several instances from the darkest at the tips of the beam to the lightest at the centre. Thus, there is a series of very light neutrals and parent colours in dark tones. In each case the flashing of the tiles usually gives the two parent colours any complements that have gone into the making of the base colour. The designer thus has a possible range of six colours along each beam and a number of beams from which to make his choice and these beams go through the entire colour circle. This entirely new approach to the problem makes it possible for the first time for the designer and the manufacturer to work within a very close colour system quite outside the arbitrary choice of colour which has obtained in the past and is in line with the most advanced colour theories used by modern designers.

This is the fourth of a series of announcements, six in all, describing a new system of colour co-ordination for flooring. Copies of the whole series will be available shortly

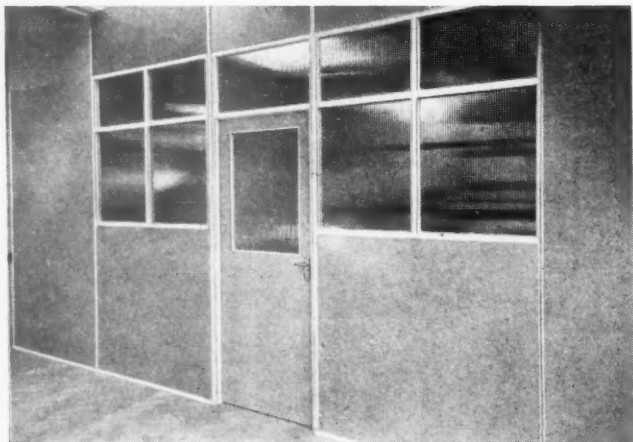
lle
es)
pe
lle
ng
of
ars
er
he
est
er
ral
re
rs
m
m
s,
ls
s.
es
rs
ne
r.
le
m
h
ns
e.
ne
ne
ne
y
e
h
n
r
s.



RIGID yet DEMOUNTABLE

Prefabrication off site
speeds the erection of

PARTITIONING



Erection completed, ready for decorating.

SOUND DEADENING & THERMAL INSULATION

Anderson partition units are scientifically designed and made in several types to provide varying degrees of sound deadening and thermal insulation.

Considerable time can be saved, and much noise and dislocation avoided, by modern methods of partition construction. The systems we employ include the installation of prefabricated units. These are quickly assembled, perfectly rigid when erected, yet easily dismantled for storage or re-erection in other positions if desired.

Alternatively, we shall be pleased to undertake PERMANENT INSTALLATIONS, panelled in a wide variety of sheet materials, veneers, plastics, etc.

Please ask for booklet, or send plans for suggestions and estimates.

ANDERSON CONSTRUCTION CO., LTD.

CLIFTON HOUSE
EUSTON ROAD
LONDON N.W.1.
EUSTON 7465

CONTRACTING AGENTS:
BELFAST—Smyth Mills Ltd.,
80, Duncrue Street.
BIRMINGHAM—Rudders &
Paynes Ltd., Aston.
BRIGHTON—Hall & Co., Ltd.,
Davigdor Road, Hove.
BRISTOL—Hall & Co., Ltd.,
Halifax House, St. Augustine's
Parade, 1

CARDIFF—John Bland & Co.,
Ltd., East Moors.
CROYDON—Hall & Co., Ltd.,
Victoria Wharf.
FOLKESTONE—Hall & Co.,
Ltd., Junction Station.
GLASGOW—W. Gibson & Co.,
Ltd., St. James St., Paisley.
LEEDS—Anderson Construction
Co. & Gibson Ltd., 79, Albion
Street.

MAIDSTONE—Hall & Co., Ltd.,
Canning Street.
MANCHESTER—Beaumonts
(Manchester) Ltd., Victoria Park.
ROMFORD—Hall & Co., Ltd.,
Manor Road.
SOUTHAMPTON—Jenkins &
Sons Ltd., 76, The Hundred,
Romsey, Hants.

INDISPENSABLE

TO THOSE CONCERNED WITH HOUSING!

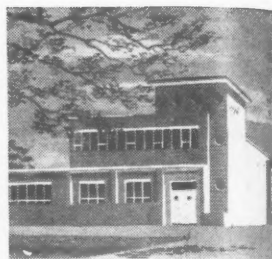
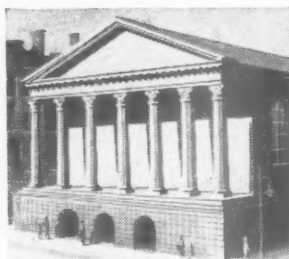


THE 4th edition of this invaluable handbook is the first to be prepared under the direction of the Gas Council's Coke Technical Committee, and you will find it more complete—especially in regard to appliance performance—than the earlier editions. It includes technical data on the efficiency and selection of open fires and heating stoves, and a list of approved coke-burning appliances for domestic use, together with photographs and requisite data on their construction, dimensions, etc. Architects, builders, local authorities, coke distributors, Area Gas Board staff and all others interested in the fuel services of the modern home will find the handbook indispensable. It is available in a handy pocket size from your Area Gas Board or by writing to the address below. 246 pages. Price 12s. 6d.

These other useful booklets are available free of charge:

- 1 *Coke-fired Domestic Appliances and their Application*
- 2 *Coke-fired Central Heating plant*
- 3 *Coke-fired Small Steam-raising plant*
- 4 *Coke-fired Semi-producer Furnace, for drying and process heating plant*
- 5 *Coke-fired Grass-drying plant*
- 6 *Coke-fired Glasshouse Heating and Soil Warming equipment*

The Gas Council · Coke Dept · 1 Grosvenor Pl., London, SW1



Whether your PAINT problem concerns colour, texture or durability...

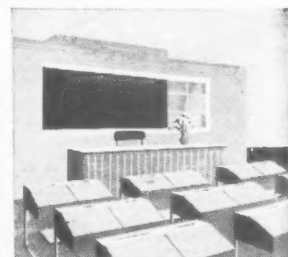
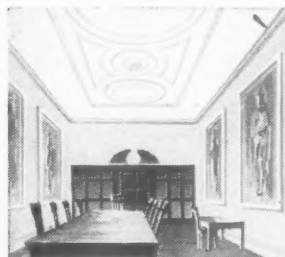
EVERY ASPECT of the application of paint receives more attention today than ever before. New considerations, such as the functional value of colour, and the need for special surfacing mediums for special purposes, have given rise to new problems. It is to solve these problems that the John Hall Colour and Technical Advisory Service exists. A highly skilled technical staff is here to advise, entirely free of charge, on all matters concerned with painting and decorating, even to the extent of undertaking research work on special problems.



BROLAC enamel finish paint is the most waterproof paint obtainable. It contains *hankol*, which is based on Tung Oil, world famous for its water-resistant properties. Brolac withstands even sea air, city smoke and kitchen steam.

MURAC Matt Oil Finish, with its scrubbable, scratchproof surface, provides the ideal finish for walls needing constant washing and clean-

ing, such as in schools and hospitals. **MURAC P.E.P.** (Plastic Emulsion Paint) is a matt finish that can be washed or scrubbed, needs no primer, leaves no smell, dries out in under 2 hours. For direct application to new work—plaster, asbestos, brick or stone.



JOHN HALL & SONS (BRISTOL & LONDON) LTD · HENGROVE, BRISTOL, 4



SAROLITE *is New!*

Sarolite is a new corrugated translucent material manufactured from thermo-setting resin reinforced with fibres of glass. Its expansion being negligible, it is an ideal roofing material and is made to correspond with the profile of ordinary corrugated roofing materials. It provides a high degree of safety for it does not crack or split, yet it can be cut with normal wood-working tools and can be drilled or even nailed for fixing. It is supplied from stock in colours water-white or pale green. Sarolite gives a pleasant diffusion to direct sunlight and provides almost shadowless light.

We shall be pleased to supply further details and to demonstrate the unique properties of this new material, also to send you leaflets regarding any of the other Saro products.

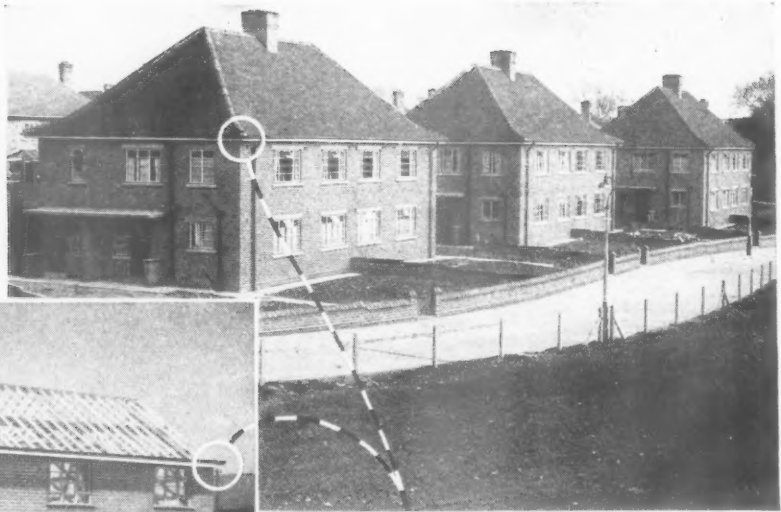
SAROLITE

CORRUGATED TRANSLUCENT MATERIAL



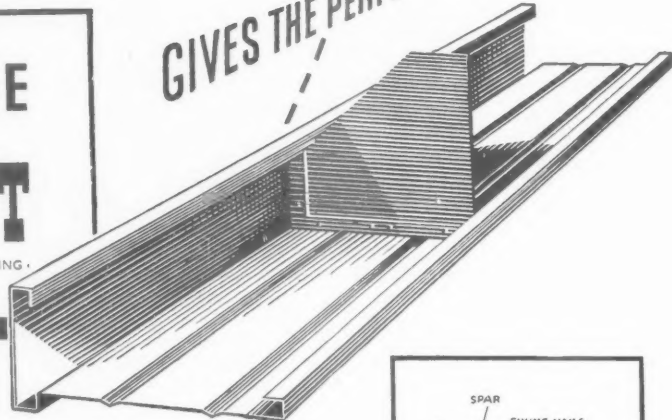
—Manufactured by the makers of—
FLUSH DOORS, SOLID & GEODETIC CORE · SAR-REZ PANELLING
& LIQUID PLASTIC FINISHES · MEDINO BOARD PARTITIONING

SARO LAMINATED WOOD PRODUCTS LIMITED
FOLLY WORKS · WHIPPINGHAM · EAST COWES · ISLE OF WIGHT (Cowes 704-8)
—London Office: 45 Parliament Street, S.W.1 (TRAFalgar 6291)—



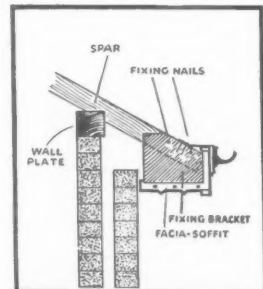
GIVES THE PERFECT SHADOW LINE

THE BAINBRIDGE
ALUMINIUM
FACIA-SOFFITT
BRITISH PATENT No. 509888 WORLD PATENTS PENDING

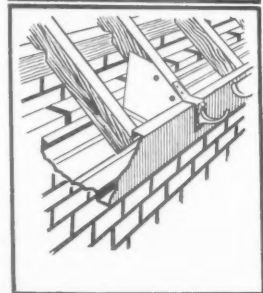


Cut your construction costs!

Two unskilled men with only a hammer can fit an average pair of houses in only one hour with the non-corrosive aluminium Facia-Soffitt. The diagrams show the simple method of erection—joints slip in with substantial overlap, excluding weather completely. By varying the depth of overlap, cutting is absolutely unnecessary special rake on brackets slip into the Facia-Soffitt and are fixed to every third spar by two nails, automatically setting the Facia-Soffitt plumb, square and in line with the roof—this is the only operation required.

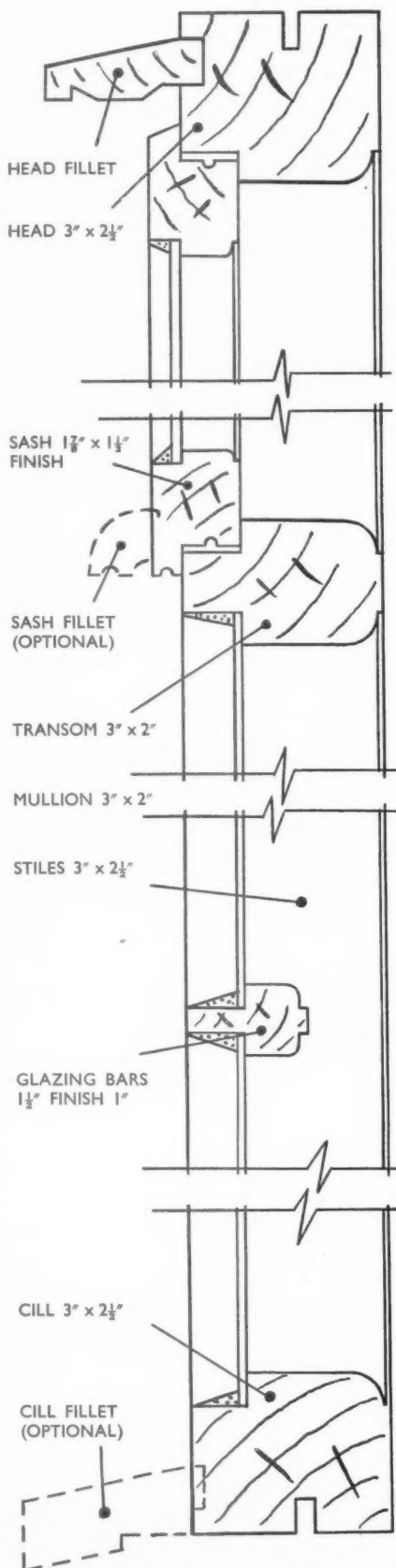


The Facia-Soffitt is manufactured in one solid piece. Corner pieces are pre-fabricated and delivered ready for fixing. You cannot afford to continue construction without knowing everything about the Facia-Soffitt—**WRITE FOR OUR COLOUR FOLDER AND FULL DETAILS TODAY!**

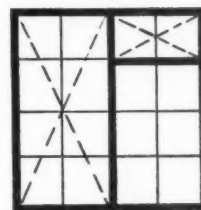
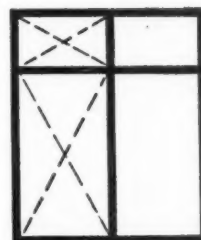
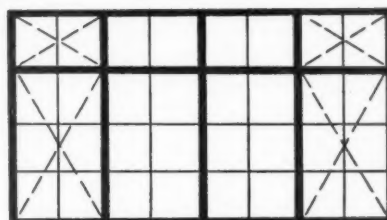
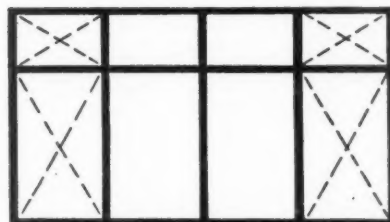


BAINBRIDGE BROS. (ENGINEERS) LTD.
FACIA WORKS · WOODHILL ROAD · BURY · LANCs. Bury 1599

Phillips



No wonder more & more contractors are using these Remploy wood casements



There are many reasons why architects and builders have confidence in Remploy Wood Casements as a sound, economical, stormproof job. Here are a few:

FRAMES

Can be constructed with morticed and tenoned joints; also heads and cills left with horns, thus allowing 'building in' and complete fixing to brickwork. Direct glazing if required, avoiding costly method of a 'fixed' sash. Frames are available (1) Plain — no glazing, (2) Horizontal glazing bars, (3) Small pane — horizontal and vertical bars, (4) Fanlight incorporated.

SASHES

With 'combed' joints, are stormproof, draughtproof, and weathered by a drip machine all round outer edge. The special drip is actually an improvement on B.S.I.

May we send you full information?

REMPLOY

19 CYMMER ROAD, PORTH, GLAM. TEL: PORTH 342
 HEAD OFFICE: 25/28 BUCKINGHAM GATE, LONDON, S.W.1

Sealocure

*cures
concrete*

CONVENIENTLY

Without the trouble of damping down, no wet sacks or sawdust necessary.

SCIENTIFICALLY

Sealocure forms a film over the surface of the concrete thereby retaining water essential to secure complete hydration.

EFFECTIVELY

Considerably increases tensile and crushing strengths. Test figures substantiated by eminent Consultants.

SIMPLY

Applied soon after the concrete has been placed. No further attention necessary, the Sealocure film disappearing when hydration complete.

*On Air Ministry Approved List, and being used
by Leading Civil Engineering Contractors*

.....

Sealocure

CONCRETE CURING LIQUID

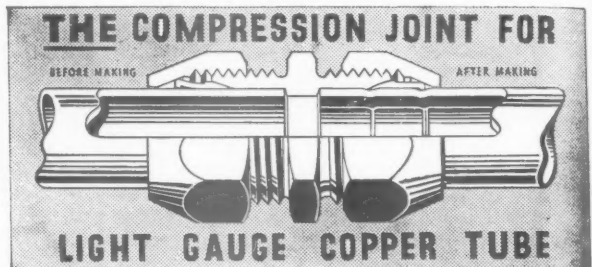
.....

SEALOCURE PRODUCTS LTD.
ATLANTIC WORKS, HYTHE RD., LONDON, N.W.10

Telephone: LADbroke 0015/6/7 Telegrams: Exploiture, Wesphone, London



Why **HANLO** *is better!*
PAT. NO. 590989



Double grip means double strength.



Streamlining gives better appearance.



Can be 'made' in 10 seconds.



Tested to 5,200 lb. per square inch, hydraulic and still sound.



All castings gunmetal—water-tested.



Can be made and remade any number of times.

The Hanlo Joint has been proved to provide the perfect union for light gauge copper tube. The double grip ferrule ensures an absolutely permanent joint of almost welded strength and yet the joint can be remade any number of times without losing its efficiency. Hanlo is acknowledged by Municipal Authorities and leading Contractors to be the best Compression joint available—the sales figures prove it too!

Ask for details of the Hanlo Pillar Cock adaptor

The new fully illustrated Hanlo Catalogue is now available. Your copy will be sent on request.



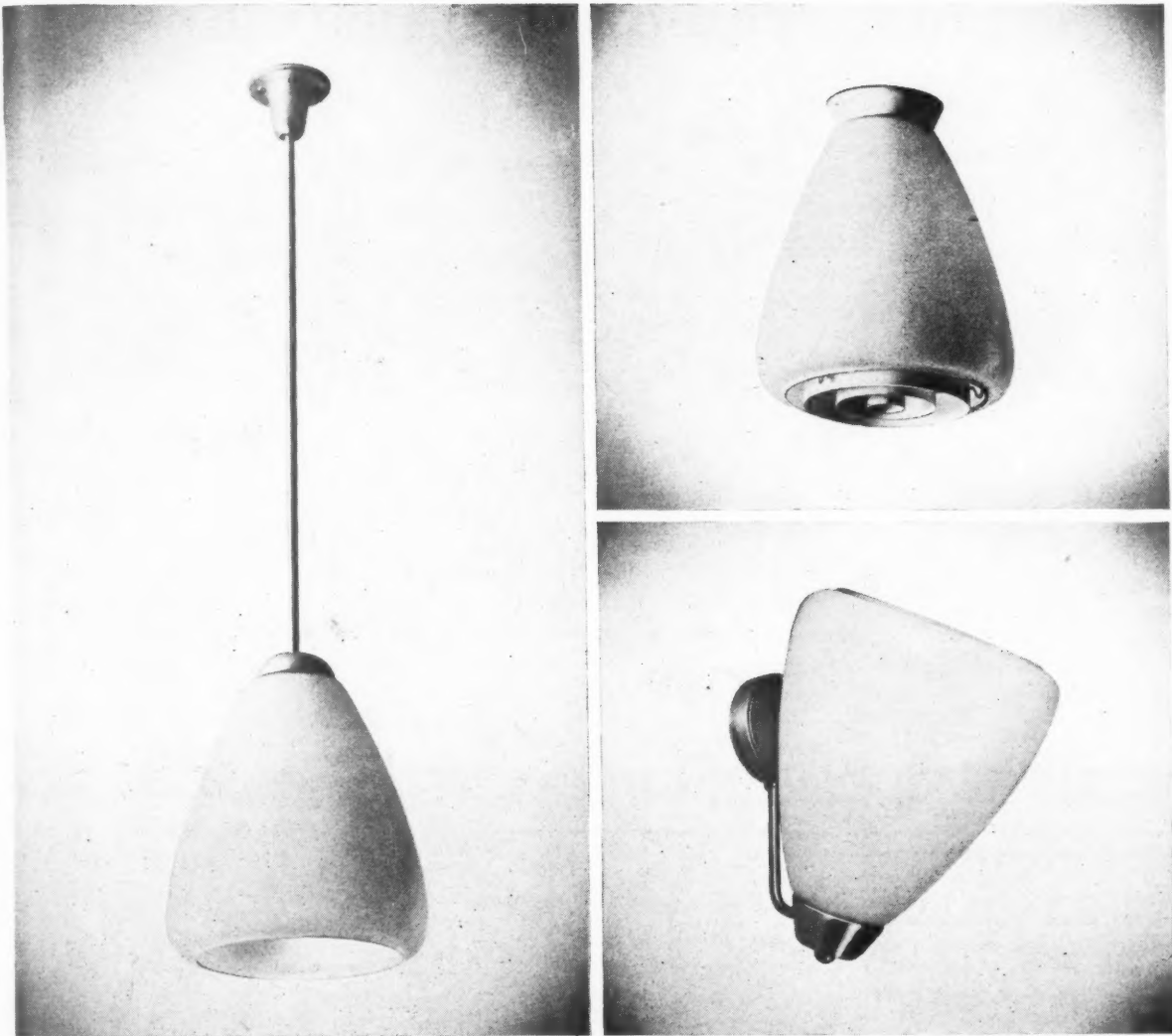
— is made by

Lowell & Hanson Ltd

332, SPON LANE, WEST BROMWICH

Phone: West Bromwich 1681 Grams: "Hanlo" West Bromwich
LONDON OFFICE: 2, Countisbury, St. Mark's Hill, Surbiton, Surrey Phone: Elmbridge 6261

London Distributors & Stockists
W. N. Froy & Sons Ltd. The Builders Copper Tube Co. Ltd.
Brunswick Works, 14, Norfolk Street, W.C.2
Hammersmith, W.6 Temple Bar 4696 (4 lines)



Three of a range

of Falks contemporary lighting fittings

designed by J. M. Barnicot M.S.I.A of Falks



91 FARRINGDON ROAD, LONDON, E.C.1, AND BRANCHES

Another VOLEX installation . . .



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

The VOLEX WARM AIR SYSTEM

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

temperature and draughtless ventilation all the year round, and the air in the building can be changed as often as desired according to the processes carried on. The heaters are made either for gas-firing, hand-firing, worm feed stokers or oil-firing.

Ventilate as you heat

Sole Makers: T. E. SALTER LIMITED TIPTON STAFFS. Telephone: TIPTON 1657/1658

Building in Ireland? **STRUCTURAL STEELWORK**

by SMITH & PEARSON LIMITED
Newcomen Works, Ossary Road, Dublin



An Extension to the Gresham Hotel, Dublin. Architects: Downes & Meehan.





P PERMANITE PRODUCTS

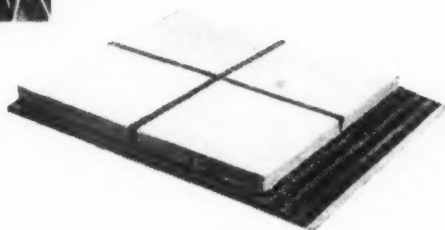


ROOFING

Specialists in all types of Asphalt or Built-up Felt Roofing Systems laid by our own skilled craftsmen. We are also experts in Insulated Roofings including the specification detailed here.

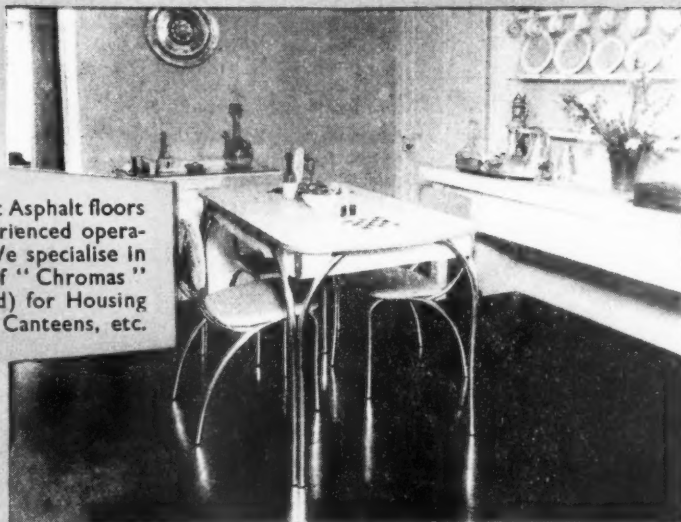
"PERMASUL" or "PERMATILE"

Specially recommended for maximum protection against solar radiation. "Permatile" heat insulating tiles, or "Permasul" screed grooved into tile pattern (as illustrated), laid over two or three layers of "Permanite" bitumen felt form a hardwearing roof suitable for Roof Gardens, Balconies, Promenades etc.



FLOORING

Coloured and Industrial Mastic Asphalt floors can be laid by our own experienced operatives to any specification. We specialise in the manufacture and laying of "Chromas" coloured floors (as illustrated) for Housing Schemes, Schools, Hospitals, Canteens, etc.



Also specialists in all types of Asphalt and Bituminous Sheeting for Tanking.

PERMANITE LIMITED

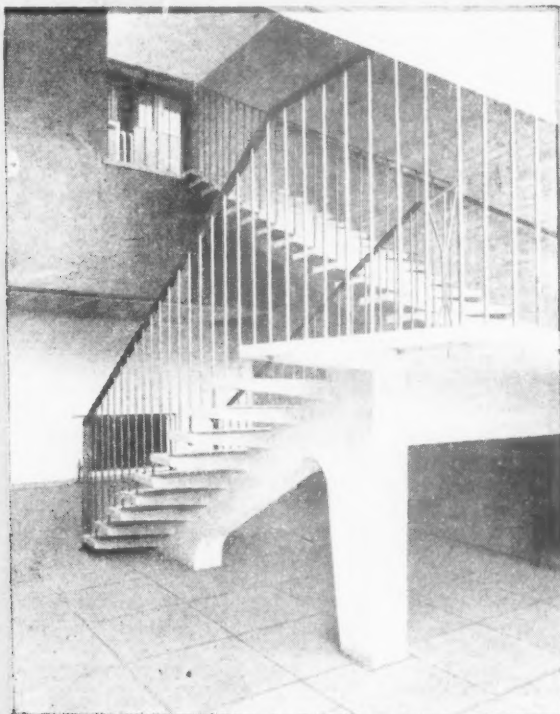
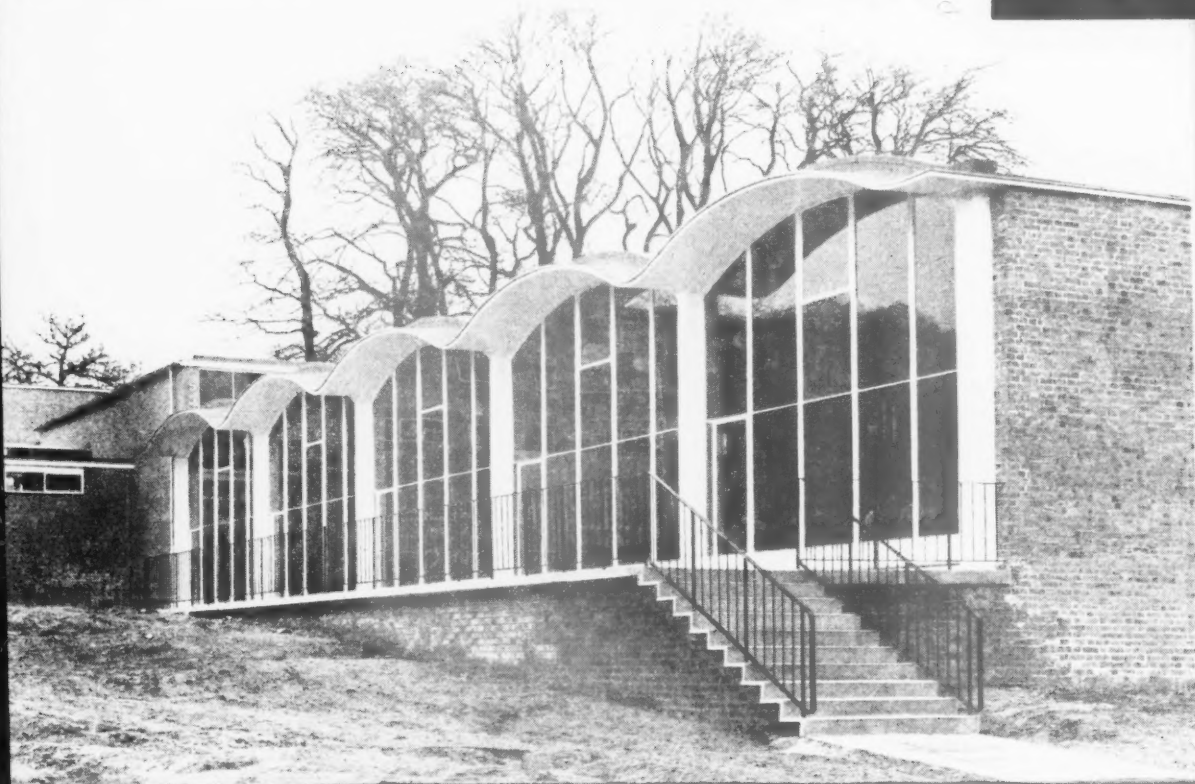
Head Office: 455, OLD FORD ROAD, LONDON, E.3 Phone: ADVANCE 4477 (10 lines)

BRANCHES THROUGHOUT THE PROVINCES.

C2

Reinforced Concrete Design and Construction

THE
**TRUSSEL
CONCRETE**
STEEL CO. LTD



MIDFIELD WAY JUNIOR SCHOOL

ST. PAUL'S CRAY, KENT

for the Kent County Council.

Architect: Elie Mayorcas, F.R.I.B.A., A.A. Dip. (Hons.)

Reinforced Concrete was widely used in the design and construction of this building, outstanding features being the Shell Roof of the Dining Hall and the three cantilevered Stair-cases. Floors and roofs in the main buildings were constructed entirely with Truscon Type I precast units.

Write to our Publicity Dept. for a copy of our latest booklet

THE TRUSSEL CONCRETE STEEL CO., LTD.
REINFORCED CONCRETE ENGINEERS & CONTRACTORS

TRUSCON HOUSE, LOWER MARSH, LONDON, S.E.1.

Telephone: WATerloo 6922

SEI
ET
LT

.)

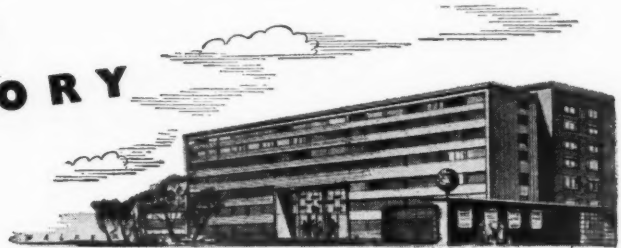




PLIMBERITE

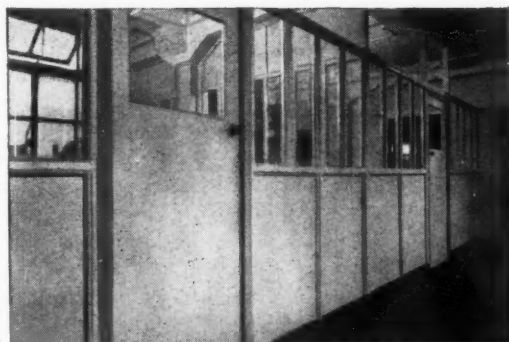
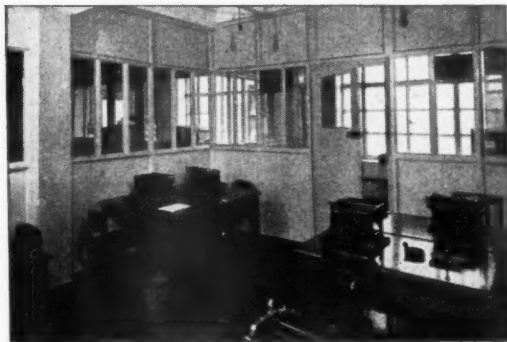
WOOD CHIPBOARD

IN OFFICE
AND FACTORY



cuts costs of conversions

Speed up your conversion work with Plimberite and cut partitioning costs. A sheet (8 ft. x 4 ft. in thicknesses of $\frac{1}{2}$ " and $\frac{3}{4}$ ") of this versatile resin-bonded wood chipboard cuts readily to fit any angle, thus saving you time, trouble and money. Manufactured under heat and pressure to a density of 50 lbs/cu. ft., Plimberite is rigid, flameproof, with good sound and thermal insulating qualities. Moisture movement and load tests, carried out on Plimberite by the Department of Scientific and Industrial Research prove its stability and strength. The surface of Plimberite, so ideal for painting, is also suited, because of its pleasing appearance, to staining, waxing and varnishing. To ensure best decorative results, ask for specifications of various finishes. Complete technical data on Plimberite is available from the manufacturers.



PRICES (ex works) 10 boards and over

$\frac{1}{2}$ " — 1/1½ per sq. ft.

$\frac{3}{4}$ " — 1/6 per sq. ft.

Lower prices for large quantities

Offices constructed with ½-in. PLIMBERITE and timber framing, by Messrs. Baiger & Co., Confectionery Manufacturers, London, E.1.

BRITISH PLIMBER LIMITED

20 Albert Embankment • London • S.E.11 • Reliance 4242

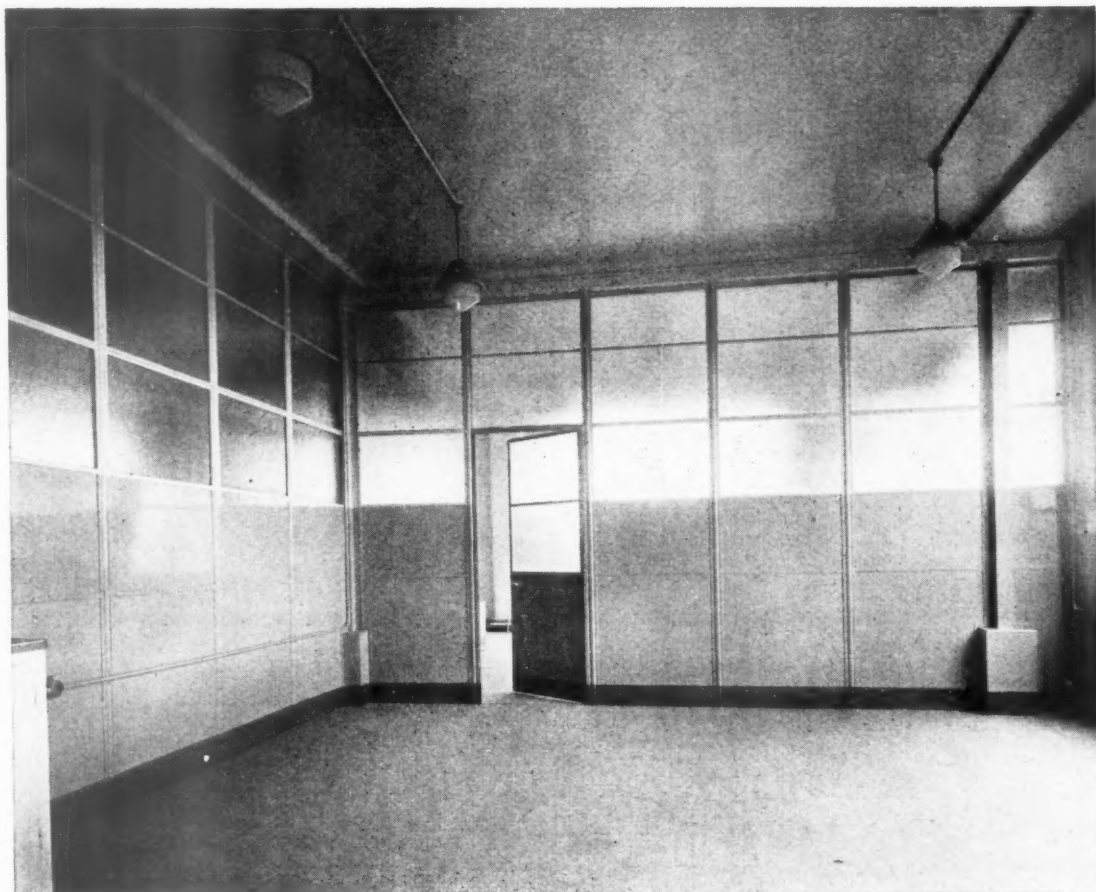




**THE OUTSTANDING
ALL WOOD FIBRE
HARDBOARD**

(PRODUCED IN SWEDEN)

WALLS OF *Daylight*



Photograph reproduced by courtesy of Paints Division of Imperial Chemical Industries Limited

LITA UNIT PARTITIONS

provide a maximum of daylight and adequate sound insulation. Though of robust steel and glass construction they are easily erected and just as easily dismantled.

● Send for our illustrated brochure "WALLS OF DAYLIGHT"

ESTABLISHED 1844

JOHN WILLIAMS & SONS (CARDIFF) LTD., EAST MOORS ROAD, CARDIFF

Telephone: Cardiff 22501

Telegrams: 'Metal' Cardiff

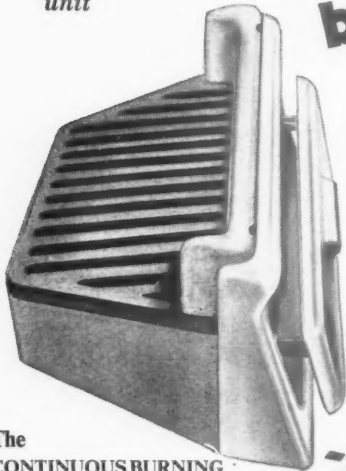
LONDON OFFICE: BANK CHAMBERS, FINSBURY PARK, N.4

Phone: ARCHWAY 2294

Grams: DISSOLVING, LONDON



A completely self-contained unit



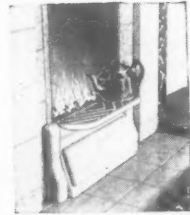
The CONTINUOUS BURNING



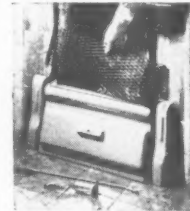
● MINISTRY APPROVED

brighter, hotter fires

Flames from coke!
Only Firemaid, with its exclusive basket, can do it! It is the one basket that has straight bars mounted at an angle, for better through draught and simple, easy cleaning. When a bright fire is required simply insert the special angled poker underneath the bars and rake from back to front. Up leap the flames hotter than coal! Response to the draught control is swift, permitting exact regulation of the burning rate. Unique self-contained construction eliminates sealing. Wide range of wipe-clean finishes. Made in three sizes to fit 14", 16", 18" Milner Firebacks.



Firemaid TRIVET
Simply lifts on or off.
Matching colours.



NIGHTGUARD
Strong mesh, stove
enamelled black.

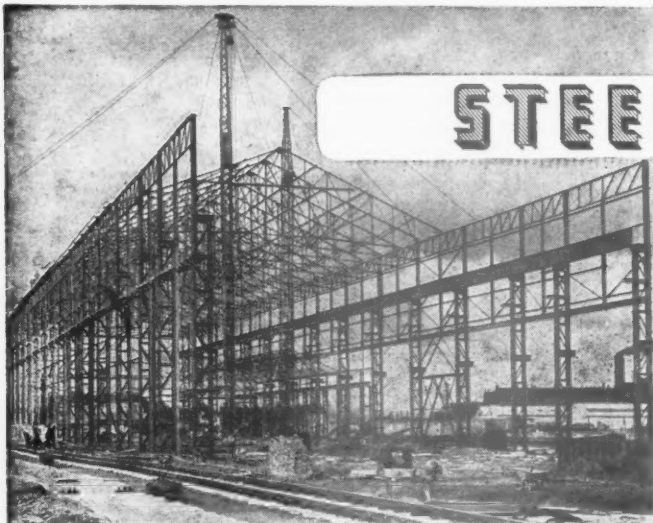
-using nothing but coke!

Full details from

WALLS LIMITED

Station Street, Tipton, Staffs. Tel.: Tipton 2126

2497



STEEL FRAMED

BUILDINGS

... are the specialty of the Clyde Structural Iron Company.

This large Engineering shop erected on behalf of the LAND BOILER DIVISION of MESSRS. JOHN BROWN & CO. LTD., of CLYDEBANK, is one example.

At home and abroad constructional steelwork is undertaken for warehouse buildings, workshops, factories, stores, mills, haysheds, bridges, pit-head frames, piers, tanks and fencing.

Designs and estimates for any type of steel building will be prepared and submitted free of charge.

Factory by Scottish Industrial Estates Ltd.,
for
John Brown & Co. Ltd. (Land Boiler Division).

Architects:
Messrs. Wylie, Shanks & Wylie,
Glasgow.

In structural steelwork, as in shipbuilding, there is a Clydeside tradition—a craftsman's pride which is handed down from generation to generation. The Clyde Structural Iron Company helped forge Clydeside's steps to fame more than half a century ago and the Company is still maintaining and extending this tradition in most countries throughout the world. "Clyde" buildings are indeed Clydebuilt.



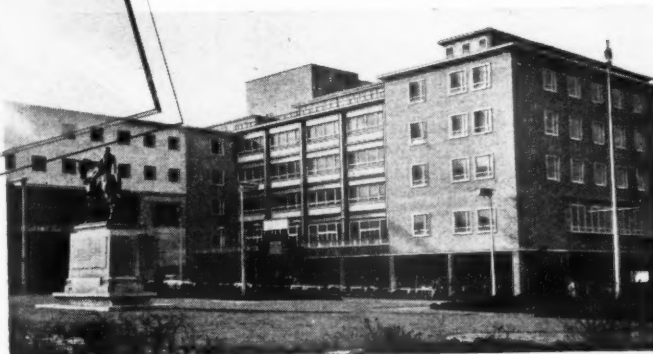
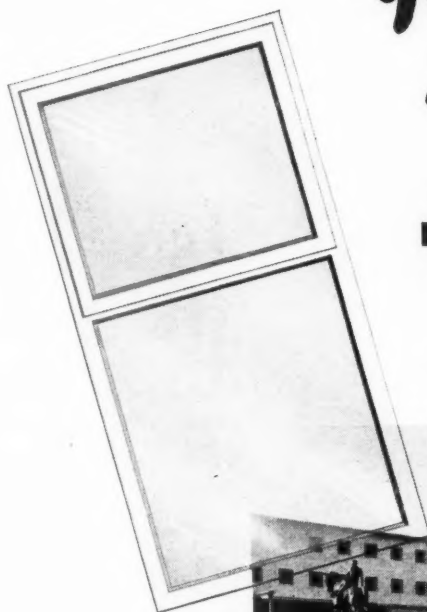
Telephone:
Scottstoun 1817 (3 lines)

Telegrams:
Corrugated, Glasgow.

Codes:
A.B.C. 5th Edition, Lieber's

Don't take chances...with your **Glazing** *Specify*

ARBOLITE METAL CASEMENT PUTTY



Broadgate House, Coventry.
**GLAZED THROUGHOUT WITH
ARBOLITE**
Architect: Donald E. E. Gibson Esq.,
City Architect and Planning Officer
Contractor: Messrs. Higgs & Hill Ltd.,
Coventry.
Glazier: Glass (Coventry) Ltd., Coventry.

ARBOLITE

contains

Arbosyn

ARBOLITE is the only putty containing Arbosyn
which ensures—freedom from cracking •
freedom from wrinkling • greater
durability • better keying properties •
good setting properties • easy working
consistency • longer keg life.

★ *Full descriptive literature
on request.*

ADSHEAD RATCLIFFE & CO. LTD. BELPER · DERBY · Tel. Belper 351/2

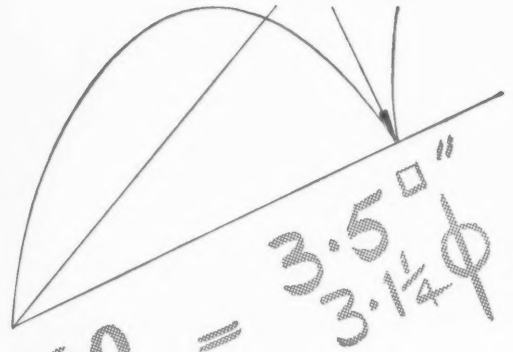


INSIDE OR OUT—

Make sure of perfection with the minimum trouble, by specifying 'STORRILUX' Gloss Finish. Extra elasticity and extremely tough film are only two of the features of this very high gloss paint—which retains its gloss under the most adverse conditions.

STORRILUX
THE SUPER GLOSS FINISH

STORRY SMITHSON & CO. LTD
HULL



$$\frac{360}{8000} =$$

leave
the design
to
**ROM
RIVER**
too

The Rom River Reinforcement Service, who also supply, bend and fix, bring to the designing of concrete reinforcement not only their specialised knowledge of this work but first hand knowledge of the steel supply position and the ability to supply from their own large stocks.

Thus Rom River designs eliminate the possibility of delay in implementing your plans through non-availability of material.

ROM RIVER
reinforcement service

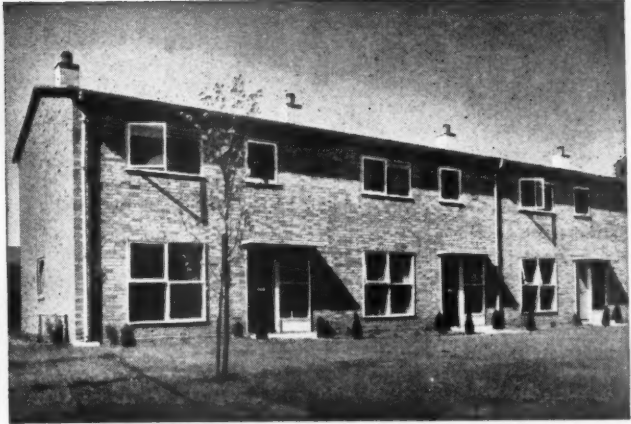
design . . . supply . . . bending . . . fixing

Please write for Service Brochure

THE ROM RIVER CO. LTD., 3/16 Woburn Place, London, W.C.1
Telephone: TERminus 7877. Telegrams: Romrivco, Westcent, London

T.A. 3178

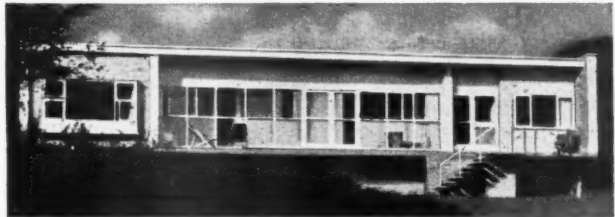
ZINC



TERRACE HOUSES AT COWLEY PEACHEY. Architects—F. R. S. Yorke, F.R.I.B.A.; E. Rosenberg, F.R.I.B.A.; C. S. Mardall, A.R.I.B.A.

Flashings and hoods, rainwater goods and weatherings — from roof to foundations zinc plays an important part in building. Our illustrations show contemporary houses roofed with zinc laid on the standing seam system. The roofing of the Cowley Peachey houses has an added interest because it has been laid on insulation boarding to combine good insulation with lasting protection.

in Zn



HOUSE AT LUCCOMBE, I.O.W. View from South-west. Architect and owner—F. R. S. Yorke, F.R.I.B.A.

There are now no restrictions on the use of zinc. Supplies are plentiful and are likely to remain so for many years to come.

The price of zinc has dropped considerably and it is again one of the most economical roofing materials.

The Zinc Development Association will be pleased to send to potential users lists of stockists of all zinc building materials and of firms specialising in zinc work.

plenty



View of standing seam zinc roofing.

ZINC DEVELOPMENT ASSOCIATION · LINCOLN HOUSE · TURL STREET · OXFORD · Tel. 47988

"I drives out to Elmer's place; I knocks

a couple of times on the door and I see they got a lot of folks to dinner, so not wishin' to disturb them, I just sneaks around to the side door and yells, "Hey, Elmer here I am : where do you want the privy put?"

*Lemuel Putt**



THAT'S not quite the technique of the Williams & Williams sales representative, so far as we know. Ask him about the new all-steel Roften privies.† They really are worth considering as the following reasons will show:—

1. Roften toilet compartments are cheaper than brick and tiles : prefabrication makes them easy and quick to erect.
2. They can be grouped in any number.
3. They are made of high quality sheet steel which is rustproof, fire resistant and won't harbour germs.
4. The doors are double skinned to prevent warping.
5. They will stand up to climatic conditions in any part of the world.
6. The clean straight lines are in keeping with modern trends in design.
7. Roftens are supplied in finished colours to specification.

If you are putting toilet compartments into schools or hospitals, factories or offices we should be glad to tell you about the new Roften lavatory units. Please write or telephone.

† *Lavatories or even toilet compartments if you wish Sir.*

* *The Specialist by Charles Sale : Putnam, 42 Great Russell Street, London, W.C.2.*

The Pressed Metal Division of

WILLIAMS & WILLIAMS Limited

ROFTEN WORKS HOOTON CHESHIRE

London Office: Victoria House, Southampton Row, W.C.1. Telephone: HOLborn 9861-5

FOR DECORATIVE FLOORS OF DIGNITY and DURABILITY



*Dunlop Rubber Flooring
installed in the London Commodity
Exchange, Plantation House, Mincing Lane*

The Semtex Comprehensive Flooring Service also includes SEMASTIC DECORATIVE
TILES · VINYL TILES · DESIGNED LINOLEUM · CORK TILES
FLEXIMER JOINTLESS FLOORING

INSTALLED BY

SEMTEX LTD

A DUNLOP COMPANY

Please address enquiries to:—

SEMTEX HOUSE · THE BROADWAY · WELSH HARP · LONDON, N.W. 9 Telephone: HENDON 6543

35E/C.A.



STEELWORK AGAIN
FREELY AVAILABLE

Steel is the backbone of engineering, equally vital to mechanical, electrical or structural engineering. To assist the nation's economic recovery, steel was for some time diverted from some of its established structural uses. Today the steel industry has materially increased its output, which is still rising.

This increase has made it possible to lift the restrictions: structural steel is now available again for building purposes without limitations.

B·C·S·A



BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION, ARTILLERY HOUSE, ARTILLERY ROW, LONDON, S.W.1



THE ARCHITECTS' JOURNAL

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury, O.B.E., Hon. A.R.I.B.A. (2) *Town Planning Editor*, Dr. Thomas Sharp, L.R.I.B.A., P.P.T.P.I. (3) *House Editor*, J. M. Richards, A.R.I.B.A. (4) *Executive Editor*, D. A. C. A. Boyne. (5) *Technical Editor*, R. Fitzmaurice, B.Sc., M.I.C.E., Hon. A.R.I.B.A. (6) *Editor Information Sheets*, Cotterell Butler, A.R.I.B.A. (7) *Editorial Director*, H. de C. Hastings.

GUEST EDITOR: (8) Prof. Ian Bowen.

SPECIALIST EDITORS*: (9) Planning (10) Practice (11) Surveying and Specification (12) Materials (13) General Construction (14) Structural Engineering (15) Sound Insulation and Acoustics (16) Heating and Ventilation (17) Lighting (18) Sanitation (19) Legal.

ASSISTANT EDITORS: (20) *Chief Assistant Editor*, Kenneth J. Robinson, (21) *Assistant Editor* (Buildings), L. F. R. Jones, (22) *Assistant Editor* (Information Sheets), H. N. Hoskings, A.R.I.B.A., (23) *Assistant Editor* (News), Sam Lambert, (24) *Assistant Technical Editor*, M. Jay, (25) *Photographic Department*, E. R. H. Read, H. de Burgh Galwey, (26) *Editorial Secretary*, Monica Craig.

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

9, 11 & 13, Queen Anne's Gate, Westminster, London, S.W.1 Whitehall 0611

No. 3043 June 25, 1953 VOL. 117

Subscription rates: by post in the U.K. or abroad, £2 10s. 0d. per annum. Single copies, 1s.; post free, 1s. 3d. Special numbers are included in Subscriptions; single copies, 2s., post free 2s. 3d. Back numbers more than 12 months old (when available), double price. Half yearly volumes can be bound complete with index in cloth cases for 25s. 0d.; carriage, 1s. extra.



ANCHORS AWAY!

At ten hours fifteen on Tuesday of last week ASTRAGAL picked his way between high heels, mock mink and braid—not to mention dockers and Daimlers—as he sought out the tug that was to take him fussily (or is it busily?) to one of H.M. warships off Spithead. One hour later he was swarming aboard, his Press lapel-badge gyrating gaily in the south-west wind—"It is hoped," the Admiralty's publicity officer had written, "that æsthetic objections will not prevent it being worn"—and a crib of nautical terms on his cuff. "So glad you could come," said the captain, and for a moment ASTRAGAL glowed with a Mitty-like feeling that he was somehow indispensable on such an occasion.

"But what can we show you, as an architectural writer?" the first lieutenant asked, and ASTRAGAL was soon spoiling a very good lunch in the ward room ("somewhat al fresco," said the Press handout—referring, no doubt, to the small breeze that was inhaled by the portholes) with a discussion on the merits of going to sea in the company of homely electric "coal" fires, cottage chintz and suburban mantelpieces. "What would you do with a ward room?" he was asked, and his reply was not well received. "Not anchor motifs"—he was told in a horrified tone—"not anchors at sea! Sheer bad taste! Bad as having a picture of your own ship on board!"

*

A somewhat chastened ASTRAGAL surfaced, with relief, to find that the seascape had changed completely owing to an unforeseen gale which argued with the tide. He tried not to feel childishly smug about this small accident, and settled down to enjoy a unique spectacle—a spectacle to which variety was given by the constantly changing cloud formation, the continual re-distribution of sunlight and shadow on the fleet, and the entry of the ocean liners—the ugly sister "Orcades" with its unpleasing, overbuilt centre-piece, the "Strathnaver," painted in such a way that she gives an uncomfortable impression that she is sinking, and the "Pretoria Castle," a ship with beautiful lines that is a delight to watch in movement.

*

A pleasant spray-swept day from which ASTRAGAL returned refreshed and convinced that the battle for good design must be won in the home before

it can be begun in the ward room or the captain's cabin. Anyway, he's never going near a ship in a professional capacity again.

GOODNESS, HOW SAD

Our old friend and competitor *The Builder* deserves a pat on the back for its enterprise in bringing out a cheap book on houses* at this time. Intended as a guide for the man of moderate means, it gives a lot of concise and sensible information about licences and prices and all that sort of thing. However, the fifty or so house-types shown are remarkable only for their lack of distinction. Where the blame lies it is difficult to discover; but if, as the preamble says, "the selection of house-types has purposely been made to cover a wide range," perhaps our sights need raising. Perhaps we really don't make fine houses now—however excellent our housing may be. Yet there was a time—less than half a century ago—when the English house was the envy and the model of the western world. *Sic vita truditur*, if you don't mind me saying so.

THE PEOPLE'S CHOICE

If you managed to stay the pace in following the course of the various phases of the *News Chronicle* housing competition, you probably ended up just as mystified as ASTRAGAL. For those who gave up the struggle quite early, let me explain that when the competition reached the stage at which ten architect-designed houses had been put before the public, the *News Chronicle* called in a panel of "experts" to judge the final people's choice. The prize to be given to the

* *Bungalows and Small Houses*. The Builder. 5s.



City of Birmingham College of Commerce *Alex Steele, Dip. Arch., A.R.I.B.A., Architect*

FEATURE WINDOW IN PRESSED STEEL, 30 FEET HIGH made in three sections without horizontal breaks of any kind.

All horizontal and vertical members have equal scantlings, and a smooth external surface is obtained by flush welding all intersections.

THE ENTRANCE DOORS and their surround are also of Pressed Steel.

A typical example of specialist work, made and fixed by

HOPE'S

**HENRY HOPE & SONS LTD., SMETHWICK, BIRMINGHAM
& 17 BERNERS STREET, LONDON, W.1**

entrant who listed the ten designs in the "correct" order of preference was to be his own pick of the bunch. But the winner, a Mr. Bryant, who put Grenfell Baines's two-storey house at the top of his list, decided that he would rather live in Judith Ledebor's bungalow, which had sixth place on his list.

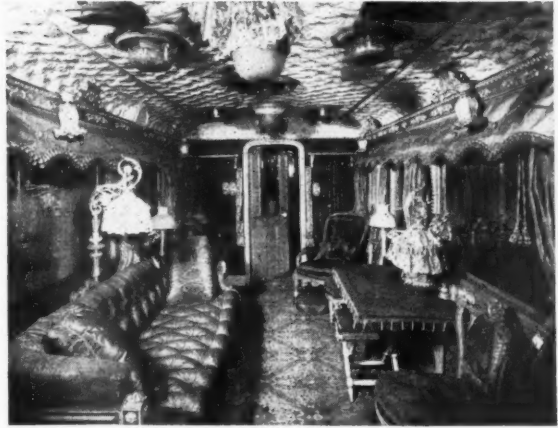
"Why?" asked ASTRAGAL, who is nothing if not direct when roused. "Mr. Bryant," came the answer, "is a slight invalid, and finds a bungalow more suitable." "But," said dogged ASTRAGAL, who thought he was on to a good thing, "Mr. Bryant has put two bungalows higher on the list than the one he wants to live in." The answer was saddening. Apparently Mr. Bryant's list was not necessarily his own choice, but what he thought the public wanted.

This leads us into all sorts of hair-raising, philosophical speculations about public opinion surveys and their real meaning, which make Einstein's theory of relativity—and even the new one he's thought up—quite simple. Anyway, "public opinion" doesn't seem to have entered into this competition. And it is still impossible to find out what was the most popular selection. We shall know later in the year when probably the whole affair will be even deader mutton than the Coronation festivities have already made it.

WOMAN'S VIEWPOINT

Mr. Bryant placed Brian Peake's "open plan" house surprisingly high on his list, yet those who read the *Observer's* of June 14—and the paper's excellent architectural articles have made it a "must" for architects—may have seen yet another attack by a lady journalist on the "open plan." It turned up in Elizabeth Bennet's "Woman's Viewpoint." Making the rather charming howler that "the essence of the open plan is the abolition of party walls," she goes on to compare such plans with the settings of Aldwych farces, and trots out the usual arguments—lack of privacy, noise, and that slight undertone of meaning that clients are putty in the hands of smooth villainous architects—with fancy waistcoats and cuffed sleeves—who are undermining an essentially British way of life which hasn't changed since the Conquest.

Interior of the day compartment of Queen Victoria's saloon (London and North Western Railway, 1869). See note on "Royal Trains".



ASTRAGAL supposes he shouldn't, but he rises every time to such silly bait. Where—and how—do they live, these fashionable lady journalists who have the public good so much at heart? Do they live with large families in small houses on smaller incomes, or do they live in service flats? They never tell us. But to talk about buffet dinners for fifty and everyone having a room of his own is rather getting back to Marie Antoinette and the cake stuff. I suggest Mrs.(?) Bennet has a word with the *Observer's* architectural critics and finds out why the open plan has come about, why clients often come to like it, and how wrong she is in supposing that it is only a minority of all new American houses that adopt it.

Incidentally this is the second time that ASTRAGAL has risen to a female columnist's observations on this problem. A casual glance—well anyway no more than twenty minutes' searching—through your AJ files will reveal a previous bitter engagement fought out (on April 16) with a Liverpool girl called Elizabeth Coxhead. Could it be that in between articles she has married a Mr. Bennet and has returned, scarred but unrepentant, to the attack? Could not Bennet and Coxhead be their (?) Elizabethan age and tell us exactly how they (?) live themselves?

ROYAL TRAINS

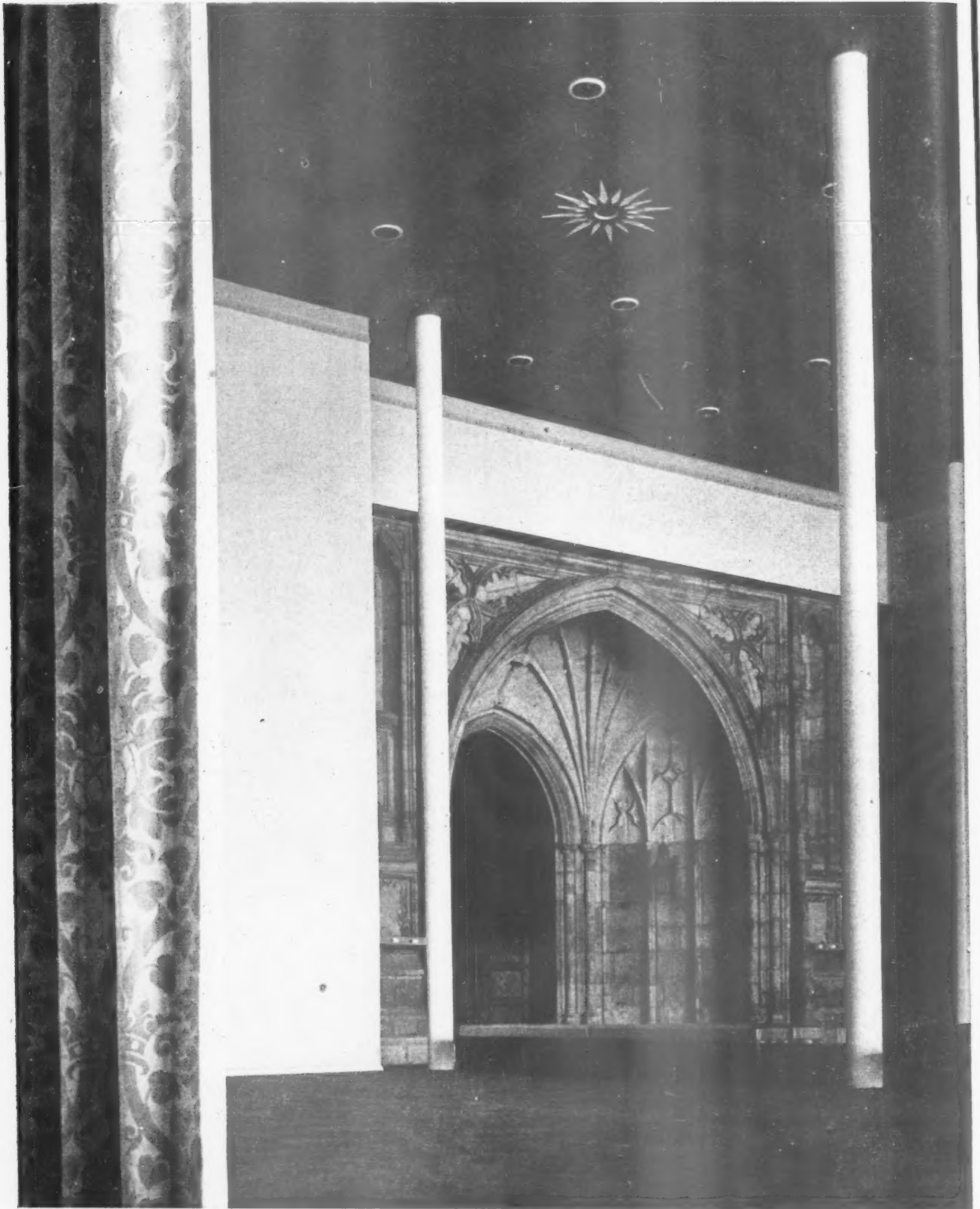
Even those who are, like ASTRAGAL, a little satiated at the moment with exhibitions should make their way to Battersea Wharf (almost opposite Festival Gardens) to see the show called "Royal Journey," beautifully arranged by John and Sylvia Reid in conjunction with Christian Barman.

These lush and luxurious coaches, brought from Wolverton, start with the delicious little carriage of Queen Adelaide and work their way through the upholstery and self-assurance of the Great Century to the downright vulgarity of the 'twenties. Much of the upholstery may—one suspects—be functional, an assurance against Royal Bruises in the rather rougher travel of the Crimean era. The exhibition—at which most of the visitors seem to think, for some inexplicable reason, that they are expected to smile—does raise serious issues about decorating transport.

For twenty years or so we have been streamlining away the nonsense so that trains shall look like trains, etc. Are we All Wrong? "Look Alicky, dear!" one can hear the Queen saying: "Just like a drawing-room at home, but"—explanatorily—"much smaller, of course; that is only natural." And that, of course, is the whole of the fun. After all, why take seriously the decor of a six-hour journey? And how very, very charming are all the gadgets—sanitary and otherwise; the new telephone and loudspeaker added, for some reason, to a 1903 coach does, surely, blow our gaffe pretty completely.

CORONATION HALF-A-CROWN

Thoroughly recommended to all London visitors and residents with half-a-crown in their pockets and not less than two hours to spare—a category that includes at least some architects—is a visit to Westminster Abbey before the temporary annex and internal seating structures are removed. The queue is longish, but under cover almost throughout, and the moral experience is well worth the preliminary shuffle through the soaked newspapers and



The Abbey Annexe

Not all comments on the Westminster Abbey annexe interior have been as kind as those made by ASTRAGAL on page 785. One defence of the criticism that it is bleak in appearance is, of course, that it was designed to be filled with colourful costumes. But that is no excuse for the loss

of opportunity to fill the wall areas above crowd level with colour—perhaps heraldry. We show here the one part of the annexe which has probably met with general approval—the framing of the Abbey's west door. (The architect was, of course, Eric Bedford, MOW's chief architect.)

candy
of Lo

After
spex
at th
gonal
of
whisp
tiring
not c
seen
pora
asse
distu
has
colo
pria
mon
grea
bit
for
Rey
and
sho
spa
fig
co

C
dr
th
to
Lo
w
“
m
an
o
b
li

w
P
t
c
o
b
e
v

candy-floss sticks with which the streets of London today seem to be paved

*

After you have passed under the perspex canopy—a device which made TV at this point possible—and the octagonal lobby, you can get a side glimpse of closed doors behind which lie, whisper the attendants, the Royal retiring rooms. (A chance lost here. Why not open the doors and let the rooms be seen?) Turnstiles, matting and temporary railings are set up in the main assembly hall, but they luckily fail to disturb unduly the interior effect, which has the excellent scale, clear rich colours and simple surfaces so appropriate as a background for ceremonial. The engraved symbols on the great glass window might have had a bit more character—a job here surely for a really experienced engraver like Reynolds Stone or Laurence Whistler—and maybe a great glittering chandelier should have brought in an extra bit of sparkle. It is difficult to say when the figures parading round are wearing rain-coats and carrying shiny bags.

*

Out in the streets, beneath the bedraggled bunting and the fading colours, the crowds still surge good humouredly to and fro. "Looking down on a London crowd from a London bus," wrote Denton Welch in his journals, "the people looked like gently animated bottles, their faces as stereotyped and expressionless as stoppers. Take out a stopper and what would you see but bile and some nameless black liquid. . . ."

*

This is not true of Coronation London, where far from expressionless faces, suspended, one suspects, above comparatively bileless interiors, have never ceased, it seems, to tire of the experience of just walking along a city street and being rewarded occasionally by the sight of a Daimler-hire borne party—grey toppers, expressionless faces and who knows what bile?—or a glimpse of a reception for foreign visitors. Only last week ASTRAGAL saw Mr. Hore Belisha pursue into the Dorchester a magnificent character wearing full evening dress, tails—orders and all—but with black legs splendidly bared from ankle to thigh. Fiji? Papua? Tongaland? Who knows? But surely only in London now can so endearing a sight be seen.

ASTRAGAL

POINTS FROM THIS ISSUE

- Westminster Abbey annexe:** photograph of interior .. page 786
- RIBA Conference:** report and photographs pages 791-795
- Over 200 fatal accidents in building industry** page 805
- Plastics exhibition:** brief report page 809

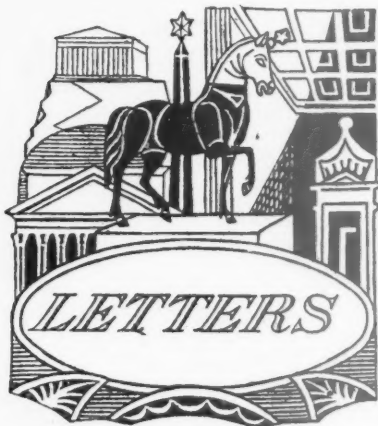
The Editors

A CONFERENCE ON CONFERENCES

AFTER ASTRAGAL's criticism last week of the British Architects' Conference, it is perhaps only reasonable to put forward some rather more constructive comments. The efforts of the South Eastern Society of Architects, if not successful in producing a really first-rate conference, were at least sufficiently enterprising to jerk the Conference procedure out of the rut in which it was getting all too comfortably settled. The next step, which it is largely the responsibility of the Devon and Cornwall Society of Architects, as hosts of the 1954 Conference at Torquay, to undertake, is to try and work out another programme of events which will encourage the conference aspect of this event as apart from the formal social side. We qualify the word "social" with "formal" because so much of the conference, as it is at present, consists of a series of items which, while not entirely regimented, impose a fairly rigid discipline as regards personal relationships and opportunities for informal discussion. Apart from two lunches and one dinner, the members are kept, during most of three days, and with the exception of five hours of papers read and discussion, on a steady band- or guide-accompanied trot of sightseeing, eating, drinking, gossiping and dancing. What can be proposed instead?

First, to ensure better discussion the number of issues raised should be strictly limited, and if possible, the size of the audience limited too. Why not have several subjects, or several aspects of one subject, discussed by small study-groups, with the participants in each subject staying in the same, or closely connected, hotels? Second, publish the papers in advance, as this year, but appoint architects in advance to comment upon them as well. Third, let leaders of the discussion groups attempt to formulate some conclusions from what was discussed, and report them to the whole membership on the final day. Fourth, let the tours—whether of historic or contemporary buildings—be accompanied only by guides of real erudition. Fifth, keep civic receptions, dinner, dance, professional entertainers and formal speeches to one evening only, preferably the last, but let them last all night, if necessary. Are we making a fuss about nothing? Is the conference in its

present form the product of the desires of the profession as a whole? A quick glance at the list of members suggests the opposite. There were (approximate figures) 520 members, of whom 180 were wives and women friends of the architects. There were 40 non-architect members. Of the remaining 300 (which were roughly half in public and half in private practice), only 130 were Associate members of the RIBA. Now Associates form the bulk of the profession. There are very nearly twice as many Associates as Fellows and Licentiate combined. Why, then, are less than half the conference members Associates? Can it, while it has such an unbalanced attendance, truly be called a British Architects' Conference? Is it not in danger of becoming a Principals-only Conference?



R. P. Harris

Leonard C. Howitt, F.R.I.B.A.,
City Architect, Manchester

W. P. Jaspert

Residential Caravans

SIR.—It is indeed time that the social and hygienic problems of residential caravanning were thoroughly investigated. As you so correctly stated in a recent editorial (May 28), the only way in which local authorities can satisfactorily cope—with existing legislation and under present circumstances—with the problem of residential caravans, is by providing well-planned sites of their own on to which they can move caravanners who have been evicted from unsuitable sites.

It is possible that many of our present ideas about caravans, and more particularly, perhaps, ideas that such caravans are sub-standard housing, which should not be encouraged, will have to be revised as a result of such investigations. From my own experience it appears that about one family out of every two live in caravans because they prefer life in a caravan to living in a traditional type of dwelling and only about two out of every five families are on any local authority house waiting list.

Furthermore, it should not be overlooked that residential caravans are often the only

means by which service men stationed in this country can live with their families, and such accommodation is also ideal for mobile workers who now form such a feature of our post-war economic structure.

R. P. HARRIS

Surrey.

Elevation Limitation

SIR.—Bye-law 48 in the new model issued by the MOHLG in November last provides that:—

(1) In the case of a building, other than a house of not more than two storeys, where any part of an opening in an external wall is vertically above an opening in an adjoining storey, suitable provision shall be made to prevent the spread of fire from the lower to the upper opening.

(2) The requirements of this bye-law shall be deemed to be satisfied if: (a) the bottom of the higher opening is not less than three feet above the top of the lower opening and not less than two feet above the upper surface of the floor separating the storeys; or (b) a balcony of incombustible material with a solid floor or some similar horizontal projection is constructed between the two openings to project two feet from the wall and extend laterally beyond each limit of the overlap of the openings—(i) where the lower or neither opening continues beyond that limit, for not less than one foot; and (ii) where the upper opening continues beyond that limit, for not less than two feet.

48 (2) is a "deemed to satisfy" provision; if this is followed, the requirement in 48 (1) has been met. It may however be met in some other way providing it can be shown that the relevant functional requirement is satisfied.

The Ministry in Circular 82/52 quite rightly stressed that it is of great importance that building law should not vary from place to place, and amendments of or additions to the model will therefore always require justification by reference to genuinely special needs. On these grounds an objection to the inclusion of this model bye-law could hardly be sustained. It would therefore seem likely that it will be generally adopted, and it is most important that all architects should be aware that in that event their freedom in elevational design will be subject to this limitation.

LEONARD C. HOWITT

Manchester.

Not Continental Practice

SIR.—On page 609 of your issue for May 14 you show a photograph with a

statue of a child seated on a pot pointing to a public lavatory, "an example of Continental practice."

Being an alien resident in this country, I should like to point out that the illustration you are showing is obviously a reproduction of a souvenir postcard issued at the annual Oktoberfest in Munich, during



which enormous quantities of beer are consumed, and a general carnival spirit prevails. The figure in question is therefore far from being a general rule. Generally speaking it can safely be stated that Continental lavatory signs do not greatly differ from the usual signs in this country, and standardization has not yet been achieved.

W. P. JASPERT.

London.



ARCUK

Officers Appointed

Anthony M. Chitty was appointed chairman of the Board of Architectural Education of ARCUK for the year 1953-54, at a council meeting held last week. P. G. Freeman was appointed vice-chairman. The following were appointed to the General Purposes Committee:—D. H. Beaty-Pownall, F. Chippindale, T. J. Drakeley, R. O. Foster, Evelyn Freeth, J. Kenneth Hicks, A. Douglas Jones, D. H. McMorran, E. Maynard Potts, J. E. Ralph, T. E. Scott and J. S. Walkden. The Association of Technical Institutions appointed E. M. Rice to the Board of Architectural Education in place of F. H. Reid (retired).

Cecil Kennard and H. G. C. Spencely were re-elected chairman and vice-chairman of the Finance and General Purposes Committee. The Premises Sub-committee, consisting of L. A. Chackett, Cecil Kennard,

(Continued on page 790)



Shopping Centre at Harlow New Town

Above, this block of 22 shops at Harlow New Town, together with 17 shops under construction, forms the Stow Shopping Centre, which serves the 17,000 people in the Mark Hall neighbourhood. The architect/planner is Frederick Gibberd, the executive architect is Victor Hamnett, the assistant in charge is Alexander McCowan. Maisonettes over the shops have a floor area of 762 sq. ft. The pub (the "Essex Skipper") on the right of the picture has a bar and lounge area of 1,129 sq. ft. The landlord's flat is 1,098 sq. ft. in area. The annual rent of the pub is £1,250. The Centre will be fully illustrated in a future issue.

BUILDINGS
IN THE NEWS



Flats at Kingston-upon-Thames

This block of six flats in Surbiton Road, Kingston-upon-Thames, for officers of the regular army who administer local T.A. units, was designed by Stroud and Nullis. There are four 3-bedroom flats of 1,150 sq. ft. and two 4-bedroom flats of 1,250 sq. ft. The width of the block is 28 ft. 1½ in. The contract price, including site work, was £17,830.



Church at Mitcham

The Church of the Ascension in Sherwood Park Road, Mitcham, Surrey, which was designed by Caroe and Partners, was consecrated last month. The roof trusses, which are of oak and oba saluk from Malaya, are partly supported by laminated timber posts cased with agba. There is room for 350 seats. The cost was £17,500.

W. H. Scanlan and H. G. C. Spencely, was also re-elected.

Denis Poulton and T. E. North have been re-elected as chairman and vice-chairman of the Professional Purposes Committee.

Vincent Burr and W. R. Howard have been re-elected chairman and vice-chairman of the Admission Committee.

COMPETITION

Awards for Furniture Designs

The first prize of £300 for the Coronation competition organized by the Furniture Makers' Guild has been awarded to E. J. Arundell of Hampton, Middlesex. The second prize of £150 was won by a joint entry from J. Y. Johnstone of Vancouver and N. F. Dries of London. The third prize of £50 was divided equally between R. C. Wade of Melbourne, S. I. Dysthe of Oslo and J. D. H. Catleugh—an architect employed by the LCC. The judges were Sir Hugh Casson, L. R. Ercolani, Anthony S. Heal, Edward H. Pinto and Arnold Tozer.

SCHOOLS

489 Buildings Completed Last Year

432 primary schools and 57 secondary schools were completed in this country during 1952. Though not completed, 186 other buildings were brought into use. At the end of the year 1,011 school buildings were under construction. The value of schools completed was £40,544,000, of buildings started £40,470,000 and of work under construction at the end of the year £104,424,000. Corresponding figures for 1951 were £34,615,000, £60,031,000 and £111,498,000.

FIBREBOARD

Development Association Formed

The building industry now has one more trade association. At a luncheon in London last week the Fibre Building Board Development Organization was launched. At the second meeting of the governing council of the organization, which preceded the luncheon, Eric Lawrence was elected its chairman.

About 25 firms of British fibreboard manufacturers (i.e., the vast majority) have joined the organization. In addition, most of the Continental manufacturers' firms are represented, and it is hoped that the firms that distribute fibreboard will eventually join, too.

The objects of the organization include: development work (particularly on improving the fire-resistance of fibreboard); the standardization of quality; the dissemination of information, both to designers and to users of fibreboard (including the organization of an information bureau); the instigation of research work; and, of course, as the organization's primary object, "to increase the consumption of fibre building board."

At the luncheon, Mr. Lawrence pointed out that, although the consumption of fibreboard in this country had increased by 100 per cent. from 1938 to 1951, the results obtained by its use in some quarters was "to say the least, no great advertisement" for the fibreboard manufacturers. He hoped that the organization's efforts would ensure that, in future, the right type of board was used in the right place.

VENICE

Summer School

CIAM is organizing a summer school for the development of an architectural and city planning theme connected with an actual existing problem in Venice at the University Institute of Architecture, Venice. The school will be held from September 5 to October 5 under the direction of Albini, Gardella, Rogers and Samona. Lectures will be given by Italian and visiting teachers on general subjects. Visits to places in Venice and its surroundings will also be arranged. The school is open to architects who have not been qualified for more than two years and students in their final year. The entry and attendance fee is roughly £8 15s. Accommodation and meals can be arranged at not more than 22s. a day. Persons intending to attend should get in touch with the Scuola Estiva CIAM, c/o Instituto Univesitario di Architettura, Fondamenta Nani 1,021, Venice, not later than July 15.

MOW

Postcards of Historic Buildings

Three sets of postcards of historic buildings in London have been issued by HMSO as a result of a committee set up in 1952 to advise the MOW on ways of improving the quality of postcards on sale at historic sites and buildings under their care. There are five views taken within the Tower of London, six cards of the Royal Naval College, Greenwich, and five views of floodlit subjects:—Buckingham Palace, St. James's Park, the Houses of Parliament, The Royal Naval College, Greenwich, and Trafalgar Square. They can be obtained from HMSO at 4d. each.

EXHIBITION

Book League

Several books of interest to architects are amongst the fifty British books chosen by

the National Book League for the Fourth International Exhibition of Book Design to be held at their headquarters, 7, Albemarle Street, W.1, in September. They include *Indoor Plants and Gardens*, by Margaret E. Jones and H. F. Clark (Architectural Press, 18s.); *Blenheim Palace*, by David Green (Country Life, 6 guineas); *Bedford by the River*, by Max Lock (Murray, 21s.); and *English Parish Churches*, by Graham Hutton and Edwin Smith (Thames and Hudson, 2 guineas).

Amongst the fifty selected jackets is that of *Modern Architectural Design*, by Howard Robertson (Architectural Press, 25s.). The jacket was designed by Herbert Spencer on lines suggested by the author.

SCHOLARSHIP

Reinforced Concrete in Contemporary Architecture

The travelling scholarship offered by the Trussed Concrete Steel Co. Ltd., details of which were given in the JOURNAL of April 16, page 477, has been awarded to G. Graham, A.R.I.B.A., of Nottingham.

Mr. Graham will be accompanied by P. B. Wood, B.Sc.TECH., of the company's staff, to whom a similar scholarship has been awarded.

DIARY

Ten Selected "News Chronicle" Coronation House Designs. At the B.C. 26, Store Street, W.C.1. Weekdays, 9.30 a.m. to 5 p.m.; Saturdays, until 1 p.m.

UNTIL JUNE 30

Furnishing to a Figure. At Heal's 196, Tottenham Court Road, W.1. Weekdays 9 a.m. to 5.30 p.m.; Saturdays until 1 p.m.

UNTIL JULY 31

House and Garden Summer Colours. At the House and Gardens Decoration Centre, 16, Grafton Street, W.1. Weekdays, 10 a.m. to 5 p.m.; Saturdays, until 12.30 p.m.

UNTIL MID-JULY



Right, two stands at the British Plastics Exhibition at Olympia, which closed last week: Top, the stand for British Geon Ltd., designed by Ian Bradbery; below, the stand for Monsanto Chemicals Ltd., designed by Jock Kineir of Design Research Unit.



Comments by conference members on the official papers, excerpts from which were published in the JOURNAL of June 11, are printed below in full. They are anonymous and have been censored by the RIBA. Also shown on this and the following four pages are photographs of the principal events of the conference (which took place from

June 10 to June 13, at Canterbury and Folkestone) and of the members participating in them. The hosts of this conference, which was a first and welcome endeavour to introduce a more serious note in this annual event, were the South Eastern Society of Architects. See page 787 for editorial comment.

BRITISH ARCHITECTS' CONFERENCE AT CANTERBURY AND FOLKESTONE



Informal Reception

There are three receptions of members at each conference. Two are formal, one by the President of the RIBA and the President of the local architectural society who are acting as hosts, and one by the mayor of the town in which the conference is being held. The third is informal, and at 8.30 in the evening before the conference proper. Top, right, the latter can be seen in progress: local architect and conference member J. E. Jackson, and Mrs. Jackson are being greeted by Robert Paine, President of the South Eastern Society of Architects, and by Mrs. Paine, and they are about to be greeted by Howard Robertson, President of the RIBA. The scene of the reception was the Leas Cliff Hall, Folkestone, and, once received, members could talk, drink (tea or alcohol) and examine the exhibitions arranged by

the hosts. These consisted of photographs of work by members of the South Eastern Society, above left, and an exhibition of developments in school design, which showed aluminium, steel, timber and concrete structural components. These exhibitions were arranged by Hugh Wilson, city architect and planning officer of Canterbury, shown centre, above, talking to F. L. Jackman, of London. Above right, President Paine listens to J. F. Moncrieff, the Mayor of Folkestone, who later spoke at the conference dinner.

DISCUSSION

Officially censored and anonymous comments by Conference members on papers by S. A. W. Johnson-Marshall, Richard Sheppard, C. H. Aslin, Sidney H. Loweth and F. R. S. Yorke.

THE first speaker said that in spite of the claims of the Conference papers, sweet reasonableness did not prevail in all parts of the country between official and private architects. If the Conference helped to bring about greater harmony into their relationship it would be very valuable. Some conflict resulted from the different methods

of remuneration, many junior official architects not appreciating the extent of the private architect's overheads. If a way could be found of giving the private architect some degree of security and continuity of work it would assist him to organize his office and plan his work economically and would get him closer to his official brother-architect. With regard to Mr. Yorke's paper, the real problem today was how to be a private architect at all. It was almost impossible for a young man to start in private practice today without considerable capital. Regarding new techniques of building, the architect ought to be in a position to design components before they came out of the factory; otherwise he would simply have to put up with them when they came out.

The next speaker referred to salaries and costs. Many local authority salaries were too low. At the same time he would like more data on office costs, particularly in new development work. For example, had the Ministry of Education any idea of office

costs in building schools like that at Wokingham? One point that had not been much touched on in the papers was the architect/client, or architect/child relationship. It was a great problem to get behind the schedule of requirements and understand the educational life for which architects were designing the physical framework. Here the official architect had the advantage over the private, and it would be interesting to know what machinery they had for keeping their ears to the ground.

One speaker, in referring to Mr. Yorke's paper, suggested that a system similar to that employed by a barrister might be introduced among architects. Instead of having a large number of juniors on his staff a barrister farmed out work to juniors employed in other offices, it being understood that they might do this work in their office time.

The point that the primary function of the architect was to be a designer was stressed by the next speaker. The disadvantage of



Inaugural Meeting

Under the delicate, gilded and traceried roof of the Chapter House, Canterbury Cathedral, the Mayor of Canterbury, below, welcomed the members to "the city's first large conference held within the city walls," at the Inaugural Meeting on Thursday, June 11. He hoped that members would have time (few had) to see something of the city. The Presidential address by Howard Robertson (on the Mayor's left, below) followed, in which he said that "we in Portland Place agree with the SESA that the conference should have some permanent value." He appealed for collaboration between public and private architects, saying: "a dog too long in a manger is apt to emerge a very sick dog." Robert Paine, President of the SESA, left, below, then proposed a vote of thanks to Howard Robertson and reminded architects that "we are building for other people, not for notoriety or ourselves." Previously circulated papers were introduced by S. A. W. Johnson-Marshall, chief architect MOE, and Richard Sheppard, above right. Slides were shown, though, due to the impossibility of darkening the room, they were hard to see. Votes of thanks to the speakers were proposed by Hugh Wilson, second from right, below, and seconded by Denis Clarke Hall, right, below, before the meeting became open to discussion by the audience, left.



large official staffs was that the official architect himself could not be the designer of much of the work for which he was finally responsible. Unless local government authorities could be brought to give adequate remuneration to a sufficient number of architects in their departments, the only chance of getting a high standard of work would be by some co-operative system that would make possible the employment of men who could give their whole time and attention to the technical processes of architecture. The group system of working could be further extended in this way.

On Mr. Yorke's suggestion of the architectural company, one member wondered if he were pulling members' legs. This member said he disliked the idea intensely. The private architect should guard his freedom and individuality even if it meant weathering financial storms. God forbid that they should ever become directors of plan-producing companies.

On the other hand, the next member to speak thought the question of limited lia-

bility companies should not be regarded as in itself indecent but should be considered dispassionately. During the last 50 years there had been many developments in techniques but no change whatever in the ordinary partnership agreement or the code of practice. The time had come to devote some attention to these things. This speaker gave some figures illustrating the financial disabilities of the architect as compared with a business firm. Thus a business firm that made £20,000 gross profit in a year might allocate £10,000 to payment of dividends and the remainder to building up reserves. On these reserves tax would be paid of approximately 10s. in the pound. The net addition to working capital was thus £5,000. The ordinary architectural partnership would have the whole of the £20,000 treated as profits, so that only £500 would be left available to plough back into the business. He did not suggest that the profession, or the Institute, should be mainly worried about the financial aspect, but they should be worried about stability and methods of

working and continuity, and if, through prejudice, they were limiting their opportunities of putting money into reserves for office improvements or for a rainy day then they were being very stupid.

The question was then asked why the Ministry of Education should pride themselves on the reduction of school building costs, when all they had, in fact, done was to build smaller buildings. If these smaller buildings were now considered adequate, obviously the former ones had been too big, and, this being so, why had it taken the Ministry from 1944 to 1951 to discover it?

Another speaker suggested that Mr. Loweth's form of service agreement might tend to diminish the architect's responsibility for engineering services, and another one wanted to know if the Ministry approved the RIBA fair tender requirements.

It was not felt by one member that the conditions of harmony between public and private architects which had been described from the platform were typical in the minor counties. There was antagonism, and this

Lunch
"Mem
for lun
right,
Left to
Momm
the GI
Wright
Depar
the N

Lunch

"Members and guests will make their own arrangements for lunch" said the official programme, and members, right, are doing so in the "Falstaff," Canterbury. Left to right, T. G. Price and C. F. Bates, of Newport, Monmouthshire, with Lawford R. Gower, representing the Glamorgan County Council; and J. H. Garnham Wright, assistant in the Kent County Architect's Department, and Douglas W. Dickenson, representing the North Riding of Yorkshire Education Committee.



Service and Garden Party

After lunch a special service, conducted by the Dean, was held in Canterbury Cathedral. It was attended by the Mayor and Corporation and by most of the conference members. After the service the members walked through the cathedral precinct, in teeming rain, to St. Augustine's Abbey, just beyond the city walls, where the garden party was to have been held. Owing to the rain it took place nearby within the buildings of St. Augustine's College, members eating their tea in the vaulted crypt, below, in an atmosphere of hot wet wool and steaming mackintoshes. Left, Sidney Loweth, Kent County Architect, is interviewed by George Mansell of The Architect and Building News. Centre, left, Mr. and Mrs. C. W. H. Wright, of Folkestone and Canterbury. Bottom left, Mrs. George Kenyon, of Newcastle, with Mr. Pembroke Wicks, Registrar of ARCUK, examines an exhibition of work by the students of the Canterbury School of Architecture. This was one of three exhibitions on view at the garden party. The stands for the students' exhibition, only part of which can be seen, were designed and made by the School. The other exhibitions showed models of the Canterbury plan, and, under a froth of little glass domes, Oakeley's models of English Cathedrals, all made of paper, slightly brown with age.



had unfortunately crept into RIBA Council elections. If the Conference decided that the employment of private architects was the right policy then this should be made known widely as the feeling of the RIBA. The same speaker deplored the waste that was caused when controlling Government Departments changed their minds after work had been started. An official architect member then declared that everyone wanted unity in the profession. He and his fellows were all architects first and officials second. No one in their right senses would say there was no need for private practice. But in his opinion these papers were two or three years too late, because schools now represented a falling market, and private architects should not look too much for their future there. There was, however, enough other work to keep the building industry working overtime for the rest of their lives. On the general subjects discussed in the papers it must be remembered that the finance committee of a local authority was the most mercenary and

hard-hearted body in the world. A county architect had to bear in mind that his finance committee was not interested in the future of private architects nor of architecture, but in pounds, shillings and pence. And work could be done cheaper in a large public office than by private architects; that was the only justification for the official architect. He thought that when private architects were used by the county architect there must be a large staff employed on co-ordinating the work of these private architects, and it could not therefore be the most economical way of tackling the job. Finally, on the question of architects forming or joining limited liability companies, this speaker reminded listeners of the story of Red Riding Hood. Two disadvantages of Mr. Loweth's system were then suggested; he had seemed to indicate that the sketch design should be provided by his Department and that they also wrote the specification. These ought always to be the individual architect's responsibility.

Another speaker felt that a lot of rubbish was talked about art and architecture. We might like being architects but we were in architecture primarily to obtain a livelihood. We worked in a commercial world and we had our hands tied by a feudal code of professional practice. Our counterparts in the commercial world thought we were "plumb crazy" for working as we did for what we got. We had only to look at the bar and at surgery to see that money-making was not incompatible with professional dignity. He thought a question to be asked was whether the RIBA was organized to give the best possible help to its members in earning their living. A member with experience of America spoke of the high standing of the large engineering-architectural corporations there. They were highly respected and had been responsible for raising American factory construction and design to its high present-day level. They had the necessary resources for the collection of data, investigation and research, without which technical advance



Civic Reception and Dance

At eight o'clock on Thursday night members were received at the Leas Cliff Hall, Folkestone, by the Mayor, Alderman J. F. Moncrieff. Above is the dance in progress. There were the usual bars for those not dancing, exhibitions for those who had not seen them on the previous evening, and a floor show, consisting of dances by a troupe of little girls and some acrobatic juggling. Below, West Country architects (with one exception), three of whom will be hosts at the 1954 Torquay Conference. Left to right, T. H. B. Burrough of Bristol; Edward Narracott, President of the Devon and Cornwall Society of Architects; Robert Townsend, of Durrington; Allan W. Vincent, representing Harwich; Lionel F. Vanstone, of Plymouth; Mrs. Molly Gerrard, of Bath; Lt.-Col. Eric Cole, President of the Wessex Federal Society of Architects; J. Nelson Meredith, representing Bristol; and Vyoyan Salisbury, of Wadebridge. Bottom, Sir Lancelot Keay, past-president of the RIBA, and late city architect of Liverpool, third from right, standing with a group of public architects all of whom have at some time worked under him. Left to right, J. Nelson Meredith, J. H. Lloyd Owen, representing Leicester; Charles T. Bloodworth, regional architect, MOHLG; Leonard C. Howitt, representing Manchester; Sir Lancelot Keay; George Keynon, representing Newcastle-on-Tyne; and G. Noel Hill, representing Lancashire County Council.



was impossible. They were in a largely parallel position to the official architects of this country. He also said that the law in some American states made it compulsory for the architectural members of a company to be named.

One member felt that effects today were being achieved by means of painted colours which in a short time would need a good deal of maintenance, instead of by materials which would mellow with time. There was a tendency to claim that the substitute was better than the original. If it had not been for the war, would we have gone along the lines we are following today? He thought we were encouraging a general lowering of building craftsmanship.

The hope was expressed by a member that we might in due course find ourselves with a unified system of administration of public authority building. The RIBA should begin thinking about such a system and getting it adopted by government and local authorities. The purpose of such a system must be the maintenance of the profession as a free designing and technical body and to that end there must be full and complete responsibility for as many individual practitioners as possible. It was a weakness of the team system of working that human beings working together tended to lean on each other.

The idea of the company organization worried the next speaker. He thought we needed to know more about the legal implications and to be told exactly what were the pros and cons of it.

Mr. Aslin, Mr. Loweth and Mr. Johnson-Marshall then summed up. On the question of temporary staff, Mr. Aslin said that in his opinion there should not be any. On the question of office costs, if an official office could not run its own costing system it was badly run. The idea that non-traditional building had high maintenance costs was a fallacy. To ask where we should be going but for the war was to look back to the middle ages and ask where should we be had it not been for the Black Death. Everything had grown out of the conditions in which we found ourselves, and he believed the present trend would continue indefinitely.

Mr. Loweth said he was surprised to hear it said that the RIBA was too late in considering the question of the employment of private architects, since the member who complained of this had himself been on the Council in 1947-48 and could have raised it then. He also challenged the same member to prove that the cost of employing a private architect was higher than that of using the official architect's office. He had given sketch plans to private architects only when it was first decided to use private architects, and the sketch plans had already been done in the office; they were naturally handed over. It was true that the quantity surveyor wrote the specification, but the whole of the information for it was given him by the architect. As to the cost of making alterations when the Ministry changed its mind about building regulations, he felt they should give official architects notice when they were going to do this, and if plans had to be scrapped the cost should be borne by the government and not the ratepayer.

Mr. Johnson-Marshall corrected Mr. Loweth on this point. No regulation had ever been changed on an existing programme, he said. On the question of local authorities' interest in architecture, this would grow with knowledge; it was the architect's job to see that it went on growing. The matter of competitive tenders was one for local authorities themselves to deal with; the Ministry was not out to give a ruling on every detail. On the statement that school buildings were smaller today, he said that the cut had not been in teaching space, which, in fact, was greater; the saving was in what had hitherto been waste space. The question of the relation between the private and official architect represented a really serious job to be done; it was the key problem of our time.



The Secret Session

On Friday, following the introduction of their papers by C. H. Aslin (seen speaking, left), by Sidney Loweth (third from right), who also showed a number of slides of Kentish schools, and by F. R. S. Yorke (second from right), votes of thanks were proposed by Howard Lobb (behind Mr. Aslin) and seconded by Harold Conolly, Essex County Architect (extreme right). The official version of the discussion which followed is reproduced on the preceding four pages. Below is a view of part of the audience, engaged in studying the papers read which were circulated in advance.



Tours

As usual, the Friday afternoon was devoted to tours by 'bus of villages, castles and schools. Those who had not attended the morning meeting (and there cannot have been many, because very many more members than usual attended the second lot of papers read) went on whole-day tours. The tours were not always very enjoyable, owing to the steady and persistent rain. Above, W. A. Shirbon, left, assistant architect in the Kent County Architect's office, showing Mr. and Mrs. R. S. Kastendieck, from America, round the steel, glass and plastic Folkestone Technical College. There were four further tours on Saturday morning, making a total of twelve.



Conference Dinner

The social climax of this, and any conference, is the dinner on the Friday night. For the last time the two Presidents receive the guests and make speeches, and for the last time the members assemble en masse. The setting for the dinner was the Simon Langton Girls' School in Canterbury, a building designed by Hugh Wilson, the City Architect. The reception took place in a gymnasium—the horizontal bars can be seen in the photograph of the Dean of Canterbury, below, centre. With the Dean is his wife, Mrs. Hewlett Johnson, and Canon C. K. Sansbury, warden of St. Augustine's College and host of the garden party. Below, right, John L. Seaton Dahl, second from left, a Folkestone architect in partnership with H. G. Cadman on the right. Mr. Dahl was the architect of the Leas Cliff Hall, the scene of so much of the conference activities. Also in the photograph are Brigadier-General Sir Ormonde and Lady Winter, and Mrs. H. G. Cadman, centre. Above, another group at the reception, from left to right, Mrs. K. C. Cartwright; Miss Marion Young; Harold Dod of Liverpool; T. N. Cartwright, President of the Nottingham, Derby and Lincoln Society of Architects; and Mrs. and Mr. F. J. M. Ormrod, President of the Liverpool Architectural Society. After the dinner, which, considering the overloaded kitchen services, was excellent, came the speeches. The Mayor of Canterbury thought that "the beauty of the arts has been exhausted... the Academy this year very disappointing... I was attracted by the larger industrial buildings (on view)... resembling a palace" Robert Paine, replying to the toast of the SESA, praised the work of city planner Hugh Wilson. Sir Lancelot Keay proposing the toast to the guests praised Jimmy Thomas, M.P., the father of Leslie Thomas, M.P., shown right in the photograph below left, with R. Schofield Morris, President of the Royal Architectural Institute of Canada. Mr. Morris replied, as did Leslie Thomas, who timed his long speech, very carefully, to end at midnight, as, to all intents and purposes, did the conference.



PRIMARY SCHOOL

in MIDFIELD WAY, ST. PAUL'S CRAY, KENT

designed by ELIE MAYORCAS in collaboration with
S. H. LOWETH, county architect ; consulting engineers

(structural) MALCOLM GLOVER and PARTNERS, (services) J. STINTON
JONES and PARTNERS ; quantity surveyors, C. JOHN MANN and SON

The junior mixed and infants' schools in Midfield Way, St. Paul's Cray, for the Kent Education Committee, form part of the main scheme to provide school accommodation for the LCC housing estate in the area, as far as could be estimated up to 1952-53. The two schools are linked by a covered way and share a kitchen ; both are three-form entry schools ; one for 520 juniors, the other for 360 infants. Later, a two-unit nursery school will be added. The dining room is divided into junior and infants' areas on the basis of two shifts for each meal.

General view from the south-east.





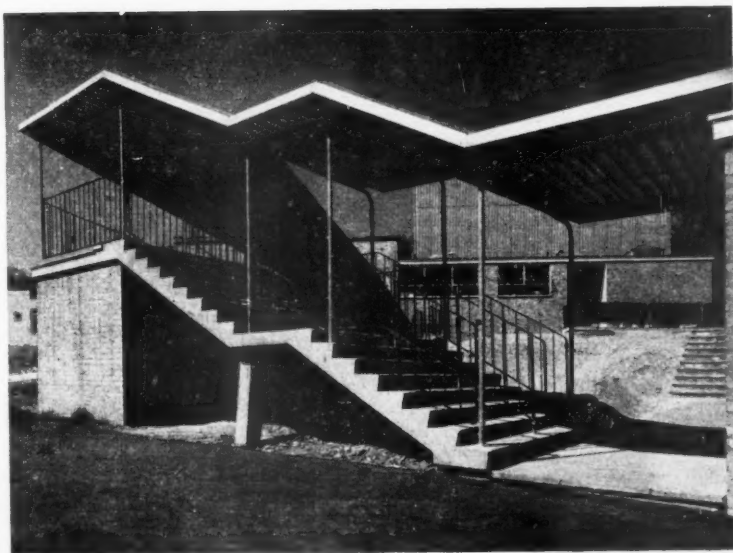
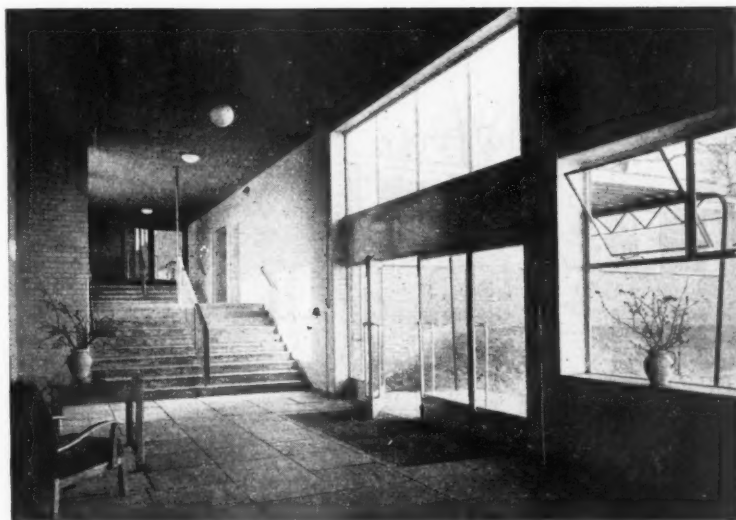
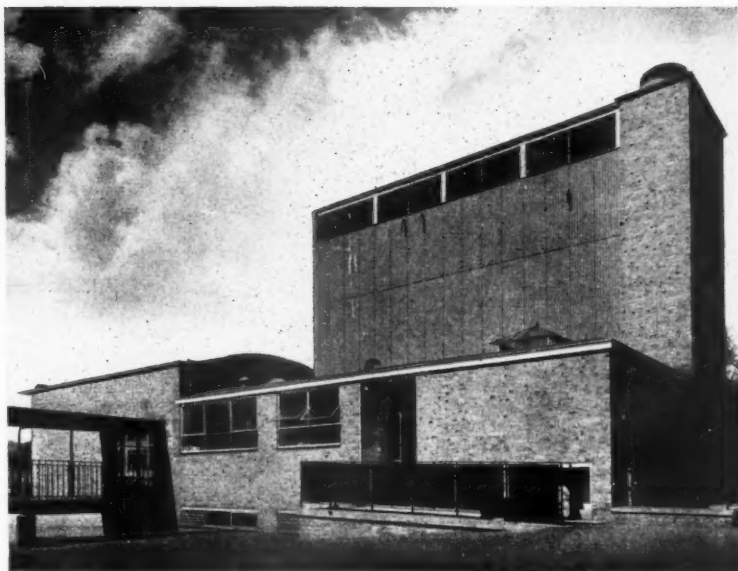
Above, the junior teaching wing from the north-west. Right, the tank tower and kitchen stores.

SITE.—The site faces almost due south and has, for about half its depth, a steep fall towards the south, and then flattens out to almost level ground. The level ground is to be used for playing fields for the secondary schools in the vicinity and is consequently kept clear of buildings. The main access to the school is at the north-east corner of the site, off the relatively quiet Grovelands Road. The contours had a great effect on the layout adopted, with the buildings following the natural lie of the land.

PLAN.—The first floor classrooms in the junior school are approached in pairs by staircases, thus avoiding an upstairs corridor and allowing cross lighting in ground floor classrooms. A problem of the elevational treatment was how to gain in a large project the friendly character often achieved in small schools. With this in mind, the architect has attempted to make the building look smaller, particularly externally, by having details, such as the sub-division of fenestration, on the large side.

CONSTRUCTION.—The construction generally is a combination of light welded steelwork and load-bearing brickwork. In contrast to the rest of the school the dining room has a reinforced concrete *in situ* frame supporting a shell concrete barrel roof. Foundations are of mass concrete with R.C. ground slabs and precast trough units for suspended floors. Internal partitions and panel walls are 4½ in. sand lime brickwork, increased to 9-in. and 13½-in. externally, where load bearing. Roofs are of light welded steel trusses or welded steel bar joists. Staircases have precast R.C. treads on *in situ* R.C. spine beams. (The covered way linking the two departments of the school will appear as a Working Detail in a later issue of the JOURNAL.) Owing to the difficulty in obtaining normal rolled steel sections for external wall stanchions to the two-storey classroom block, normal steel reinforcing rods were welded together in the form of a light

Centre, right, the junior entrance (the canopy appeared as a Working Detail in the JOURNAL, January 29, 1953), and steps leading to the assembly hall. Right, covered way linking the dining room and infants' school.





Above and right, the dining room and terrace from the north-west. Extreme right, the junior dining space and kitchen hatch.

PRIMARY SCHOOL

at ST. PAUL'S CRAY,
KENT

designed by ELIE
MAYORCAS

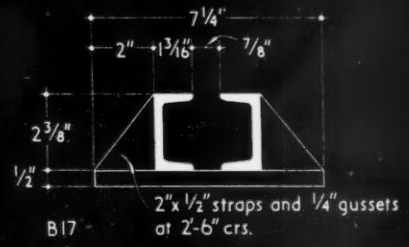
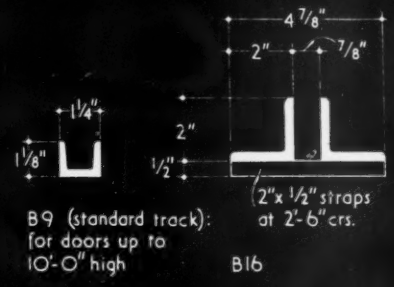
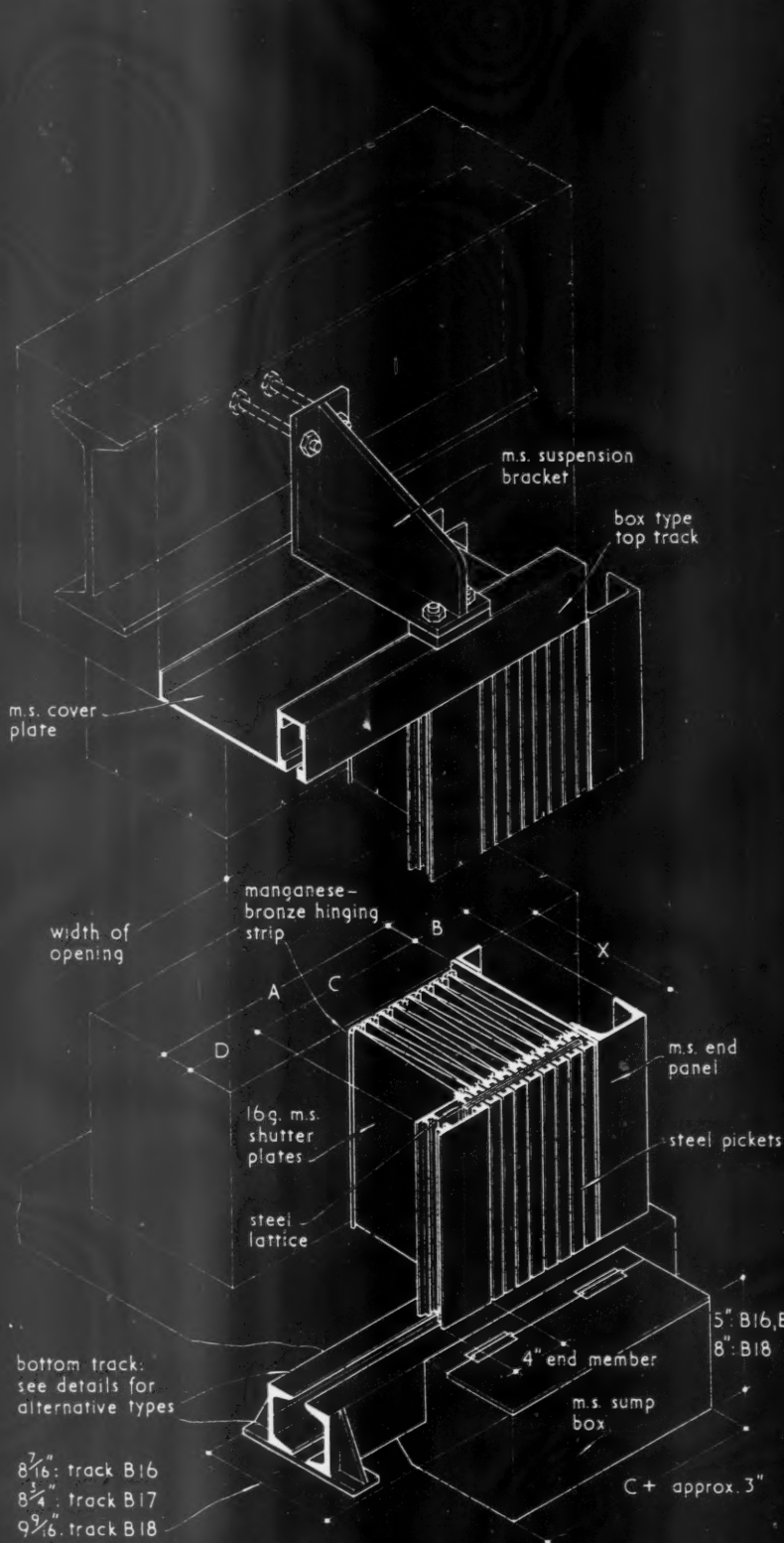




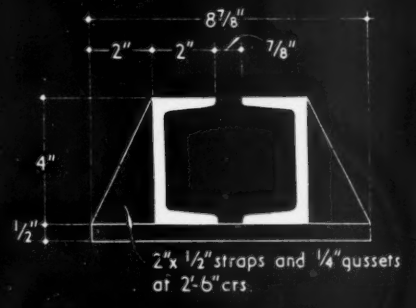


DOORS | COMPOSITE

The Architects' Journal Library of Information Sheets 421. Editor: Cotterell Butler, A.R.I.B.A.



B16 and B17 for doors 10' 0" to 16' 0" high



ALTERNATIVE BOTTOM TRACKS.

size of leaf	9" (for doors up to 16'-0" high)	12" (for doors over 16'-0" high)
X	11"	1'-2 1/2"
D	4" min.	6" min.
A	varies according to width of opening	
B	5/8" for doors up to 10'-0" high 4 1/8" for doors 10'-0" to 16'-0" high 5 1/8" for doors over 16'-0" high	
C	varies according to width of opening: method of calculation given on reverse of Sheet	

TABLE OF DIMENSIONS.

ISOMETRIC VIEW OF DOOR ASSEMBLY.

23.E1 BOLTON PATENT SHUTTER DOORS (Patent No. 464984)

This Sheet describes Bolton patent shutter doors which may be supplied singly or in pairs to suit any size of opening. In addition to the type shown, the manufacturer can supply fireproof and electrically-operated doors, multi-leaf doors and collapsible gates and grilles.

General Design

The door consists of steel pickets, with collapsible lattice between, which support on the outside folding shutter plates. There is a box type track at the top and a channel track at the bottom. Handles and locking devices are accommodated in the vertical end member.

Construction

Top track: This is a built-up steel box section and is 4 in. high when used with $\frac{3}{4}$ in. pickets and 5 in. for 1 in. pickets.

Suspension brackets: These are of welded construction manufactured from 4 in. by $\frac{1}{4}$ in. mild steel flat with $\frac{1}{4}$ in. thick gusset plates. They are fixed to the lintel member at approximately 3 ft. 6 in. centres, the shape and size of bracket depending on the type of lintel. The two brackets at the end are more closely spaced as they carry the full weight of the doors when folded.

Cover plate and end panel: These are mild steel and act as draught excluders. Where doors are folded back against piers or return walls, end panels are unnecessary.

Pickets and lattices: The sizes of picket and lattice members vary as follows:—

For doors up to 16 ft. high, $\frac{3}{4}$ in. pickets, 1 in. by $\frac{1}{4}$ in. lattice.

For doors between 16 and 20 ft. high, 1 in. pickets, $1\frac{1}{4}$ in. by $\frac{1}{4}$ in. lattice.

For doors over 20 ft. high, 1 in. pickets, $1\frac{1}{4}$ in. by $\frac{3}{8}$ in. lattice.

Shutter plates and hinging strips: The shutter plates are in 16-g. mild steel and are 9 in. or 12 in. wide. The latter are fitted with a centre rib for additional strength and are for doors over 16 ft. in height.

The vertical edges of each plate are specially shaped to produce an easy hinging action and are rolled round a $\frac{1}{8}$ in. dia. mild steel wire which adds considerable strength to the door.

The hinging strips which connect the edges of the shutter plates are in manganese bronze or other non-ferrous metal.

End members: These are built up from two picket sections connected by two 4 in. wide plates.

Handles: Handles are normally supplied in brass and are fitted halfway up the door on the end member or at a maximum height of 5 ft. on doors over 10 ft. high.

Locks: The doors are normally fitted with clutch-bolts or hook-bolts. The clutch-bolt locks, but does not latch, so may be left in the unlocked position on doors that are used frequently and opened from either side. The hook-bolt latches whenever the door is shut and is used mainly on entrance doors which require to be kept closed and are opened only to admit authorised persons. It may be fitted with a key and trigger control, enabling it to be opened from the inside without a key.

Cylinder rim locks can be fitted or any other type of lock to suit requirements; doors may also be adapted to receive padlocks.

Bottom track: This varies according to the height of the door. Details of the alternatives are given on the face of the Sheet.

Sump box: This is of mild steel with a hinged lid and is fitted in all cases where the height of the door exceeds 10 ft. Dimensions are given on the isometric drawing on the face of the Sheet.

Windows: Windows to the following dimensions can be fitted in the doors if required: $5\frac{1}{2}$ in., 9 in., 12 in., 18 in., 24 in. and 36 in. deep by $3\frac{1}{2}$ in. to 9 in. wide, depending on the size of the leaves.

Although the data given are for steel, the doors are also available in aluminium alloy.

Sizes

Planning sizes are given on the face of the Sheet with the exception of the width of the door when folded (dimension C on drawing). For planning purposes this may be roughly calculated by allowing $1\frac{1}{2}$ in. for every foot of the width of the opening and subtracting D from the total. Where there is a pair of doors the calculation for each door is worked on half the width of the opening.

Weights

The weights per square foot of the areas of the extended doors are as follows:

With $\frac{3}{4}$ in. pickets, 9 in. shutter plates—9 lb. per sq. ft.

With 1 in. pickets, 9 in. shutter plates— $9\frac{1}{2}$ lb. per sq. ft.

With 1 in. pickets, 12 in. shutter plates—8 lb. per sq. ft.

The weights of aluminium alloy doors are approximately two-fifths of the figure given in each case.

Fixing

The best method of fixing the top track is shown in the drawing on the face of the Sheet. The bolts for the suspension bracket are secured to the r.s.j. before the concrete is cast. For fixing to an existing lintel, ragbolts must be grouted into the concrete. In each case, the track may be fitted to the face of the lintel or beneath, as required.

Ordering

When ordering the patent shutter doors the following information should be supplied:

- Number of openings to be fitted.
- Whether doors to be single or in pairs; if single, to which side it is to fold.
- Sketch plan giving width of opening, showing which is the inside and indicating position and space available for folded door.
- Sectional drawing through opening, giving details of lintel and any steelwork to which the door can be fixed and also indicating any slope in the floor.
- Where there are any beams, trusses or other obstructions, an inside elevation of the opening showing their position should be supplied. Similarly, where there are any variations in the height of the opening these should be indicated, showing clearly whether they are due to irregularity in the floor or the lintel.
- Specify type of lock and windows required.

Further Information

The manufacturer will send a representative to advise on details of fixing and other problems.

Compiled from information supplied by:

Bolton Gate Co. Ltd.

Address: Waterloo Street, Bolton.

Telephone: Bolton 4240.

Telegrams: Gates, Bolton.





BUILDING BOARD | GENERAL DATA

15.B3

The Architects' Journal Library of Information Sheets 422. Editor: Cotterell Butler, A.R.I.B.A.

TRADE NAME	DESCRIPTION AND APPLICATIONS	THICKNESS	APPROX. WEIGHT PER SQ. FT.	STANDARD SIZES
Royal hardboard: standard quality	long, tough wood fibres made into hard, homogeneous sheets of great strength. smooth, durable face. for internal use: furniture and fittings, panelling	$\frac{1}{8}$ "	0.75 lb.	4'-0" x 12'-0", 10'-0", 9'-0", 8'-0", 6'-0": also cut from 5'-3" x 18'-0"
		$\frac{3}{16}$ "	1.0625 lb.	4'-0" x 12'-0", 10'-0", 9'-0", 8'-0", 6'-0"
Royal hardboard: standard quality door panels	for flush doors	$\frac{1}{8}$ "	0.75 lb.	<p>specially cut to door manufacturers' requirements e.g.</p> 6'-8", 6'-6" x 2'-8 $\frac{1}{2}$ ", 2'-8", 2'-6", 2'-5 $\frac{1}{2}$ ", 2'-2 $\frac{1}{2}$ ", 1'-11 $\frac{1}{2}$ " : 6'-6" x 5'-3" etc.
Royal oil-tempered hardboard	long, tough wood fibres made into a homogeneous sheet, tempered by a special process and rendered highly water resistant. stronger and harder than standard quality for floor finishes and all external work: concrete form lining: caravans and body building	$\frac{1}{8}$ "	0.75 lb.	4'-0" x 12'-0", 10'-0", 9'-0", 8'-0", 6'-0"
		$\frac{3}{16}$ "	1.0625 lb.	
Royal flameproofed hardboard	hardboard flameproofed in manufacture, accepted by L.C.C. for temporary exhibition work	$\frac{1}{8}$ "	0.75 lb.	4'-0" x 9'-0"
Royal coloured hardboard	available as standard or oil-tempered boards, coloured in manufacture by a special process. smooth, durable coloured surface does not require primer, filler or undercoat may be left untreated or finished with gloss paint	$\frac{1}{8}$ "	0.75 lb.	cut from 4'-0" x 18'-0"

ROYAL HARDBOARDS: RANGE, STANDARD SIZES AND TYPICAL APPLICATIONS.

Compiled from information supplied by Spencer, Lock and Co. Ltd. for Aktiebolaget Statens Skogsindustrier.

15.B3 ROYAL HARDBOARDS: RANGE, STANDARD SIZES, PROPERTIES AND TYPICAL APPLICATIONS

This Sheet describes the general properties of Royal hardboards. The table on the face gives a brief description of the range, standard sizes available and the general applications for each type of board. The following notes give further details of their properties.

Description

Royal hardboard, standard quality : The face of the boards is hard and smooth and the reverse has the markings of the wire mesh screens on which the boards are formed. They may, if required, be proofed in manufacture against attack by destructive insects.

Royal oil-tempered hardboard : This board has an extra hard surface with a fine finish. The reverse side has the markings previously described.

Royal flameproofed hardboard : The boards are flameproofed during manufacture and are distinctively coloured to distinguish them from other types of board.

Royal coloured hardboard : These boards are available in standard or oil-tempered quality, the smooth face being coloured in manufacture by a special process.

Properties

The figures given below are for standard quality and oil-tempered hardboards. The figures for coloured boards will be similar, depending on whether they are in standard or oil-tempered quality.

Property	Royal standard quality hardboard	Royal oil-tempered hardboard
Density, lb./cu. ft.	62.1 to 65.0	67 to 70
Modulus of rupture, lb./sq. in.	8,000 to 9,300	11,600 to 12,700
Tensile strength, lb./sq. in.	4,600 to 5,400	5,700 to 6,700

Water resistance : Royal hardboard does not disintegrate when in constant contact with moisture and on drying out the boards regain a high percentage of their original strength.

Water immersion tests show that after being in water at 20° C. for 72 hours the standard boards, on being dried, regain 85 per cent. of their original tensile strength and modulus of rupture. The oil-tempered boards, subjected to the same test, regain 90 per cent. and 95 per cent. of their tensile strength and modulus of rupture, respectively.

Spread of flame : Tests, as described in B.S. 476: 1932, to classify a material according to its surface spread of flame, were carried out by the Department of Scientific and Industrial Research and Fire Offices' Committee Joint Fire Research Organisation on samples of Royal flameproofed hardboard. It was placed in Class 3—surfaces of medium flame spread (F.R.O.S.I. Report No. 275).

Compiled from information supplied by :

Spencer Lock & Co., Ltd. for Aktiebolaget Statens Skogsindustrier, Stockholm.

Address : 5, Laurence Pountney Hill, London, E.C.4.

Telephone : Mansion House 9304.

FIRST FLOOR

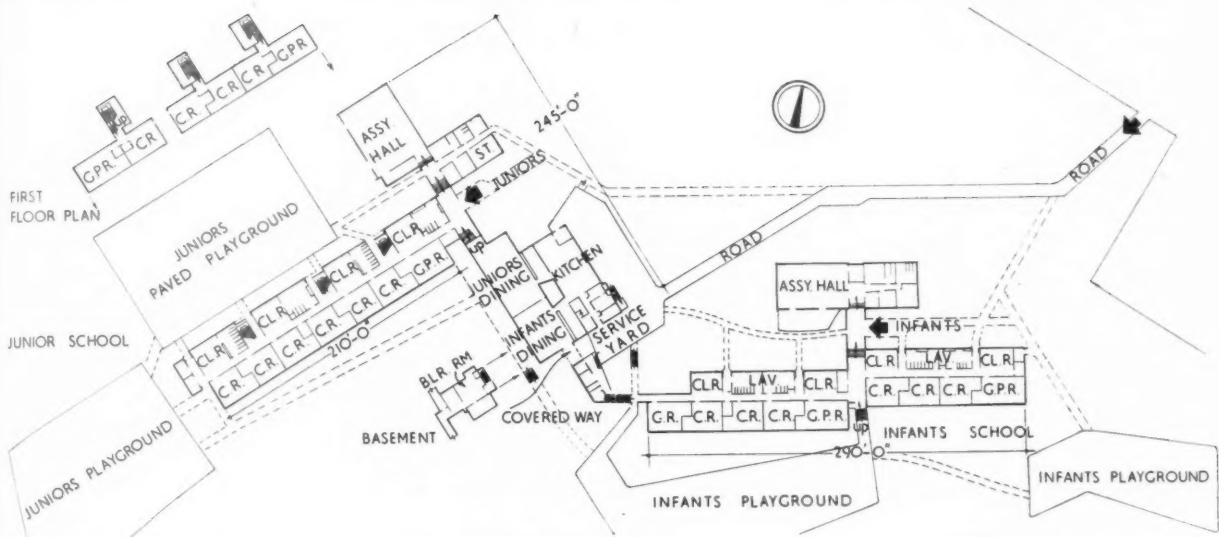
JUNIOR

JUNIOR

Ground plans

Below, junior c. staircases wing, block wing.





Ground floor and first floor plans and site layout

Below, left, typical first floor junior classroom. Bottom, left, staircase in junior classroom wing. Below, right, staircase block in 2-storey classroom wing.

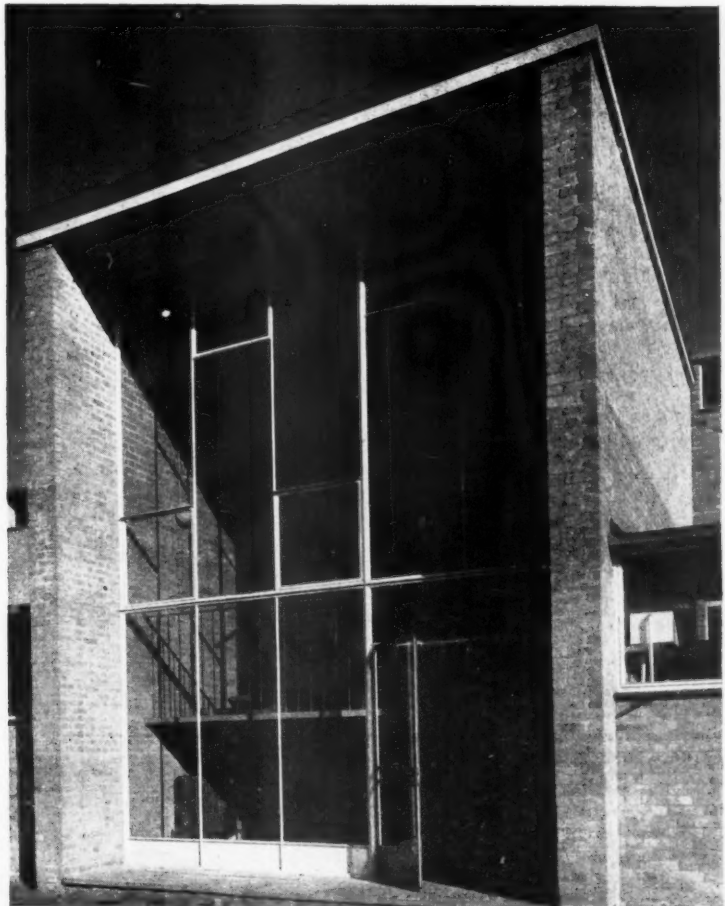
open metal "cage," with a steel base-plate top and bottom for bolting to foundations and fixing steel beams over. These cages were fixed into position and 4½-in. brickwork built around them, forming a 9-in. sq. "flue" whose centre was filled with concrete. The whole design is based on a 4-ft. module, in one direction only.

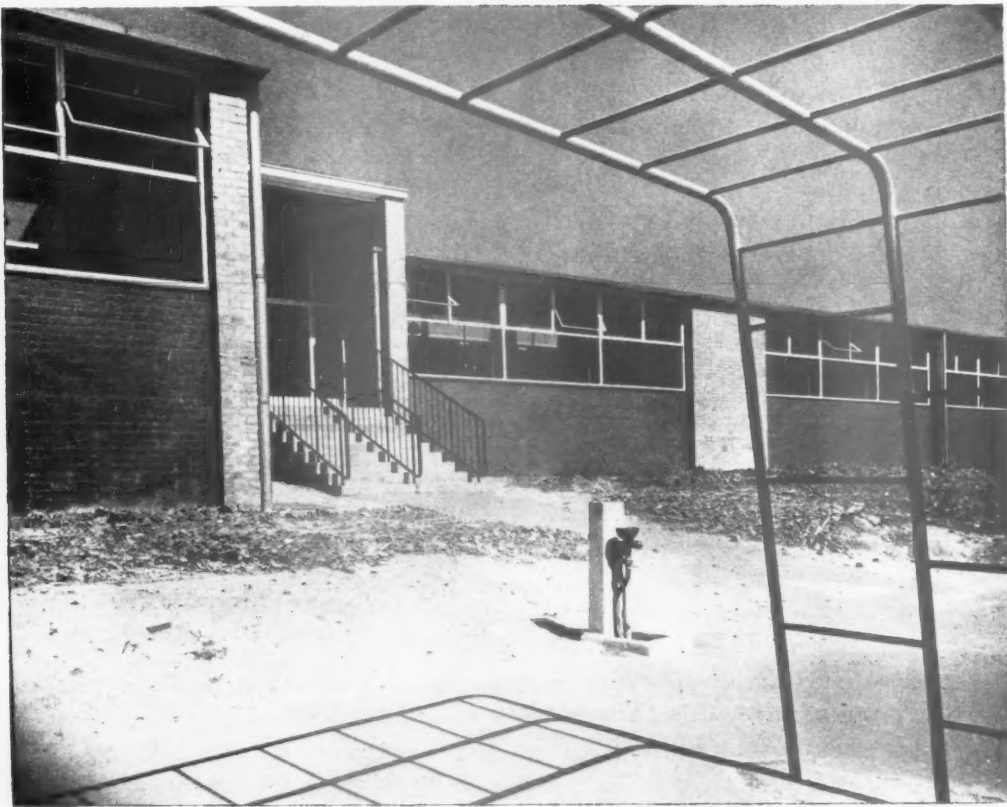
FINISHES.—Roofs are mainly of 2-in. woodwool

PRIMARY SCHOOL

at ST. PAUL'S CRAY, KENT
designed by ELIE MAYORCAS

slabs, supported on mild steel tees. Insulation board ceilings have been sprayed with water emulsion paint and the soffit of the dining room roof (which will be illustrated as a Working Detail in a later issue) is sprayed with a material which gives sound and





PRIMARY SCHOOL

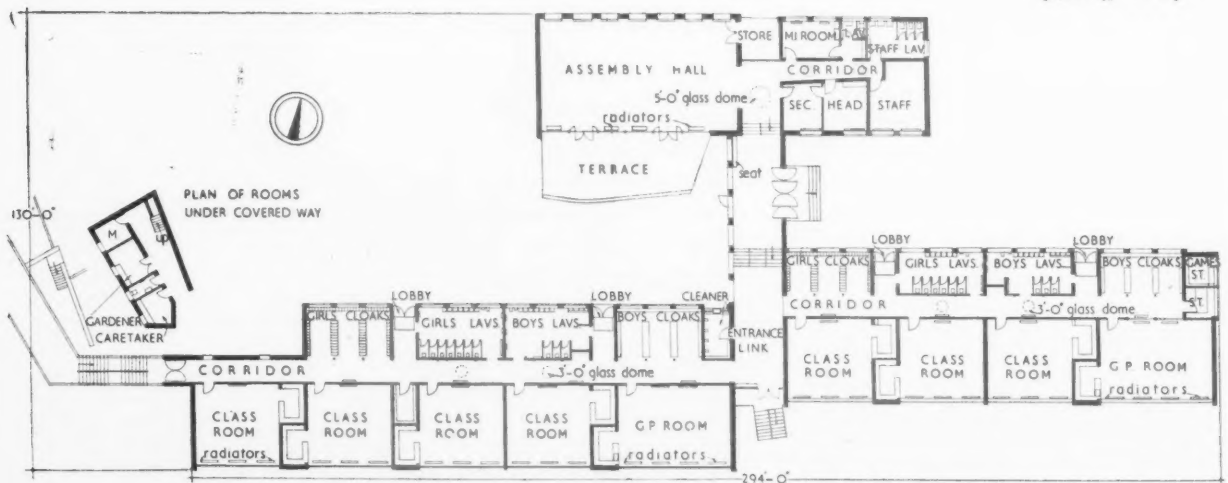
at ST. PAUL'S CRAY, KENT
designed by ELIE MAYORCAS

thermal insulation and has a "sand" texture. The external cladding of corrugated asbestos sheeting is fixed direct to light steel frame or timber studding. Gutters, down pipes, etc., are of 16-gauge aluminium, unpainted. Internally, walls are plastered only in assembly halls, administrative rooms and in the kitchen. Elsewhere decoration is applied direct to brickwork either in the form of glazed rubber chlorinated paint in corridors and lavatories or

Above, the infants' teaching wing from the playground on the south side, seen through a playframe. Right, exit from infants' classroom to playground.



Plan of infants' school
[Scale: 3/8" = 1' 0"]

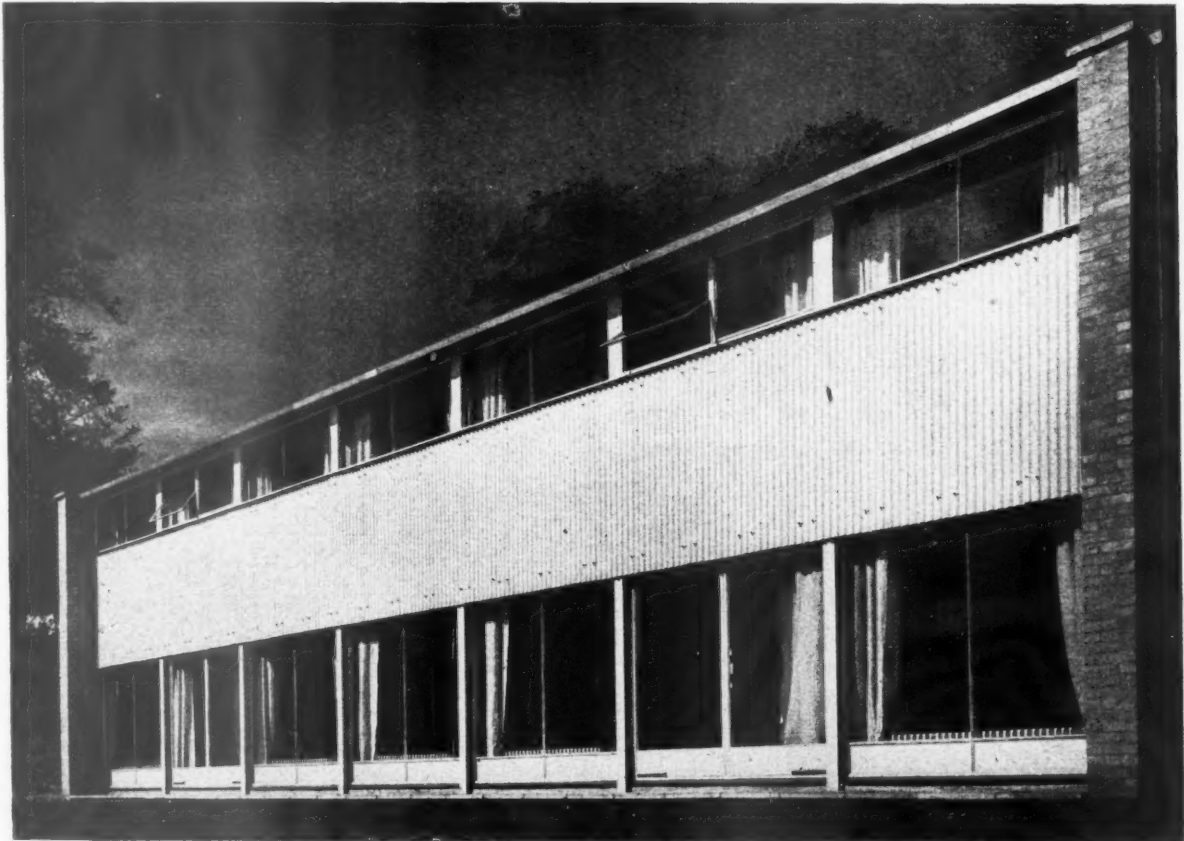
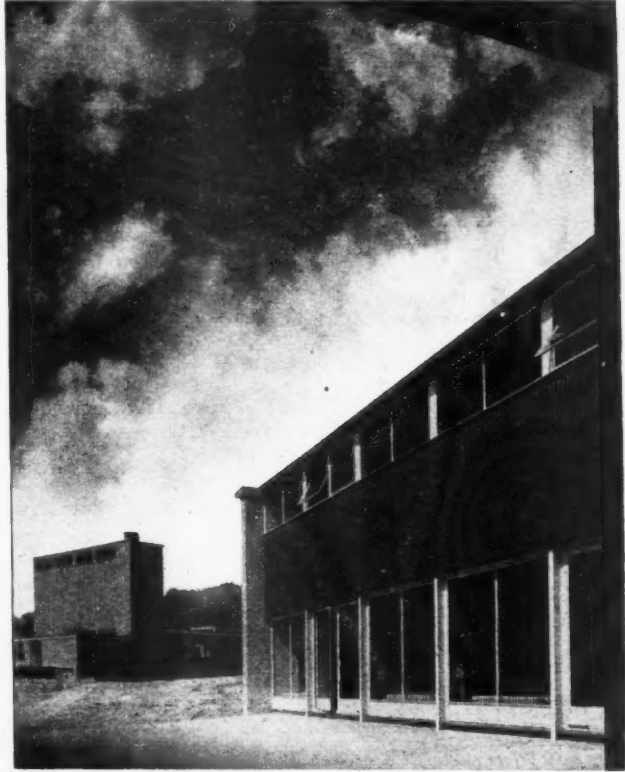
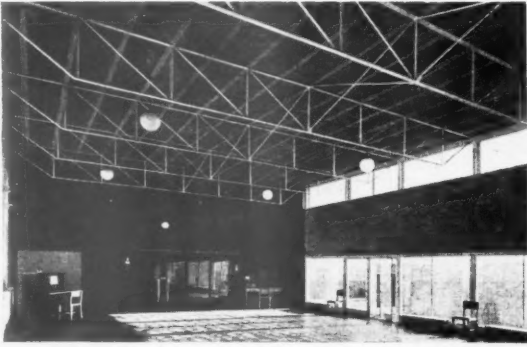


water emulsion paint in classrooms, etc. It is expected that the cost, including all site works, will be approximately £150 18s. per place (46.7 sq. ft. per place). This school forms part of the 1950 pro-

gramme, when the MOE nett cost per place limit was £170.

The general contractors were R. Corben & Son, Ltd. For sub-contractors see page 812.

Below, left and right, infants' assembly hall. The roof appeared as a Working Detail in the JOURNAL for February 26, 1953. Centre, left and bottom, junior assembly hall.



SHOP

at 116, NEW BOND STREET, LONDON W.1

designed by CHAMBERLIN, POWELL and BON

assistant-in-charge, ROBERT ASHDOWN

mural painter, AUGUSTUS LUNN



Shop front before redecoration

The original premises for the London Shoe Co. were designed in 1910 (see photograph below, on opposite page) although the facade was redesigned in 1935 by Mallet Stevens, as seen left. Shelves for shoe boxes lined every wall from floor to ceiling and chairs, fitting stools and show-cases were spread informally. In the new layout the shop has been divided into four areas, the entrance and display area at the front, the service and quick sales department, the fitting room and the storage area.

The façade facing New Bond Street



*The f
looking
display
display
be show
ing Det
issue of*

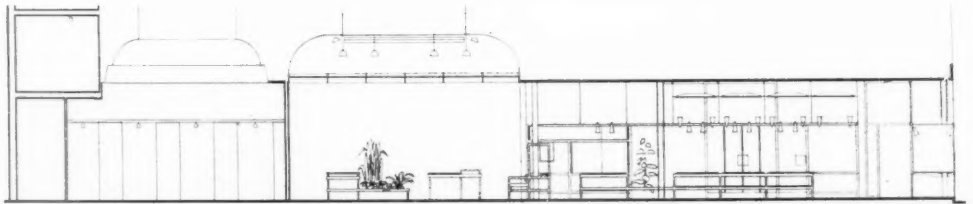
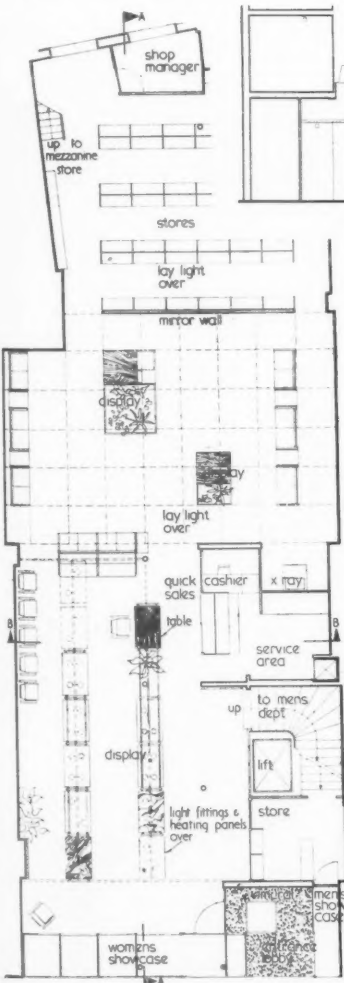
Plan



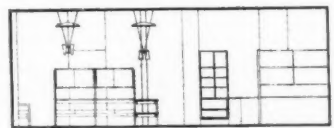
The fitting room looking towards the display area. The laylight ceiling will be shown as a Working Detail in a later issue of the JOURNAL.



Plan [Scale: 1/8" = 1' 0"]



Section A-A



Section B-B

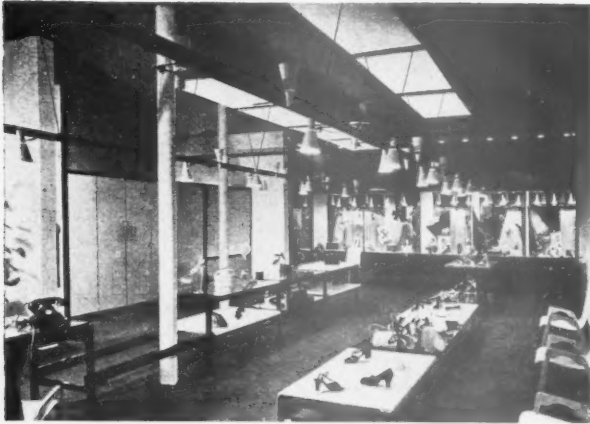
PLAN.—In the re-planning, the main showcase has been set back so that people can view the display at ease when the pavement becomes congested. The front and back, as well as the top, of this showcase are glazed to counteract reflection and allow the shop interior to be clearly visible from outside. There is a wide entrance lobby, backed by a mural designed by Augustus Lunn. The service centre, located between the display area and the fitting room, is arranged so that clerical work, wrapping of purchases and shoes for repair are kept out of view of customers. In the fitting room the existing laylight* has been re-designed to provide even daylight to ensure correct colour rendering for shoes. The screen dividing fitting room and storage area is faced with mirror glass to increase the apparent size of the former.

FINISHES.—The colours used had to be related to the existing green carpet. Four shades of grey, with a fairly wide separation of tones, and lime, provide the general background on walls and partitions. The suspended heating panels* in the



The shop before redecoration, looking towards the street and entrance from what is now the storage area. The shop was built in 1910.

* These will appear later as a Working Detail in the JOURNAL.



SHOP

in NEW BOND STREET, LONDON, W. 1
designed by CHAMBERLIN, POWELL and BON

display area are painted yellow and are in contrast to the deep blue ceiling, as well as acting as light reflectors. All colours are based on the Munsell range. Mahogany framing is black french polished. The display trays are verde antico, black and gold, Swedish green and Bois jourdan marbles and 1/4-in. polished plate glass. The seating units have loose covers in striped satin on latex foam upholstery. The glazing of the fitting room laylight is reinforced glass ply.

SERVICES.—In the display area there are electric floor heating panels under the carpet, with the thickness of the panels equal to that of the adjoining underfelt, also suspended ceiling panels and wall panels. In the fitting room there are storage heaters which consume current only at night and discharge accumulated heat by day. Of the total area of 2,875 sq. ft., the showroom is 2,000 sq. ft. and the storage area 875 sq. ft. The cost per sq. ft. is £2 17s. 2d. and the percentages of the total cost are building work,

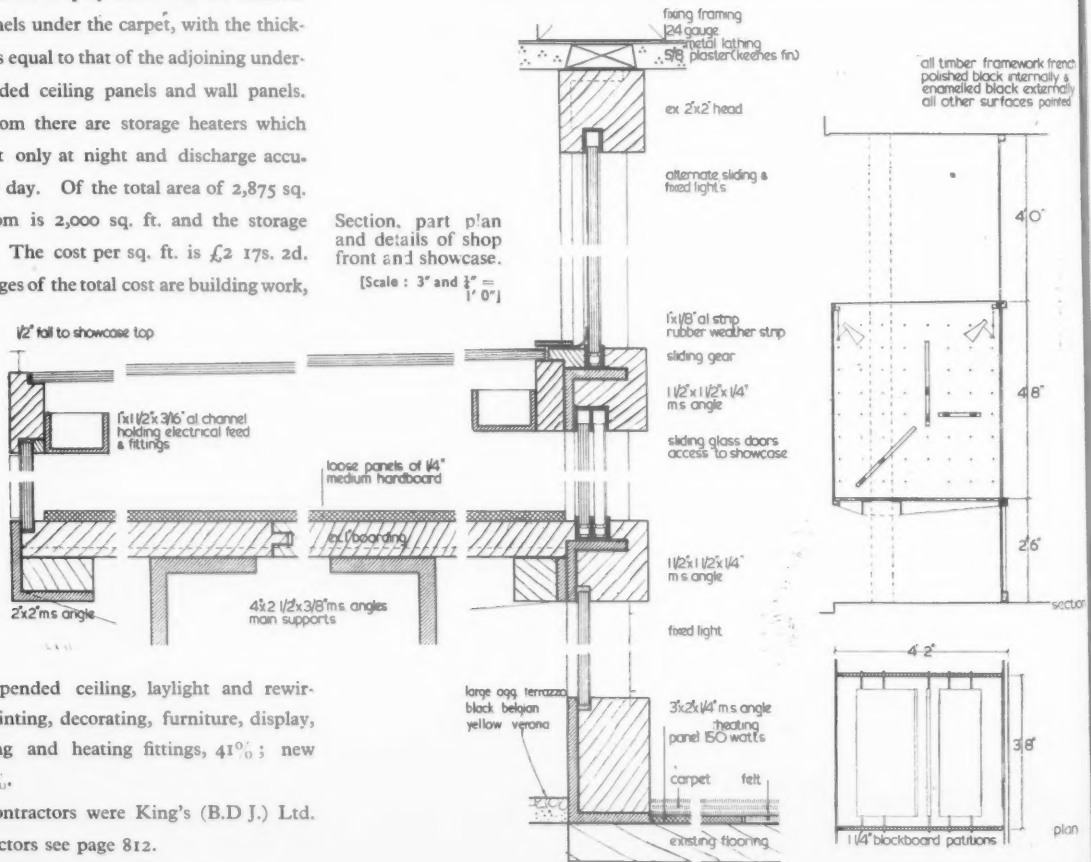
plastering, suspended ceiling, laylight and rewiring, 41%; painting, decorating, furniture, display, mirrors, lighting and heating fittings, 41%; new shopfront, 17%.

The general contractors were King's (B.D.J.) Ltd.
For sub-contractors see page 812.

Left, the display area looking towards the street. The suspended heating panels will appear as a Working Detail in a later issue. Below, the shop front and entrance.



Section, part plan and details of shop front and showcase.
[Scale: 3" and 1/2" = 1' 0"]



TECHNICAL SECTION

"Should a clause on accident prevention be introduced in building contracts?" asked Peter Trench, managing director of a well-known firm of building contractors, at the recent National Industrial Safety Conference.

The latest report of the Chief Inspector of Factories shows that there were roughly 12,500 reported accidents, of which 220 were fatal, in the building industry in 1951. The figure for fatal accidents is approximately one quarter of all the fatal accidents in the manufacturing industries and it was estimated earlier this year that "the chances of fatal accidents in the building trade are six times as great as in any other industry."

The architect's *legal* responsibility for accidents on work he is supervising is somewhat obscure, but his *moral* responsibility, both to the operatives and to the client (an accident on the site is bound to affect adversely the progress of the work), is clear. It seems equally clear, therefore, that the architect should know something of the precautions which should be taken to prevent accidents, as outlined in the *Building (Safety Health and Welfare) Regulations 1948*,* so that, when visiting the site, he will know whether or not these precautions are being observed. The answer to Peter Trench's question can only be given by the Joint Tribunal on the standard Form of Contract.

* H.M.S.O., 1948, 1s. 3d.

This week's
special article

26 SERVICES & EQUIPMENT: MISCELLANEOUS television aerials

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

An array of television aerials may easily ruin the carefully designed elevations of a block of flats or a terrace of houses. Can these rashes of antennæ be dispensed with? "Yes," says Anthony Hale who, in the following article, describes three methods of avoiding the use of individual external aerials for television receivers. In deciding which of these alternatives to choose, the architect should always consult a specialist firm of aerial installation engineers, preferably at an early stage in the design of the building.

A proper aerial is essential for television, but it is quite practicable to feed any number of receivers from one aerial. Systems of this nature have been in use for a number of years. Alternatively, in certain circumstances,

it is possible to feed a television receiver from an indoor aerial.

The three alternative arrangements to individual outdoor aerials are: (i) that each television receiver should have an indoor aerial; (ii) that a small number

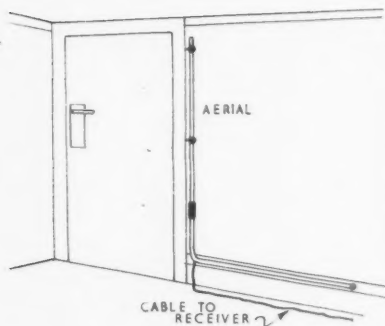


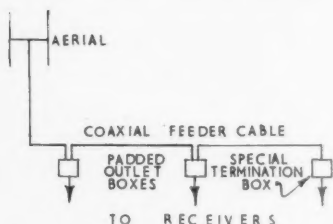
Fig. 1, typical indoor television aerial installation.

of receivers should be fed from one outside aerial, using special "matching" or "padding" circuits; (iii) that any number of receivers should be fed from one aerial, by means of an amplifier and suitable cable runs.

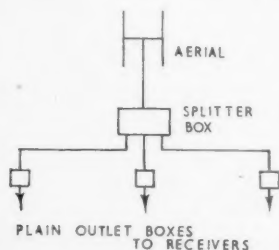
INDOOR AERIALS

The first arrangement, using indoor aerials, such as the type shown in Fig. 1, is only satisfactory in districts within, say, 8 miles of a high power transmitter, such as Birmingham or Wenvoe, or within 4 miles of a low power transmitter, such as Pontop Pike near Newcastle.

The results from such an indoor aerial, mounted in the same room as the receiver, will be quite satisfactory in a brick structure, provided it is not subject to a lot of electrical interference. Unfortunately, this type of aerial is very liable to pick up interference from cars or from mains wiring in the



Figs. 2a (above) and 2b (below), two methods of installing a small group of television receivers fed from one aerial.



Right, Fig. 3, the installation of a large number of television receivers fed from one aerial—a typical arrangement.

building, and can rarely be used, therefore, in heavily built-up areas.

In many blocks of flats the position is even more difficult, as a steel or reinforced concrete frame acts as a very efficient screen, which reduces the signal and may intensify the interference radiated by the mains wiring. It may not be possible, therefore, to get good results, especially on the ground or first floors of such a building, as the signal is much weaker near the ground. On the higher floors, results may be quite satisfactory. It is clear that regulations specifying that only indoor aerials may be used should not be made without carefully considering whether satisfactory reception can be obtained with these aerials. In general, such regulations are undesirable.

AERIALS IN THE ROOF SPACE

It is sometimes possible to use the roof space for aerials to feed the lower floors of a block, whilst using room-mounted indoor aerials for the higher floors, but such a decision could only be made after measuring the available signal level.

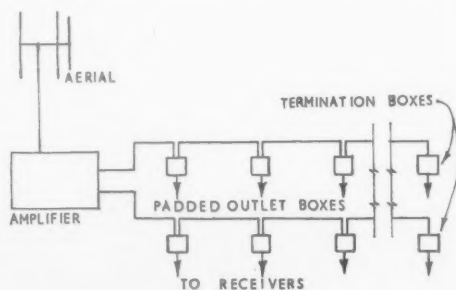
GROUP AERIALS

The second alternative is to use one aerial to feed a small number of receivers (3 or 4). This system can be used only fairly close to the transmitter; the limit of range being similar to that with indoor aerials, although good results may be obtained at longer ranges if the aerial is very high.

The great advantages of this system are that a directional aerial, mounted high, can be used, resulting in very much less interference being picked up. This arrangement can be used, therefore, in a town where indoor aerials would not be satisfactory.

Two alternative wiring systems are shown in Fig. 2. The first (a) is the most satisfactory, but it needs a large signal, such as is received 4-5 miles from the transmitter, as there are heavy, but inevitable, losses in the outlet boxes, amounting to a voltage reduction of about one-eighth (equivalent to about 18 decibels). With this system, there is no inter-action between the receivers, and any set may be used, switched off, or disconnected, without affecting the others.

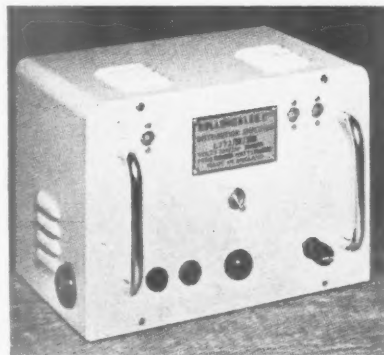
The second wiring system (b) gives a much smaller voltage loss (equi-



valent to about 9 decibels for a 4-outlet system). Unfortunately, however, operation with this arrangement is only correct when all receivers are installed. To maintain correct operating conditions, therefore, it is necessary for each user to insert a special loading plug when a set is disconnected.

THE USE OF AN AMPLIFIER

Where a large number of receivers have to be fed, or where the installation is more than 8 miles or so from a transmitter, the only satisfactory system is one using an amplifier. It is then possible to feed 100 or more receivers from one aerial in any district where a television receiver can normally be used and, in some cases, it is possible to give an even better picture than would be obtained with an individual aerial. A typical installation of this type is shown in Fig. 3. A directional aerial is used.



Type of amplifier used to feed up to 40 television receivers from one aerial. It is 10 in. wide, 7 in. high and less than 6 in. deep. (Belling & Lee, Ltd.)

With this system, the intentional losses in the outlet boxes, which prevent any inter-action between receivers and enable any connections or disconnections to be made without affecting the remainder of the system, are cancelled out by the gain in the amplifier. Thus, the signal available to the receiver is, within practical limits, the same as the signal that would be received direct from a normal aerial.

The amplifier can be mounted in the roof void, if access is easy, or in a lift house or cupboard on the top floor, and, as its mains consumption is normally only between 20 and 30 watts, the running cost is slight and it may be left switched on the whole time, although, of course, a time switch may be used if desired.

It is difficult to give an exact idea of the cost of this system without detailed knowledge of the particular circumstances, but it has been found that a properly engineered system costs somewhere in the region of £5 per receiver. This compares favourably with a normal

let
er,
nly
ed.
on-
for
ug

ve
is
ms-
is
men
ers
e a
sed
ive
be
al.
is
ial



le-
in.
ep.

ses
ny
ble
be
of
the
nal
ain
nal
a

the
lift
or,
is
30
it
me,
ay

the
led
m-
t a
ne-
er.
nal





MANDER BROTHERS LTD.

Makers of Varnishes & Fine Colours

This business was founded in 1773 by the Mander family. Members of the Sixth generation are active Directors of the present Company.

The world-wide reputation of Manders has been built up over a period of 180 years by sterling quality and service. The present factory is one of the most modern in the industry.

The latest addition to the Mander Range of Decorative materials is

MANDERLAC ENAMEL

It possesses outstanding qualities, in keeping with Manders' world-wide reputation.

For further information write to
MANDER BROTHERS LIMITED
WOLVERHAMPTON



Architect: Housing Department, Paddington Borough Council.
Contractors: Messrs. A. J. Harrold & Co. Ltd.

Redecoration . . .

When the redecoration of these flats in Leinster Gardens, Bayswater, was under consideration, "ELLICEM" Cement Paint was chosen as the finish most likely to give long-lasting protective decoration. The original paint finish was cleaned off thoroughly and "ELLICEM" applied by brush.

Incidentally, "ELLICEM" is a cement paint, not a wash, and is applied with a 4 in. paint brush or spray.

ellicem_{REGD.}

FOR DURABLE AND PROTECTIVE DECORATION.

APPLIED TO ANY CLEAN, SOUND SURFACE. NO IMPROVER REQUIRED.

For further information
and colour chart
write to me:—

Cecil Kahn



THE ADAMITE COMPANY LTD., Manfield House, Strand, W.C.2. Tem. Bar 6233/6

"H" type aerial system which, at present labour and material costs, would amount to some £12 to £15 per receiver.

Maintenance costs on an amplifier system are quite low, and will normally amount only to valve replacements in the amplifier, at say £2 or £3 per system per year, plus painting of the outside aerial at the usual intervals for painting external building work.

AERIALS

The more complex the aerial, the larger the signal it makes available and

the lower the interference picked up. Thus, it is always desirable to use a directional aerial with 3 or 4 elements, even when close to the station, in order to give a good signal-to-interference ratio.

In any installation using an outdoor aerial, this should be mounted as high as possible, and it is usual to use one of the many commercially available chimney or wall mounting brackets, in conjunction with a short mast.

CABLE RUNS

Multiple outlet systems must always be

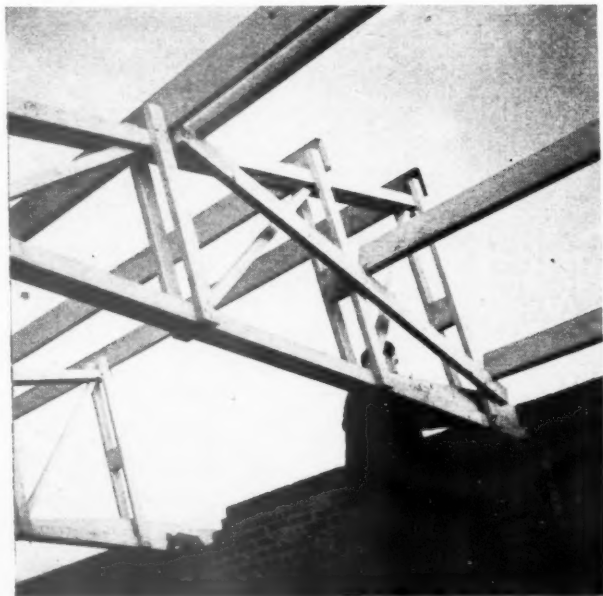
laid out in accordance with the type of equipment in use, and it is essential, therefore, to consult the manufacturers or the installers whilst the building is being designed, so that the conduits can be located in the most satisfactory positions (unless surface wiring, either internally or externally, is to be used). It is extremely difficult for the installation engineers if conduits or draw boxes are in the wrong places. The cable is quite different from electric wiring cable and the drawing-in procedure is different, too. There are usually 15 to 20 receivers on each circuit, but this depends on the type of amplifier.

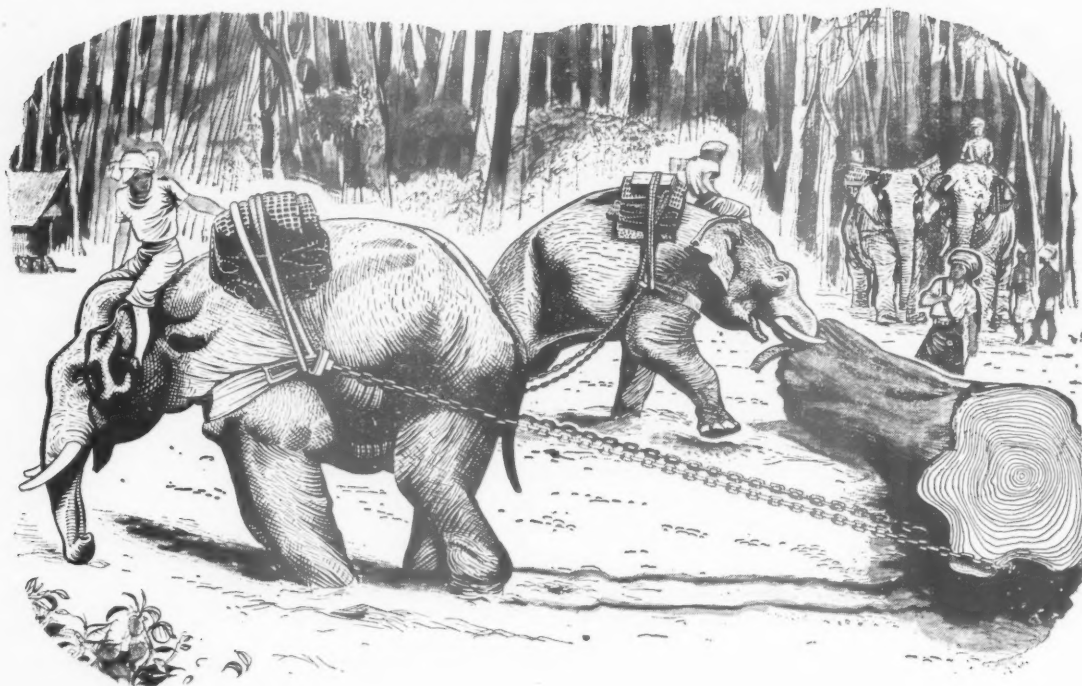
GLUED LIGHT TIMBER TRUSSES USED FOR NORTH-LIGHT ROOF

The use of light timber trusses, in lieu of steel, cut the cost of the roof structure of a boat-house on the river Tyne by nearly 70 per cent. The boat-house, for the rowing clubs of King's College and the Medical School of Durham University, was designed by architects Fielden and Wharfe, in consultation with engineer D. W. Cooper, in 1951, when it was virtually impossible to obtain a steel allocation for this type of building. The trusses are of the north-light type, as direct sunlight would harm the varnish of the boats. They have a clear span of 16 ft. 6 in. and are composed entirely of 3-in. by 1½-in. and 2-in. by 2-in. members, of 950-1,000

lb./sq. in. graded softwood (with the exception of the gussets—ex. 9 in. by 2 in.), glued together with synthetic resin glue ("Aerolite 300")—no bolts were used at all. Each joint was detailed so that three nails driven into pre-bored holes would act as cramps during the setting of the glue. This took 24 hours, but could have been speeded up considerably by the application of heat. The trusses were light enough to be lifted by one man, and were fixed in position by two. The roof consists of two rows each of nine trusses, at 10-ft. 1½-in. centres. The trusses are supported at one end on 13½-in. by 4½-in. buttresses in the 11-in. cavity brickwork external walls,

and at the other end on a central row of 18-in. brick piers. The roof is covered with corrugated asbestos sheeting on insulation board. The cost of the 18 trusses, erected and fixed, was slightly under £100. Steel trusses would have cost approximately £300. The photographs below show, left, a bricklayer finishing off the brickwork around one end of one of the trusses; right, a view along the valley between the two rows of trusses—note that the north-light is placed short of the end of the truss, which cantilevers about 18 in. to the point of support. (General contractors and joinery, J. & W. Lowry, Newcastle.) For further news of timber trusses, see p. 808.





Gold, diamonds and **TEAK**

Nature usually sees to it that man's struggles to wrest her rarest treasures are in proportion to the qualities of the treasure. The search for yellow specks in the soil goes on in the most uncomfortable places because there is no substitute for gold. The mighty efforts of man and beast to extract rare Teak trees from remote Asiatic forests continues for no less reason and to more purpose. Discerning and practical men the world over know that there's nothing like Teak for woodwork that must resist attack from water, wind, chemicals, insects and high temperature, for centuries if necessary.

Of course, it's dearer than most timbers; but it is good value. Morris can tell you all about Burma and Siam Teak and supply most building trade specifications from stock.

M·A·MORRIS·LTD



Other hardwood specialities stocked by Morris include Mahogany, Iroko and Wainscot Oak.

RAVENSDALE WHARF, STAMFORD HILL, LONDON, N.16.

Tel: Stamford Hill 6611 (6 lines)

COMPOSITE (LIGHT TIMBER/STEEL) TRUSSES SAVE
STEEL AND ARE ECONOMICAL IN TIMBER TOO



37-ft. 6-in. span, glued light-timber trusses were used for the roof of the new ante-natal clinic at the Princess Mary Maternity Hospital, Newcastle (architects, J. H. Napper and Bruce Allsop; consulting engineer, D. W. Cooper). The trusses were designed to give an almost horizontal soffit alongside the walls, above which concealed lighting is to be arranged (see photo above). They are constructed mainly of short lengths of select merchantable Douglas fir, stress graded at 1,000 lb./sq. in. in flexure, 100 lb./sq. in. in shear parallel to the grain, and 1,000 lb./sq. in. in compression parallel to the grain. The trusses were transported in two parts. Final assembly took place on the site and consisted of making one glued joint at the apex of the truss and the bolting on of the main tie (two 3-in. by 1½-in. R.S. channels) and the central post (two 3-in. steel flats). All other joints in the trusses were glued with synthetic resin glue ("Aerolite 300"); all contact surfaces having been machine planed. Bolts with 2½-in. square washer plates were used as cramps and have been left in as an additional safeguard. The eight trusses for this roof cost, erected and fixed, only £325. The photo below is a close-up showing the arrangement of the members of the trusses.



INFORMATION
CENTRE

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

13.107 materials: timber

FLOORS

Wood Block Flooring and Panel Heating. F. D. Silvester. (Wood. April, 1953.)

Architects are very interested in, but somewhat apprehensive about, the laying of wood block finishes over floor panel heating. At last some controlled experiments have been carried out, by TDA in consultation with BRS and FPRL. This article describes the results of tests on one panel of teak and three of oak blocks. While it gives useful data, it fails to give a clear summary or any clear indication to architects as to exactly what they might or might not do, with a reasonable chance of success. It also makes an annoying reference to costs, without giving any really useful information.

16.100 materials: miscellaneous

BRICKS

Perforated Clay Bricks. BRS Digest No. 53. (HMSO. April, 1953. 3d.)

Perforated bricks are very much more widely used abroad than in this country, where there appears to be some prejudice against them. This Digest explains that they have a number of advantages and very few disadvantages. A better understanding of their qualities is a matter of some importance as it appears that brick production might be appreciably increased if they were more widely used. From the manufacturing point of view, they use less fuel and require less time in drying and burning. A useful note, but it suggests that failure to use perforated bricks is almost entirely the architect's fault. It might have been pointed out, however, with some justice, that there has also been very little obvious effort on the part of the brick industry to advertise the advantages mentioned in the Digest.

19.164 construction: details

DOOR FRAMES

Wood Door Frames and Linings. BS 1567: 1953. (British Standards Institution. 4s.)

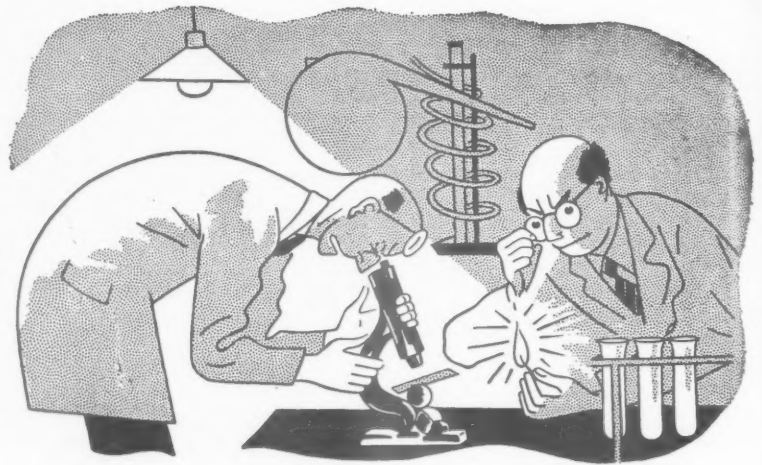
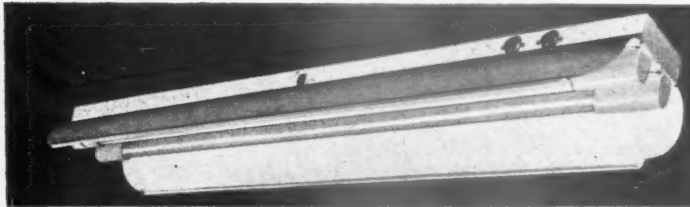
Revision and re-arrangement of previous, 1949, edition now includes door frames with wing lights, as these frames can now be obtained complying with BS 644, Part I, *Wood Casement Windows.*

NEW LIGHT ON OLD SAYINGS:

Seeing through a glass darkly

FOR laboratories, research establishments, hospitals and every type of specialised building, Philips supply advanced and highly efficient lighting equipment—the product of sixty years' research and manufacturing experience. Whatever your lighting problem Philips can find the exact solution. Why not call in Philips for a consultation?

Two 80w. 5 ft. Philips fluorescent lamps installed in the "Axbridge" fitting. Other suitable fittings: "Ardingley", "Alness".



Consult

PHILIPS



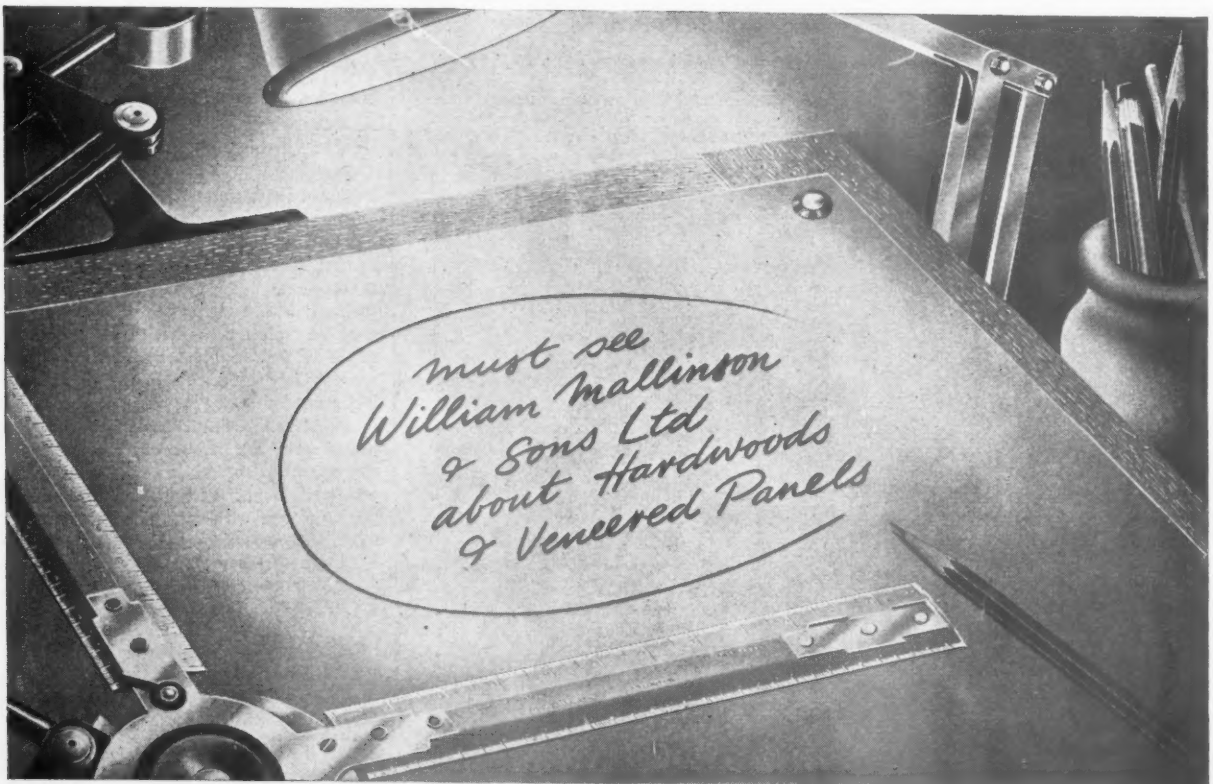
on all lighting problems

PHILIPS ELECTRICAL LTD.

LIGHT GROUP · CENTURY HOUSE · SHAFESBURY AVENUE · LONDON, W.C.2

LAMPS AND LIGHTING EQUIPMENT · RADIO AND TELEVISION RECEIVERS
"PHILISHAVE" ELECTRIC DRY SHAVERS, ETC.

(LD202A)



WILLIAM MALLINSON & SONS LTD. 130-150 HACKNEY RD. LONDON E.2. Tel: SHoreditch 7654 (10 lines)

23.179 heating and ventilation DOMESTIC APPLIANCES

Installing Solid Fuel Appliances. No. 2. Heating Stoves, Independent Boilers and Cookers. MOW Advisory Leaflet No. 31. (HMSO. 1953. 3d.)

Not a substitute for makers detailed recommendations, but useful general notes on fixing appliances—a vital factor in securing good performance.

24.164 lighting INDUSTRIAL LIGHTING

Industrial Lighting System Appraised for Comfort and Economy. G. J. Taylor & R. D. Bradley. (Architectural Record [USA]. Feb., 1953.)

Comparison of visual comfort, operating costs, first costs, and maintenance costs of industrial fluorescent fittings.

A well balanced evaluation of industrial fluorescent lighting, comparing different types of fitting and different conditions of decoration, in terms of visual comfort, operating costs, first costs and maintenance costs. Could be related to British practice to form a basis for analysing the merits of different systems. Conforms with British recommendations that, for comfort, a percentage (10-15) of the light from fittings should go upwards, and also reports tests showing that fittings with top slots keep cleaner longer than those with closed tops. Sixteen fittings are compared in a chart containing comfort and cost data.

The text analyses the chart and produces several interesting conclusions, one of which is that lighting systems with 10-15 per cent. "up-light" are more economical than systems without "up-light," whilst providing more comfortable conditions.

The importance of light coloured surfaces is stressed. Reflection factors of 75 per cent. for ceilings and 50 per cent. for walls are recommended.

Worth serious consideration by all industrial architects, this paper is also printed in full in *Illuminating Engineering (USA)*, April, 1953.

25.95 water supply and sanitation RESTAURANT KITCHENS

The Selection, Utilization and Hygienic Operation of Equipment for Cleansing Utensils, Crockery, etc., in Hotels, Restaurants and Canteens. Ronald Williams. (Journal of RSI. May, 1953.)

Specialist article, but of considerable interest to architects planning medium- or large-size kitchens. Deals chiefly with arrangements for dish-washing, both by manual and machine methods. Hygiene is considered at some length and a rather surprising conclusion appears to be that mechanical dish-washing is by no means more hygienic. Apparently it is not necessarily more economical in the cost of labour either.

25.96 water supply and sanitation INSECT CONTROL IN KITCHENS

Problems of Insect Control in Large Kitchens. E. A. Parkin. (Journal RSI. May, 1953.)

A useful article, by the assistant director of the Pest Infestation Laboratory, dealing with pests in large kitchens, especially cockroaches, ants, silver fish and flies. Of some general interest to architects.

25.97 water supply and sanitation SMALL SEWAGE PLANT

Small Sewage Treatment Works. BS C of P Draft Code. CP(B) 1113. (British Standards Institution. 1953. 5s.)

Methods of treatment for groups of houses, etc., up to population of about 350 where public sewer connection is impossible. Does not cover surface or sub-soil water disposal.

THE INDUSTRY

From the Industry this week, Brian Grant reports on the 1953 Plastics Exhibition, a new gas-fired boiler, a new display at the Building Centre and some inexpensive lighting fittings.

THE PLASTICS EXHIBITION

In an exhibition such as this, which was intended mainly for specialists, a good deal of the space was devoted to moulding machinery and diemaking, and the manufactured products of interest to the building industry were comparatively few. Many of the established materials were naturally there—"Holoplast" in its several forms, including the relatively new 1½ in. thick panel, "Ware-rite" and the other decorative and hard-wearing sheet materials, and of course the electrical mouldings.

New materials, however, were shown only in small numbers. Reference has already been made in these notes to a translucent sheeting for roof lighting, reinforced with glass fibres and known as "Cascalite"; there are now two others of much the same kind, "Undulite," produced by Ashdowns (*Eccleston Works, Knowsley Road, St. Helens, Lancs.*) and "Micorlite," produced by Microcell Ltd. (56, Kingsway, London, W.C.2). Both are made in most of the standard corrugations and in several different colours, and cost from 5s. to 6s. per sq. ft. The latter firm has also produced a static water tank made in square panels like the steel tanks, but in glass reinforced polyester resin; a complete tank, 12 ft. sq. and 4½ ft. high, weighing only 800 lb., and being easily erected, since each panel weighs only 35 lb.

These resins cure at room temperature without any pressure, and double curvature shapes like car bodies can be simply produced, the technique being to apply quilts of glass fibre to a mould made of any convenient cheap material and then to apply the resin. It is possible that this technique may be of use to the building industry, but at the moment it is only likely to be used for work where lightness and strength are of particular importance in complicated shapes.

One other development is worth a mention—Messrs. Lacrinoid (*Gidea Park, Essex*) have a patented process, known as "Vietum," for covering rods or any other section, of any material, flexible or rigid, with a sleeving of p.v.c., slightly modified chemically so that it shrinks with the application of heat. The sections can be square, triangular, or quadrants, and the sleeving is slipped over them. The application of gentle heat will cause the sleeving to shrink by 50 per cent. or more, so that it is possible to cover sections which taper.

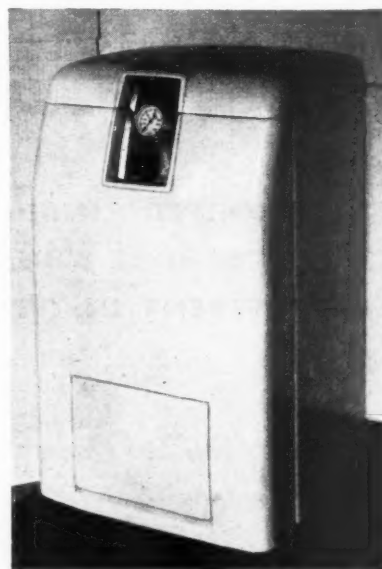


Standard hot-dip galvanized metal window undergoing corrosion test in the waters of Dover harbour.

The sleeving is produced in many different diameters and wall thicknesses, and in various hardnesses and colours. Equally, it can be produced with any type of surface, knurled, corrugated or knobbed; ribbed both transversely or longitudinally; or closed at one end for covering the handles of insulated pliers or other tools.

This material seems likely to be very useful for the covering of rods in airing cupboards or wardrobes, handrails and a number of other building uses. Small articles would probably best be covered in a factory, where the heat is generally applied in an infra-red oven, but larger work can be done on the site with a carefully used blowlamp, or with an ordinary domestic hair dryer having a heating element of not less than 1,000 watts. At the moment the material is sold by the pound (12s.), but the price per foot run is quite reasonable.

Another new development, only on the market for six weeks or so, is the reversible "Vent Axia" fan. This has a controller giving five different speeds in each direction, whether the fan is being used to extract stale air or blow in fresh. At the same time the performance has been improved over previous models by the use of a different type of motor which gives a higher rotational speed



The new "Kayenco Superb" gas-fired central heating and hot water supply boiler.

Safeguarding your clients' interests *



There are many ways of protecting your clients' interests over and above your professional work. Insurance is one of them. If you are not already an insurance Agent you may not know the best answer, particularly in the matter of recommending Assurance through a mutual office.

The United Kingdom Provident, one of the oldest and best known mutual offices, has no shareholders; all profits belong to the policy-holders. This encourages a high bonus rate. For instance, the current bonuses are 37/- or 39/- per cent. Competitive premiums are quoted for all kinds of life assurance (including house purchase) and for fire and accident risks.

* We have booklets which will assist you. Send for them today. They will prove interesting, helpful and may be profitable.

UNITED KINGDOM TEMPERANCE & GENERAL PROVIDENT INSTITUTION

ASSETS OVER THIRTY FIVE MILLION POUNDS

Your 'Mutual' Friend



33 GRACECHURCH STREET, LONDON, E.C.3

Mansion House 6543 (6 lines)

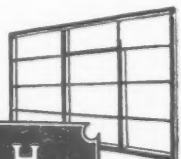


To a woman . . .

The windows are the most important features of a house. Watch her when she enters an empty room of a new house. See her eyes go to the window, assessing its outlook, light value, considering pelmets etc.

She will appreciate the quality of LEADERFLUSH GRADE 1 WINDOWS. They are precision made strictly to BSS 644. Part 1, 1951 but the quality of LEADERFLUSH craftsmanship places them beyond normal standard productions.

Immediate delivery in quantity from stock.



LEADERFLUSH

GRADE 1 WINDOWS (HEAVY SECTION)

Also GRADE 1 DOORS and FLOORING BLOCKS
LEADERFLUSH LTD. TROWELL, NOTTINGHAM
Telephone: Ilkeston 623 (4 lines)

Cogent

with a lower wattage, the 9-in. model shifting 30,000 cu. ft./hr., as against 20,000 for the previous model. Four types are produced, in 6-, 7½-, 9- and 12-in. diameters, with capacities of from 11,000 to 62,000 cu. ft. of air per hr. (*Vent-Axia Ltd., 9, Victoria Street, London, S.W.1.*)

GAS-FIRED BOILERS

The illustration on p. 809 shows the new "Kayenco" gas-fired boiler, which is produced in 7 different models, with outputs varying from 30,000 to 300,000 B.Th.U. per hour. The performance of all models is to the appropriate BSS and particular attention has been paid to easy accessibility of all controls and waterways, all of which can be reached from the front of the boiler, so that it can be installed in a recess and requires the minimum of floor space. Flues can be reached for cleaning by lifting off the top cover and without disturbing the main flue. Standard finish is cream vitreous enamel, but other colours are supplied at no extra charge. (*Frederick Kay (Engineering) Ltd., Nash-leigh Works, Chesham, Bucks.*)

METAL WINDOWS

The British Metal Window Manufacturers' Association has arranged a display at the Building Centre. Owing to the restricted space, the exhibit has a labyrinth layout which allows eight different types of window to be examined from both sides, including the methods for fixing them in the wall. Two or three examples of steel door frames are also shown in the same way. The display was designed by James Gardner.

Mention of metal windows reminds me of an interesting exhibit which Hopes had at the Castle Bromwich BIF. This was a standard window and sub-frame, hot-dip galvanized, which was fixed to one of the walls in Dover Harbour in September, 1950, and removed a little over a year later. It was fixed at half tide level, so that it was submerged twice every 24 hours. It has suffered almost no damage, and shows no signs of rust. Hopes have always maintained that "there is no process of rust proofing which can hold a candle to hot dip galvanizing" and from the result of this test it would seem that they cannot be far wrong. (*Henry Hope & Sons Ltd., Smethwick, Birmingham.*)

SOUND PROOFING IN 1853

JOURNAL readers may perhaps have noticed an article by Sir Stephen Tallents in the *Sun-*



day Times dealing with Denbighs, a house built for himself by Thomas Cubitt about 100 years ago and now being partly demolished as being too large for a present-day household. Demolition has revealed that cockle shells were used on one of the upper floors as insulation to prevent the noise of



children from annoying their parents on the floor below. As insulators the shells may not have been very efficient, but in those days they were no doubt very easy to obtain and also not liable to support vermin of any kind. Thomas Cubitt was an exceptional man, but it is interesting to see that he not only appreciated the problem but evolved a simple solution which, as he lived in the house himself, may be assumed to have been satisfactory.

LIGHTING FITTINGS

At last, some really cheap "contemporary" lighting fittings, designed (some in collaboration with B. J. Gullberg, whose unit furniture was illustrated in the JOURNAL for August 23, 1951) and marketed by H. C. Hiscock, at whose Chelsea showroom can be seen a remarkable range of pendant fittings and shades for standard lamps and table lamps between 30s. and 50s. in price.

They consist of 3-coat, stove-enamelled frames covered with plastic ribbon, with a nylon matt finish, known as "nylonized plastic." Colours at present available—ivory, pink, pale mauve, peach, grey, silver and pale gold. Also available with a star motif printed on the ribbon or with linen ribbon instead of plastic.

The fittings are easy to keep clean—they can be plunged complete into a bath of soapy water. Mr. Hiscock's "pet" is the tilting table lamp illustrated on the left; complete with shade it costs only 30s. 4d. (inc. P.T.). The other fitting illustrated costs 36s. 5d. (inc. P.T.) plus about 30s. for the rise-and-fall gadget. (*H. C. Hiscock, 55, Old Church Street, London, S.W.1.*)

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers' names please).

.....

Please ask manufacturers to send further particulars to:—

NAME

PROFESSION or TRADE

ADDRESS

.....



The British Metal Window Manufacturers' Association display of metal windows and door frames at the Building Centre.

Announcements

F. A. C. Maunder, F.R.I.B.A., has resigned his appointment as architect to the Buckinghamshire County Council and is shortly to set up in private practice.

Sir Giles Gilbert Scott & Son have taken into partnership F. G. Thomas, F.R.I.B.A., as from January 1, 1953. The firm will in future be known as Sir Giles Scott, Son & Partner, and will continue to practice at 3, Field Court, Gray's Inn, W.C.1. (Tel.: Chancery 8388).

Johnson & Phillips Ltd. announce the appointment of David M. Hutton as a director of their subsidiary company, British National Electrics Ltd. of Newarthill, Motherwell, Scotland.

John Thompson Beacon Windows Ltd. ask us to advise readers that the name of the architect was omitted from their advertisement which appeared on page iv of our issue March 12, 1953. The names of the architects for Tancot House, Dar-es-Salaam, Tanganyika, are Blackburne, Norburn & Partners.

Due to the expansion of their business interests in Scotland, Pickerings Ltd. have opened larger premises at 66-70, McCulloch Street, Glasgow, S.1, where the sales, service and drawing office departments for the Scottish area will be located (Tel.: Glasgow, South 1884).

Sir William Stanier, F.R.S., is to join the Board of Brynmawr Rubber Ltd., Brynmawr, South Wales.

A. G. Goodair, A.R.I.B.A., has taken into partnership K. E. Foster, A.R.I.B.A., and H. D. Howell, A.R.I.C.S. The firm will continue to practice at Albemarle House, Osborne Road, Southsea, under the style of Goodair, Foster

& Howell, Chartered Architects and Chartered Quantity Surveyor.

Robert S. Shaw, A.R.I.B.A., A.M.T.P.I., has opened an office at 402, Bitterne Road, Bitterne, Southampton (Tel.: Southampton 76555).

The TDA has gained purchase tax exemption for the TDA designed monopitch suburban bus shelter.

British Insulated Callender's Cables Ltd. have removed their Lincoln Branch to 113, Canwick Road, Lincoln (Tel.: Lincoln 654).

S. N. Cooke & Partners have removed their Birmingham Office to 34, Harborne Road, Edgbaston, Birmingham 15 (Tel.: Harborne 1151).

Buildings Illustrated

Chislehurst and Sidcup County Primary School, Grovelands Road, Midfield Way, St. Paul's Cray, Orpington, Kent, for the Kent Education Committee. (Pages 796-801.) Architect: Elie Mayorcas, F.R.I.B.A., in collaboration with S. H. Loweth, F.S.A., F.R.I.B.A., M.I.STRUCT.E., County Architect. Consulting Engineers (Structural), Malcolm Glover & Partners, (Services) J. Stinton Jones & Partners. Quantity Surveyors, C. John Mann & Son. Clerk of works: L. V. Robinson. General foreman: Mr. Rogers. General contractor: R. Corben & Son Ltd. Sub-contractors: reinforced concrete, stair-treads, shell concrete roof over canteen (construction and design), The Trussed Concrete Steel Co. Ltd.; bricks, Wills & Packham (facings), Ryarsh Brick & Sand Co. Ltd. (sandlimes); structural steel, Bracketting, Centering & Lathing Ltd.; roofing felt, waterproofing materials, William Briggs & Sons Ltd.; woodblock flooring, Horsley Smith & Co. Ltd.; central heating, Bearfoot

& Bryett Ltd.; electric wiring, David Thompson Ltd.; sanitary fittings, Stitson's Sanitary Fittings Ltd.; door furniture, Lockerbie & Wilkinson Ltd.; window furniture, casements, R. E. Pearse & Co. Ltd.; rolling shutters, G. Brady & Co. Ltd.; metalwork, Jos. Sankey Ltd. (pressed steel door frames), Fulham Art Metalworks and Light Steelwork Ltd. (balustrades); stonework, Liverpool Artificial Stone Co. Ltd.; plastic tiling, Armstrong Cork Co. Ltd.; textiles, Gerald Holtom and David Whitehead Ltd.; wallpapers, John Line & Sons Ltd. and Sanderson's; cloakroom fittings, B. Finch & Co. Ltd.; chain link fencing and gates, A. J. Binns Ltd.; terrazzo slabs, Zanelli Ltd.; tar paved playing pitches, A. W. Hobman & Sons Ltd.

Showroom for the London Shoe Co. Ltd. at 116, New Bond Street, London, W.1. (Pages 802-804.) Architects: Chamberlin, Powell and Bon. Assistant-in-charge: Robert Ashdown. Mural painter: Augustus Lunn, A.R.C.A. General contractor: King's (B.D.J.) Ltd. Sub-contractors: metal lathing and plaster, Byron & Panter Ltd.; terrazzo, marble, granite door handles, Fenning & Co. Ltd.; metal work, Stedall & Co. Ltd.; glazing of showcases, mirror wall, C. Clifford Ltd.; "Plyglass" in laylight, armourplate door, T. & W. Ide Ltd.; steelwork, Enterprise Metal Co.; paints, W. & J. Leigh Ltd.; upholstery, Lynwood Upholstery; curtain, Story & Co. Ltd.; cleaning and relaying carpet, new carpet to staircase, Maples & Co. Ltd.; plants, West End Flower House Ltd.; display fittings (shoe supports), William J. Cox Ltd. and Frederick Sage Ltd.; electrical wiring, John Hearson & Co. Ltd.; "Medraw" heating panels, Dulrae Ltd.; "Thermolare" storage heaters, Aberdare Electrical Co. Ltd.; lighting fittings (George Forrest), Thorn Electrical Industries Ltd.; fascia lettering, Pearce Sign Ltd.; lift repairs, Waygood-Otis Ltd.



Photograph by courtesy of Ideal Home Magazine

STEEL RADIATORS LTD

STELRAD WORKS • BRIDGE ROAD • SOUTHALL

Telephone: SOUTHALL 2603/4

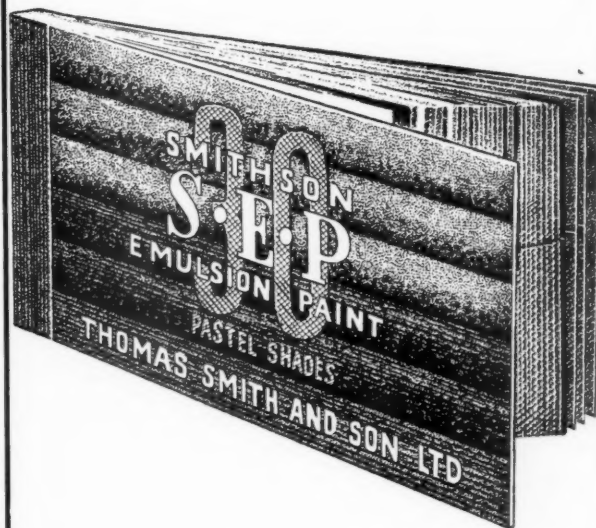
Telegrams: STELRAD, PHONE, SOUTHALL

SPECIFY SEP

Time-Tested



This Super plastic emulsion paint is the answer to your decorating problems. Ideal for schools, factories, hospitals, hotels and private houses. Easy application reduces labour costs. SEP may be applied to any prepared surface including new cement, new plaster, asbestos sheeting, brick and stone.



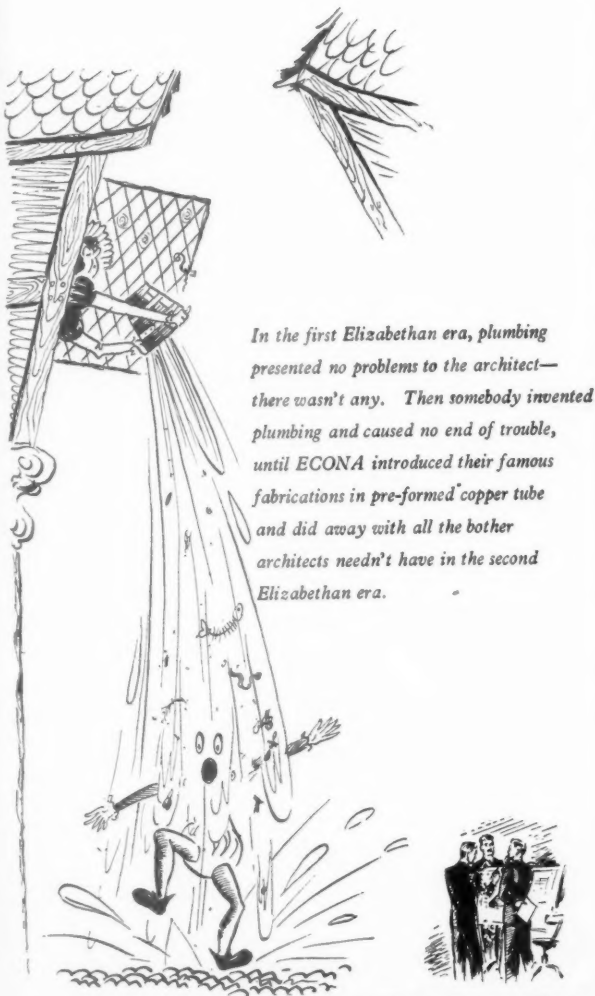
Our colour consultant and technical advisory service are always freely available to advise on colour schemes or the most suitable paints to use under all conditions.

THOMAS SMITH & SON LTD.

238-240 Whitechapel Road, London, E.1.

Bishopsgate 3717-8-9

Manufacturers of superfine paints since 1790



In the first Elizabethan era, plumbing presented no problems to the architect—there wasn't any. Then somebody invented plumbing and caused no end of trouble, until ECONA introduced their famous fabrications in pre-formed copper tube and did away with all the bother architects needn't have in the second Elizabethan era.

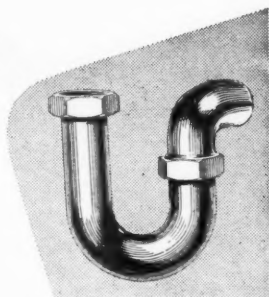
... and First things First in the embryo stage of your plans...

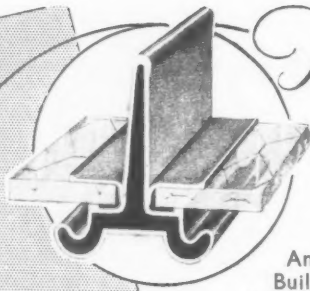
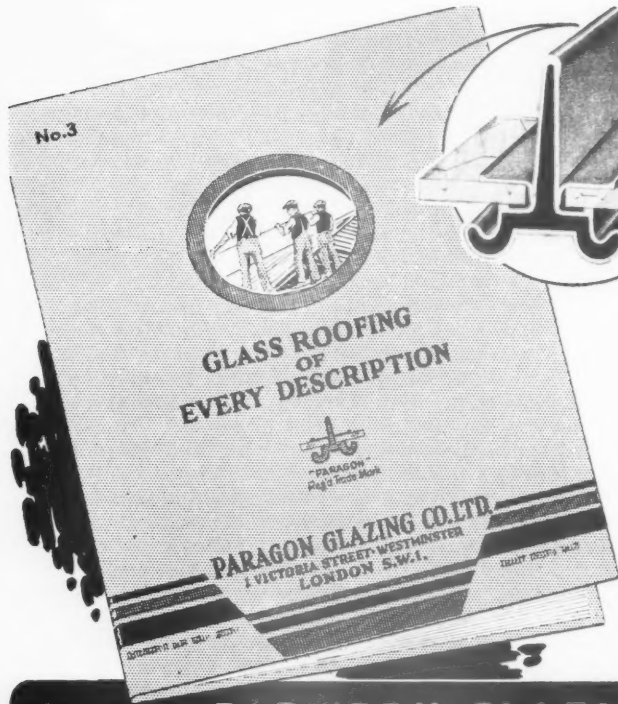
Econa

can help
you .

pioneers in pre-formed copper tube plumbing

ECONA MODERN PRODUCTS LIMITED
AQUA WORKS, WARWICK ROAD, TYSELEY, BIRMINGHAM 11
TELEPHONE AND TELEGRAMS: ACOCKS GREEN 2211-2





This book will solve your glazing problems

An invaluable guide to Architects, Builders, Contractors, Engineers and Surveyors, covering every aspect of roof glazing, is comprised in this new Brochure. This well-illustrated catalogue describes in detail the Paragon System of Patent Glazing and its adaptation to Lantern Lights, Skylights and a variety of types of glazed structures, such as Dome Lights, Conservatories, Canopies, Shelters, Verandahs, Haystack Lanterns, etc.—all manufactured from start to finish in our own Works.

We will gladly despatch this Catalogue on application.

TELEPHONE ABBEY 2348 (PTE. BR. EXCH) **PARAGON GLAZING CO. LTD.** TELEGRAMS ECLAIRAGE 50 WEST LONDON
1 VICTORIA STREET WESTMINSTER S.W.1

Give marching orders to worn floors



with IOCO Rubber Flooring

IOCO Rubber Flooring is practically permanent and will eliminate worn or shabby surfaces for as long as you are likely to look ahead. This is an enormous saving in the long run and on these grounds alone is worthy of your most serious consideration. But it has much more to commend it: it is resilient, hygienic, non-skid and greatly reduces noise; it is easy to clean; it is decorative and is available in a variety of plain, tiled and marbled effects which can be adapted to suit any colour scheme. Surely all this adds up to one thing?—IOCO Rubber Flooring for YOUR next job! Our experts are at your service for laying anywhere in Great Britain. Write for 16-page Booklet "IOCO Rubber Flooring".

IOCO LIMITED ANNIESLAND · GLASGOW · W.3.





RAPID FLOORS

Laid complete at the rate of 100 yards super per gang per day

Precast Units of Approx. "I" section, designed for all loading conditions and for both simply supported and continuous spans.

Floor thicknesses are constant over a wide range of spans. Interlocking lips render the floor homogeneous. Soffits are flush and even. Trimmings and Cantilevers can readily be provided.

Special bearings are not required, and our gangs fix straight from the Transport lorry.

The specified load is carried immediately and the floor at once provides a clear uninterrupted working platform for all following trades.

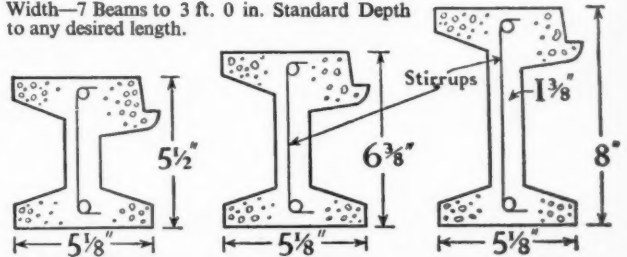
Quotations for supply only, or supply and fix as desired. Deliveries commence 6 weeks after approval of working drawings. Technical booklet free upon request.

TARMAC LIMITED VINCULUM DEPT. ETTINGSHALL, WOLVERHAMPTON

Telephone : Bilston 41101/11 (11 lines)

Licenses for manufacture and supply to Warwickshire, Staffordshire, Worcestershire, Shropshire, Sussex, Surrey, Hampshire, Cheshire and North Wales.

Width—7 Beams to 3 ft. 0 in. Standard Depth to any desired length.



Worth reading and keeping



We appreciate that Architects and Heating Consultants are not dealing with central heating boiler flue designs every day. It is with this in mind that we have prepared a brochure which contains technical information on the application of 'Fosalsil' Flue Bricks, and we think you will find it worth reading and keeping.

Please write to us for your copy.

**FOR MODERN
CENTRAL HEATING
BOILER FLUE
DESIGN**

MOLER PRODUCTS LTD. HYTHE WORKS COLCHESTER

Phone Colchester 3191 (3 lines)
G ams FURMOL Colchester

CEMENT?

You need
not go
short... use

How does the scarcity of cement affect you? If you normally use a 3:1 sand-cement mix for BRICKLAYING and RENDERING mortars, you are using cement far more extravagantly than is necessary, thus aggravating a difficult supply situation and contributing to your own frustration

The secret of the thrifty and efficient use of cement is simply the addition of "PHOMENE" Mortar Plasticizer. By this means a 6:1 mix actually gives better working properties and reduces cracking and crazing.

Lose no time in taking advantage of this new building aid, which makes great savings for you in cement, in time and money—and produces better mortars into the bargain. Try it now!

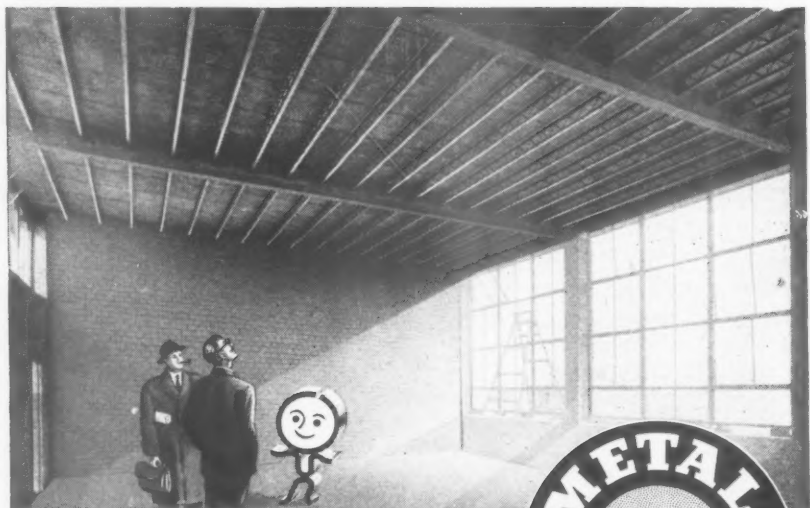
Packed in sealed quart cans—no waste on site. Each can saves at least four bags of cement or lime. Ask your local Builder's Merchant for sample can or in case of difficulty send 8s. P.O. to the address below, from where a fully informative folder is also available.



For Bricklaying and Rendering

THE PYRENE COMPANY LTD., Cellular Products Division, Great West Road, Brentford, Middx. Telephone: EALING 3444 (14 lines)

*** **These**
open web
nailer joists
reach your
job ready
for placing
... WITHOUT
CUTTING OR
FITTING!



Solihull, Lyndon Secondary School. Architects: Rolf Hellberg, F.R.I.B.A. in collaboration with C. H. Elkins, F.R.I.B.A., F.R.I.C.S., County Architect, Warwick

Ideal for Roof & Floor construction in houses, school buildings and similar types of structures, because of these 3 very good reasons. (1) **SPEED**... Simple site erection. (2) **ECONOMY**... saving of manhours, timber and transport. (3) **TIME**... they arrive ready for placing and the open web permits unobstructed passage for pipes, etc.



Why not write to-day for full particulars to:

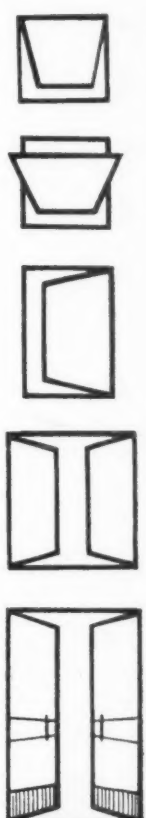
METAL SECTIONS LTD., OLDBURY, BIRMINGHAM. Tel: BR0adwell 1541

MEMBER OF THE COLD ROLLED SECTIONS ASSOC.





METAL
WATSON WINDOWS



There is an extra quality in Watson Windows whether made of Schori Rustproofed Steel, Bronze, or Extruded Aluminium—they are craftsmen made to satisfy the most critical requirements.

Our range includes Standard Windows for housing schemes, Standard Sashes for factories, and Custom-made Windows in universal sections or sash construction for other important buildings.

Five generations of architects have entrusted their work to us. May we have the pleasure of supplying Watson Windows to your specification?

Brochures illustrating the special services we provide will be sent on request, together with details of many interesting window and glazing contracts recently completed.

WILLIAMS & WATSON LTD

REGENT WORKS

BOOTLE, LIVERPOOL, 20.

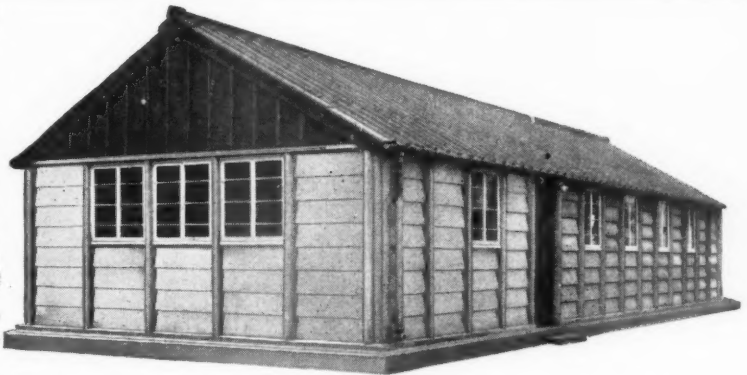
Established in 1820 — in the reign of King George IV.

Erected, to eaves level, in only 2 DAYS!

Is the essence of the contract speed of erection? Attractive appearance? Weathertightness? Permanency? Economy both of cost and of labour?

Or the need to dismantle at a later date and re-erect elsewhere?

All these advantages are secured by the use of STAFFORD Unit Buildings with the new patent Pre-cast Components.



IMPORTANT NEW SINGLE-STOREY PREFABRICATED CONSTRUCTION

An advantage of the system is that alterations such as extra windows or the re-positioning of doors can be made during erection. Buildings up to 28 ft. span and 100 ft. length in 4 ft. increments are possible with Stafford Units. The School Annexe shown above—60 ft. by 24 ft.—was ready for roofing in two days.

**IDEAL FOR SCHOOL CLASSROOMS
HOSPITAL WARDS · LIBRARIES
FACTORIES · ETC.**

Full particulars should certainly be in your hands and will gladly be sent from:

West Midlands :
Stafford Concrete Buildings Ltd.,
Rickerscote Road, Stafford.
Stafford 1195.

East Midlands, North and East England :
John Ellis & Sons, Ltd.,
21 New Walk, Leicester.
Leicester 56682.

London and South East England :
The Atlas Stone Co. Ltd.,
Artillery House, Artillery Row, London, S.W.1.
Abbey 3081.



First and Foremost with Stoneware Pipes

More than a century has passed since Sir Henry Doulton pioneered the manufacture of salt-glazed stoneware pipes to replace the unhygienic porous brick sewers of our towns and cities. Today, pipes made by the Royal Doulton Potteries still set the standard for excellence. Continuous research has been devoted to problems of resistance to corrosion and abrasion, smoothness of flow, and mechanical strength. Add to this vital knowledge Doulton's long manufacturing experience, and it is clear why so many plans for new towns, in Britain and abroad, include specifications for Royal Doulton salt-glazed drainage goods.

Obtainable from leading merchant distributors

For further details, write to
Doulton & Co. Limited,
Dept. BE, Doulton House,
Albert Embankment, London, S.E.1.



Royal
DOULTON
SALT-GLAZED DRAINAGE MATERIALS



Specify

EXTRUSIONS

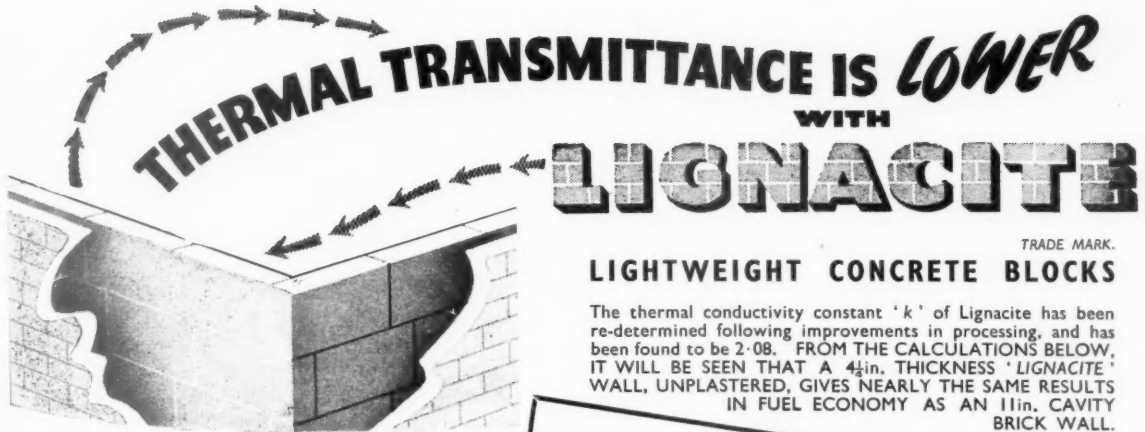
There is virtually no limit to the applications of McKechnie extrusions in **brass, bronze and nickel silver**. Constant supervision at all stages of manufacture ensures uniform quality and minute closeness to size, thus eliminating further machining and saving time, tools and labour. *Can McKechnie Metal Technique help you to solve your production or machining problems?*

★ See our Exhibit at The London Building Centre, Store Street, London, W.1.

MCKECHNIE BROTHERS LIMITED

14, BERKELEY STREET, LONDON, W.1
Telephone: Mayfair 6182/3/4.

Metal Works: Rotton Park Street, Birmingham, 16.
Other Factories: Widnes, London, South Africa, New Zealand.
Branch Offices: London, Leeds, Manchester, Newcastle-on-Tyne, Gloucester, Paris.



THE LOWER THE "U" VALUE
THE GREATER THE INSULATION VALUE!

Thickness of Lignacite	"U" value
2in.	0.51
2½in.	0.45
3in.	0.41
4in.	0.34
4½in.	0.33
4¾in.	0.32
6in.	0.26

LIGNACITE (Home Counties) Ltd., Bracknell, Berks.
Bracknell 666.

LIGNACITE (Brandon) Ltd., Brandon, Suffolk. Brandon 350.

LIGNACITE (South Eastern) Ltd., Ninfield, Sussex. Ninfield 345.

LIGNACITE (Fordingbridge) Ltd., Fordingbridge, Hants. Fordingbridge 2177.

LIGNACITE (North Eastern) Ltd., Whitley Bridge, nr. Goole, Yorks. Whitley Bridge 354/5.

LIGHTWEIGHT CONCRETE BLOCKS

TRADE MARK.

The thermal conductivity constant 'k' of Lignacite has been re-determined following improvements in processing, and has been found to be 2.08. FROM THE CALCULATIONS BELOW, IT WILL BE SEEN THAT A 4½in. THICKNESS 'LIGNACITE' WALL, UNPLASTERED, GIVES NEARLY THE SAME RESULTS IN FUEL ECONOMY AS AN 11in. CAVITY BRICK WALL.

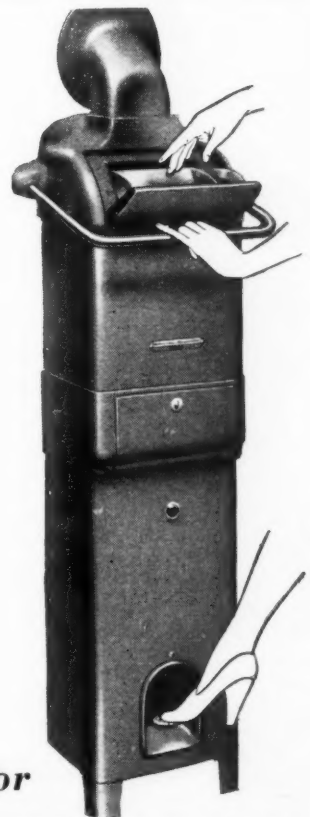
Construction	"U" value (B.Th.U.s. sq. ft./ hr./°F.)	Fuel burnt to make good heat loss 1,000 sq. ft. (tons/year).
Corrugated asbestos	1.15	6.4
4in. concrete	0.64	3.6
6in. concrete	0.54	3.0
4in. brick	0.64	3.6
9in. brick	0.47	2.6
11in. cavity brick wall	0.30	1.7
3in. Lignacite, unplastered	0.41	2.3
4in. Lignacite with plaster or rendering	0.37	2.1
4in. thick on each side	0.33	1.8
4in. Lignacite unplastered	0.30	1.7
4in. Lignacite with plaster or rendering	0.21	1.1
4in. thick on each side		
Cavity wall, 4in. brick externally, sealed 1in. air space, 4in. Lignacite with plaster skim-coat internally		

*We've solved
an essential
welfare problem—*

*the hygienic and rapid disposal of used
sanitary wear and surgical dressings.*

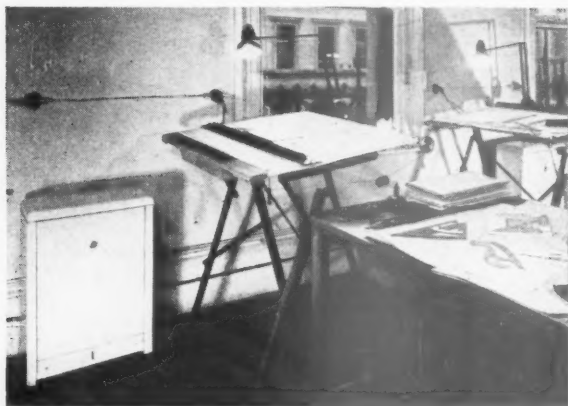
- ✓ Perfectly safe and simple to operate—the G.E.C. sanitary incinerator is entirely automatic
- ✓ Pressure on foot lever opens receptacle for discarded material which is rapidly reduced to ashes
- ✓ Robustly built and attractive in appearance
- ✓ Fully guaranteed for 12 months

Fully descriptive leaflet available on request.



electric SANITARY incinerator

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



As installed in the showrooms of the London Shoe Co. Ltd

OVER 25,000 'THERMODARES' IN USE
24 hours heating—8 hours consumption

Using 'OFF PEAK' cheap rate electricity THERMODARE HEATERS keep offices, showrooms, factories, schools, etc., at constant temperatures ALL DAY and NIGHT. Schemes prepared for the Trade.

Prices from £11·7·7d tax free
 (not for domestic installation)

Write for Brochure

THERMODARE (GREAT BRITAIN)
 36 Victoria Street, London, S.W.1. Telephone ABBey 1060



Economy . . . plus . . .

When circumstances demand economy, plus ease of erection, plus adaptability, the J.B. Pre-fabricated Garage meets all requirements. Weatherboard unit construction facilitates erection to any dimension of standard 9 ft. width, in any length multiples of 4 ft. 6 in. It is supplied with double doors for a garage or single door when used for other purposes. Any unit can be lifted by one man and the whole building can be erected by two men in two days.

Johnston Brothers
 (CONTRACTORS) LTD.

There is a J.B. pre-fabricated building to meet most needs. Send details of your requirements.

Doseley Quarries, Dawley, Salop
 London Office: IBEX HOUSE, MINORIES LONDON, E.C.3

L.G.B.

"REMINDS ME ...

**I MUST RING
 BIGWOODS ABOUT
 STAIRS FOR THE
 NEW BUILDING ...**



Consult Bigwoods about that Steel Staircase. With over forty years of experience and knowledge, they are ready to make and install stairs of any description for inside or outside use. Just send a card or 'phone, and Bigwoods representative will call and talk over your stairway requirements.

Bigwoods

THE STEEL
 STAIRCASE PEOPLE

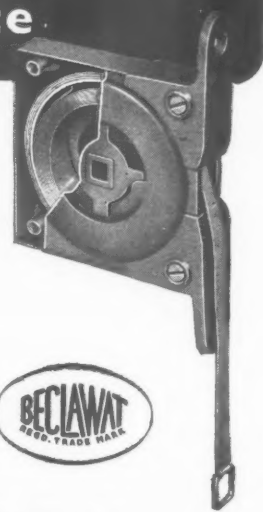
Established 1879

BIGWOOD BROS. (BIRMINGHAM) LTD.
 Woodfield Road, Balsall Heath, Birmingham 12
 Phone: CALthorpe 2641/2
 London Office: 68, Victoria Street, S.W.1.

LGB

**Adjustable
 Spring Tape
 Sash
 Balance**

- Spring tension easily increased or decreased.
- Universally adaptable fixing Brackets enabling balance to be placed in any position.



Perfect balancing is ensured on installation by simply decreasing or increasing the tension of the balance spring. Rust proofed casing and stainless steel tape

Please write for information sheet 44.1



BECKETT, LAYCOCK & WATKINSON LTD.
 Acton Lane, London, N.W.10

217-38

The
**CHISLEHURST & SIDCUP COUNTY
 PRIMARY SCHOOL**

Architect : Elie Mayorcas, F.R.I.B.A., A.A.Dip. (Hons.)

**BUILDING CONTRACTORS
 R. CORBEN & SON
 LIMITED**

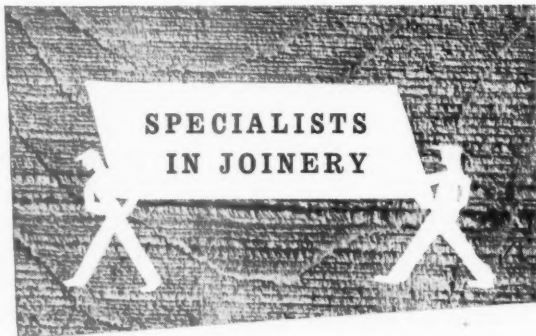
**WEST BOROUGH
 MAIDSTONE, KENT**

Phone : 51141.

HASTINGS
 Phone : 2278

SOUTHAMPTON
 Phone : 76764

DOVER
 Phone : 792



**SPECIALISTS
 IN JOINERY**

We have been working with wood for a long time and there's precious little we can't do with it. The name of Boulton & Paul is a guarantee of first class joinery and all kinds of manufactured woodwork. We shall be pleased to forward our catalogue upon request.

NORWICH · LONDON · BIRMINGHAM



WHEN THE
 JOINERY
 IS BY

**BOULTON
 AND PAUL**

IT'S A
 FIRST CLASS
 JOB

CRC 11J

Solvex



A 3-oz. tube will last many months. **1/6**

MANUFACTURERS & SUPPLIERS OF ALL REQUIREMENTS OF THE DRAWING OFFICE

Photo papers
 Photo print machines
 Surveying equipment
 Drafting equipment
 Drawing instruments
 Map mounting
 Tracing cloth
 Tracing paper
 Mounted paper
 Drawing paper
 Drawing ink
 Sectional paper
 Photo prints by all processes

SOLVEX is the ideal medium for removing ink lines from tracing cloth—rub a little paste well into the line, wipe away with a clean rag and the unwanted line disappears. It is packed in a collapsible metal tube which keeps it fresh and ready for use. If you work in a drawing office you cannot afford to be without Solvex.

HARPER & TUNSTALL LTD.
 LETO WORKS · EDGWARE · MIDDLESEX

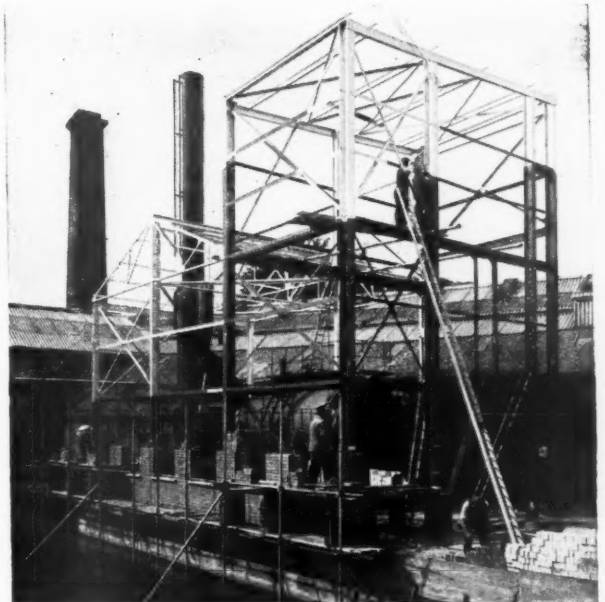
Telephone : Edgware 4455

Telegrams : Ofterial, Edgware

LONDON :
 39, Victoria St., S.W.1

BIRMINGHAM :
 31, Union St., 2

GLASGOW :
 278, St. Vincent St.



STRUCTURAL STEELWORK
 FOR INDUSTRIAL AND AGRICULTURAL BUILDINGS

CROGGON & CO. LTD.

230, UPPER THAMES ST., LONDON, E.C.4
 Central 4381/3 Works : Colnbrook

ESTD.
 1835

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

COUNTY BOROUGH OF ROTHERHAM. APPOINTMENT OF CHIEF ASSISTANT ARCHITECT (GRADE VIII). AMENDED ADVERTISEMENT.

Applications are invited for the above appointment in the Architects' Department in the office of E. J. Manson, B.Eng., A.M.I.C.E., Borough Engineer, at a salary in accordance with Grade VIII of the A.P.T. Division of Scales (£760-£835).

Applicants must be Registered Architects and Associate Members of the Royal Institute of British Architects, and have had considerable experience in design, construction and contract administration, preferably with a local authority, particularly in connection with housing schemes. HOUSING ACCOMMODATION WILL BE AVAILABLE FOR THE SUCCESSFUL APPLICANT IF REQUIRED.

Applications, to be endorsed "Chief Assistant Architect, stating age, qualifications, architectural training and necessary, together with copies of three recent testimonials, should be received by me not later than 6th July, 1953. Canvassing will disqualify.

JOHN S. WALL, Town Clerk. 8976

Municipal Offices, Rotherham. METROPOLITAN BOROUGH OF CAMBERWELL.

PERMANENT HOUSING SITE No. 38 (CROXTED ROAD/ACACIA GROVE). ERECTION OF 108 FLATS. PANEL OF CONTRACTORS.

The Council invite applications from contractors who wish to submit tenders for these flats. The value of the contract will be in the region of £250,000 and tender documents are in course of preparation.

A limited number of applicants will be selected and invited to submit tenders.

Applications to be sent with a statement of recent housing contracts or other work carried out and the names of referees to the Town Clerk, Town Hall, Peckham Road, S.E.5, not later than Wednesday, 1st July, 1953.

A deposit of five guineas will be required subsequently from contractors invited to tender and will be returnable on receipt of a bona fide tender.

Firms selected to tender will be required to state on the tender form whether they are parties to schemes such as that operated by the London Builders' Conference relating to the submission of tenders.

The Council reserve the right to make such enquiries into the bona fides of applicants as may be deemed necessary and do not bind themselves to invite every applicant to tender or to accept the lowest or any tender.

June, 1953. 8999

COUNTY BOROUGH OF OLDHAM. APPOINTMENT OF PRINCIPAL ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in my Department at a salary of £760-£835 per annum, being Grade VIII of the National Scale of Salaries.

The successful candidate will be provided with housing accommodation if necessary. Candidates must hold recognised Architectural qualifications and must possess wide experience in the design of private or public buildings.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, present and previous appointments, in addition to qualifications and experience, and copies of two recent testimonials, must reach the undersigned not later than Monday, the 6th July, 1953, in envelopes endorsed "Principal Architectural Assistant."

A. L. HOBSON, Borough Engineer and Surveyor. 75, Union Street, Oldham. 16th June, 1953. 9018

HEREFORDSHIRE COUNTY COUNCIL.

Applications are invited for the following appointments on the permanent staff of the County Architect's Department:—

(a) CHIEF ASSISTANT ARCHITECT, Grade IX, A.P.T. Division (£815-£40 to £935 per annum). Candidates must be Fellows or Associates of the R.I.B.A., with previous experience in the control of staff and a sound knowledge of Local Government procedure. The person appointed will be required to provide a car, for which the appropriate allowances will be paid.

(b) ASSISTANT QUANTITY SURVEYOR,

Grade VIII, A.P.T. Division (£760-£25 to £835 per annum). Candidates must be qualified by examination, preference being given to Associates of the R.I.C.S. (Quantities Division). Wide experience required in the preparation of Bills of Quantities and the control of large contracts.

(c) ARCHITECTURAL ASSISTANT, Grade IV, A.P.T. Division (£555-£15 to £600 per annum). Applicants must have passed the R.I.B.A. Intermediate Examination or its equivalent at one of the recognised schools of architecture, and have subsequently worked in an architectural office for a period of two years.

The appointments are subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side. The successful candidates must pass a medical examination. In certain cases an allowance of 25s. per week and third class return fare to place of residence once every two months for a limited period is payable to married men.

Application forms from W. Usher, A.R.I.B.A., County Architect, Bath Street, Hereford, to be completed and returned by 4th July, 1953. 8972

LANCASHIRE COUNTY COUNCIL. SECTIONAL PLANNING OFFICER, A.P.T. VIII (£760-£835), required in Accrington Divisional Planning Office.

Considerable experience in Town Map preparation and administration of Town and Country Planning Acts and Orders is essential. Candidates should be qualified Architects; a planning qualification in addition would be an advantage.

Applications, giving experience, present salary, and two referees, to the County Planning Officer, East Cliff County Offices, Preston, by 8th July, 1953. 8961

MINISTRY OF WORKS.

Vacancies exist in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS with recognised training and fair experience. Vacancies mainly in London and Risley (Nr. Warrington). Successful candidates will be employed on wide variety of Public Buildings including Atomic Energy and other Research Establishments, Telephone Exchanges and Housing.

London Salary: Up to £628 per annum. Starting pay according to age, qualifications and experience. Rates outside London slightly lower.

Reasonable prospects of promotion to Leading and Senior Architectural Assistant. Although these are not established posts many have long-term possibilities and competitions are held periodically to fill established vacancies.

Write stating age, nationality and full details of training and experience, to Chief Architect, W.G.10/C.A.2, Ministry of Works, Abell House, John Islip Street, London, S.W.1. 8760

SUDAN GOVERNMENT.

The Public Works Department requires an ASSISTANT DIRECTOR for service in the Sudan. Candidates should have extensive experience in the building branch of a Public Works Department preferably under Middle East or North African conditions. Either Architect or Engineer acceptable preferably with previous experience as Head of department. Corporate Membership R.I.B.A. or Institution Civil Engineers or equivalent desirable. The duties will be to take charge of the administration of the building side of the P.W.D., responsibility for building programmes, housing, Medical and Educational buildings totalling about £E.12 million yearly. Considerable touring involved by Government air service.

Appointment will be on Short Term Contract (with bonus) determinable at any time by six months' notice from either side at a salary of £E.2,500 per annum fixed rate. A variable cost of living allowance is now payable in the Sudan and is reviewed quarterly. No Income Tax is at present payable in the Sudan. Annual home leave on a generous scale after initial tour of approximately 18 months. Free passages by air both ways for official and family. Duty transport provided. Government accommodation, as available, provided at low rent. An outfit allowance of £E.50 is payable when contract is signed.

Further information and application form will be sent on receipt of a post-card only addressed to the Sudan Agent in London, Sudan House, Cleveland Row, London, S.W.1, quoting name and address in Block Letters and "Assistant Director 1825." 9024

STEVENAGE DEVELOPMENT CORPORATION require TRACERS in the Chief Architects Department. Salary: Men £226 at age 15 to £360 at age 30. Men £160 at age 15 to £260 at age 30. Applications to be sent to the Chief Administrative Officer, Aston House, Near Stevenage, Herts., as soon as possible. 9023

WARWICKSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the post of SENIOR PLANNING ASSISTANT, Grade A.P.T. VII (£710-£785 per annum).

The person appointed will be engaged on the County Development Plan, and will be in charge of a section dealing with part of the county. He will be stationed at Warwick, and should be a Corporate Member of the Town Planning Institute, with wide experience of Development Plan work, particularly in the preparation of Town Maps.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination. He will also be re-

quired to provide and maintain a motor car, for which travelling and subsistence allowances will be paid in accordance with the National Scale.

Applications, together with the names and addresses of two persons to whom reference may be made, should be forwarded to J. J. Brooks, County Planning Officer, Northgate, Warwick, not later than Monday, 6th July, 1953.

Canvassing, directly or indirectly, will be a disqualification. L. EDGAR STEPHENS, Clerk of the Council.

Shire Hall, Warwick. 24th June, 1953. 9036

MIDDLESEX COUNTY COUNCIL—COUNTY PLANNING DEPARTMENT.

PLANNING ASSISTANT required possessing full professional qualifications, or a suitable good honours degree, and capable of holding a senior position in charge of a group of assistants in the headquarters section. Salary A.P.T. VI, £700 p.a. rising to £765 if 26 years or over. Established, pensionable, subject to medical assessment and prescribed conditions. Applications (on forms which may be obtained on request) to County Planning Officer, 10, Great George Street, London, S.W.1, by 3rd July (quoting M.156 A.J.). Canvassing disqualifies. 9022

LONDON COUNTY COUNCIL. QUALIFYING EXAMINATION FOR THE OFFICE OF DISTRICT SURVEYOR.

An examination for certificates of proficiency to perform the duties of District Surveyor will be conducted in London in the week commencing 19th October, 1953. The minimum age limit for candidates is 26.

Possession of this certificate is necessary for appointment to vacant positions as District Surveyor (salary scales: £1,190 to £2,130 a year), or as Assistant District Surveyor (salary scale: £1,002 to £1,143 a year).

Subsequent examinations will be held annually. Apply to The Architect to the Council (A.E./D./E.B.S.), County Hall, Westminster Bridge, S.E.1, for application forms and further particulars. (429) 8658

EASTERN REGIONAL HOSPITAL BOARD (SCOTLAND).

ASSISTANT QUANTITY SURVEYOR—Salary £600-£865 per annum.

Candidates must be Corporate Members of the R.I.C.S. and have had experience in the Scottish Mode of Measurement.

Applications, including particulars of three referees, should be sent to the Secretary, Eastern Regional Hospital Board, 430 Blackness Road, Dundee, not later than 14 days after insertion of this advertisement. 9007

PEAK PARK PLANNING BOARD. SENIOR DEVELOPMENT CONTROL ASSISTANT.

Applications are invited for the above appointment on the N.J.C. Scale of Salaries A.P.T. VI (£670-£735). Applicants should be Associate Members of the Town Planning Institute and an additional recognised qualification will be an advantage. Preference will be given to applicants with some architectural experience.

The officer appointed will be required to take charge of development control in the Peak District National Park and in part of north-west Derbyshire (including Buxton and Glossop Municipal Boroughs) outside the Park but adjacent to it.

Applications must be made on forms obtainable, together with further particulars of the appointment, from the undersigned and will be received up to and including 13th July, 1953.

A. L. OLDACRE, Planning Officer.

Bath Street, Bakewell, Derbyshire. 9017

LEWISHAM METROPOLITAN BOROUGH COUNCIL.

CLERKS OF WORKS required on the Council's temporary staff, to supervise the erection of houses and flats. Experience of supervision of large building work essential. Salary scale £555-£600 per annum, plus £30 London "weighting" (A.P.T. Grade IV).

The appointments will be subject to the Rules and Regulations of the Council from time to time in force relating to temporary officers, to termination by one month's notice on either side, and to the successful candidates passing satisfactorily a medical examination.

The persons appointed will be required to devote their whole time to the duties of the posts. Applications, in writing, stating age, qualifications and experience, should be addressed to the Borough Architect, Council Offices, Canadian Avenue, London, S.E.6.

Canvassing either directly or indirectly will be a disqualification. 9016

HAYES & HARLINGTON URBAN DISTRICT COUNCIL. BUILDERS' CLERK.

Applications are invited for the permanent appointment of Builders' Clerk in the Architectural Section of the Engineer & Surveyor's Department at a salary in accordance with A.P.T. Grade II of the Scales of Salaries. The salary for the post commences at the rate of £495 per annum and rises to a maximum of £540 per annum, plus appropriate London "Weighting" amounting to £20 p.a. at 21-25 years of age and £30 per annum at 26 years of age and over.

Applicants should have had experience in a Builder's or municipal office and a knowledge of building construction and specification writing is desirable.

The person appointed will be required to assist in the clerical duties associated with building maintenance and improvement works to schools and other buildings, including the reception of instructions, writing orders and routine letters, keeping maintenance records and progressing the work.

The Council is unable to assist in the provision of housing accommodation.

Forms of application may be obtained, upon receipt of a stamped addressed envelope, from the Engineer & Surveyor, Town Hall, Hayes, Middlesex, to whom completed applications must be returned by 15th July, 1953. The envelope containing a request for a form of application should not be endorsed.

A. E. HIGGINS,
Clerk of the Council
9015

HACKNEY BOROUGH COUNCIL invite applications for the appointment of ASSISTANT ARCHITECT, at a salary in accordance with Grades A.P.T. VII-VIII (£710-£835 p.a.), plus London weighting allowance. The commencing salary may be fixed at a point above the minimum, according to the qualifications and experience of the successful candidate.

Candidates must be Associate Members of the Royal Institute of British Architects, with good architectural ability and experience in the preparation of designs and specifications for housing schemes and other buildings.

Conditions of appointment and application form obtainable from me upon receipt of a stamped addressed foolscap envelope.

Applications, endorsed "Assistant Architect," returnable not later than first post on 4th July, 1953.

DUDLEY SORRELL,
Town Clerk.
9037

Town Hall, Hackney, E.8.
10th June, 1953.

BRITISH ELECTRICITY AUTHORITY.
EAST MIDLANDS DIVISION.

Applications are invited for the following positions within the Division:—

CIVIL ENGINEERING DRAUGHTSMEN. Construction Department. (Vacancy No. 22/53.)

Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., for general building construction, drainage and sanitation schemes, associated with office and administrative buildings.

The salary will be in accordance with Grade 5 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

Closing date for this appointment will be the 30th June, 1953.

ENGINEERING DRAUGHTSMEN (MECHANICAL), Construction Department. (Vacancy No. 44/53.)

Senior Draughtsmen are required in the Mechanical section of the Construction Department at North Wilford Power Station. Candidates should have experience in one or more of the following:—

(i) Design and layout of Power Station equipment, including Turbo-Alternators, Boiler Plant, Coal and Ash Plant, and General Station Auxiliaries.

(ii) H.P. and L.P. Steam and Feed Pipework. Condensing plant and feed heating systems.

(iii) Conveyor plant, coal handling systems, and material handling of station auxiliary equipment.

Salary and conditions of service will be in accordance with the National Joint Board Agree-

ment, Grade 5 (£567-£671 per annum, and Grade 6 (£433-£567 per annum) of Schedule D, according to experience.

Closing date for this appointment will be the 30th June, 1953.

ENGINEERING DRAUGHTSMEN (ELECTRICAL), Construction Department. (Vacancy No. 61/53.)

Candidates should have experience in the preparation of layouts and diagrams for the installation of E.H.T. and L.T. Switchgear, transformers, E.H.T. and L.T. cables; knowledge of protective gear systems would be an advantage.

The salary will be in accordance with Grade 5 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

Closing date for this appointment will be the 29th June, 1953.

The above appointments will be pensionable within the provisions of the British Electricity Authority and Area Boards Superannuation Scheme.

Applications should be submitted on the official form, which may be obtained from the Divisional Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and should be returned to the undersigned by the dates stated. Please quote Vacancy Number.

L. F. JEFFREY,
Divisional Controller.
9014

STAFFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT BUILDING INSPECTOR.

Applications are invited for the above appointment at a commencing salary within the range of £465 p.a.—£555 p.a. according to ability and experience.

Applicants should have a thorough practical knowledge of the building trade and experience as a Clerk of Works or General Foreman. They should be good specification writers and be able to make clear concise reports. The successful candidate will be required to reside in or near Stafford and to provide a car for the performance of his duties, for which travelling allowance will be payable in accordance with the County Scale.

Application forms may be obtained from C. M. Coombs, F.R.I.B.A., County Architect, Martin Street, Stafford, to whom they should be returned after completion.

T. H. EVANS,
Clerk of the County Council.
9020

COUNTY BOROUGH OF HUDDERSFIELD.
Applications are invited for the following appointments in the Borough Architect and Planning Officer's Department:—

(a) SENIOR QUANTITY SURVEYOR, Grade VIII, salary £760-£835.

(b) QUANTITY SURVEYOR, Grade VII, salary £710-£785.

Housing accommodation will be provided for the successful applicants if required.

Applicants must have experience in the preparation of bills of quantities, specifications, estimates, and the settlement of final accounts, and preference will be given to Associates of the Royal Institute of Chartered Surveyors.

Conditions of service are those formulated by the National Joint Council, and the appointments are subjected to the provisions of the Local Government Superannuation Act, 1937. The successful candidates will be required to pass a medical examination.

Applications, suitably endorsed, together with the names of two referees, should be delivered to the Borough Architect and Planning Officer, High Street Buildings, Huddersfield, not later than the 6th July, 1953.

HARRY BANN,
Town Clerk.
9010

COUNTY OF WARWICK.
ARCHITECT'S DEPARTMENT.

Applications are invited for the post of ASSISTANT ARCHITECT (A.R.I.B.A.), Grade A.P.T. V, salary £595-£645, on the established staff.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to undergo a medical examination. Application forms can be obtained from G. R. BARNESLEY, F.R.I.B.A., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.
9035

LANCASHIRE COUNTY COUNCIL—
PLANNING DEPARTMENT.

DEPUTY DEVELOPMENT OFFICER, A.P.T. Grade IX, £815-£935, required in Estate Development Section at Headquarters, Preston.

Applicants must possess organising ability and have had wide experience in preparing and carrying out large scale development, including industrial and housing estates and preferably schemes for accommodating population overspill.

A professional qualification in architecture, engineering or surveying is essential and a planning qualification in addition would be an advantage.

Applications, stating age, qualifications, experience and two referees to County Planning Officer, East Cliff County Offices, Preston, by 15th July, 1953.

9021

BOROUGH OF BASINGSTOKE.
ARCHITECT'S DEPARTMENT.
(REVISED ADVERTISEMENT.)

Applications are invited for the appointment of CLERK OF WORKS. Salary: Miscellaneous, Grade V (£480-£540). Considerable experience of Housing and Road Construction is essential.

Applications, together with either copies of two recent testimonials or the names and addresses of two referees, must be submitted not later than Monday, the 6th July, to the Borough Architect (E. Almond, Dipl.Arch., A.R.I.B.A.), Municipal Buildings, Basingstoke.

MEIRION O. JONES,
Town Clerk.
9025

ANGLESEY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of ASSISTANT ARCHITECT, Salary Grade A.P.T. IV (£555-£600). Applicants should have good experience in preparation of working drawings and preference will be given to applicants who have passed the Intermediate Examination of the R.I.B.A.

The post is superannuable and candidates will be required to undergo a medical examination.

Lodging allowance will be granted in suitable cases.

Further particulars may be obtained from the County Architect, Shire Hall, Llangefni, Anglesey.

Applications giving names and addresses of 2 referees to be forwarded to the Clerk of the County Council, Shire Hall, Llangefni, by 30th June, 1953.

9019

'...a book I can recommend —in my opinion the best that

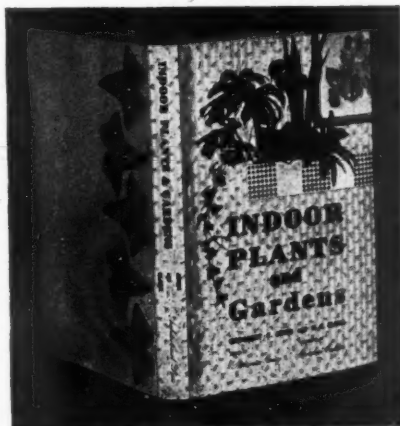
**INDOOR
PLANTS
AND
GARDENS**

by MARGARET E. JONES

and H. F. CLARK

edited by PATIENCE GRAY

illustrated by GORDON CULLEN



has yet been written on the

subject of house-plants . . . It's

comprehensive, it has excellent

photographs and it's extremely well

illustrated.' (Charles Funke Jnr. on

the B.B.C.)

18s. net., postage 6d.

THE ARCHITECTURAL PRESS

9-13 Queen Anne's Gate Westminster SW1

**URBAN DISTRICT COUNCIL OF
GAINSBOROUGH.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the appointment of Architectural Assistant in the Department of the Engineer and Surveyor and Water Engineer at a salary within Grade V of the A.P. & T. Division of the National Scales (£595 to £645 per annum). The commencing salary will be fixed according to qualifications and experience.

Candidates should be Registered Architects, and preference will be given to Associates of the Royal Institute of British Architects who have experience of the design of Local Authority housing.

The appointment will be subject to the National Scheme of Conditions of Service and to the provisions of the Local Government Superannuation Act, 1937.

The successful candidate will be required to pass a medical examination, and the appointment will be terminable by one month's notice on either side.

**HOUSING ACCOMMODATION WILL BE
MADE AVAILABLE IF NEEDED ON APPOINTMENT.**

Applications, stating age, qualifications, present appointment and duties, particulars of past service and experience, together with other essential information, and accompanied by copies of not more than three recent testimonials, must be delivered to the undersigned not later than 6th July, 1953.

Canvassing, directly or indirectly, will be a disqualification, and applicants must disclose whether they are related to any member or senior official of the Council.

ERIC R. MORGAN,
Clerk of the Council.

Council Offices, Lord Street, Gainsborough. 9034
June, 1953.

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.
The engagement of persons answering those advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she is, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

ARCHITECTURAL DRAUGHTSMAN wanted at Maidenhead, permanent position; good salary and prospects. Full particulars training, experience, age, salary, to Box 8568.

SENIOR ASSISTANT required to work on large industrial projects in the Architectural Department of a London Consulting Engineer. Applicants must be capable of controlling all stages of detailing and works generally. State experience and salary required to Box 8935.

ASSISTANT required for large general Architectural Practice with offices in Maidenhead. Some experience in specification writing essential. Salary £300 to £500, according to experience. Box 8933.

SENIOR AND JUNIOR ASSISTANT ARCHITECT required for London Office. Varied projects (mainly industrial) with opportunity of contemporary development. Five day week. Apply, stating age, experience and salary required to Box 8970.

ARCHITECTURAL ASSISTANTS required by firm specialising in prefabrication, for tracing and detailing. R.I.B.A. Inter. standard considered. Write, stating age, etc., and salary required. Box 9045.

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED invite applications for appointments on the staff of their Architect's Department, Manchester, as follows:—

ASSISTANT ARCHITECT at a commencing salary of £550 per annum. Applicants must have had good practical office experience, possess a sound knowledge of building construction and be able to prepare working drawings and details from sketch plans.

JUNIOR STRUCTURAL ENGINEERING ASSISTANT at a commencing salary of £475 per annum. Applicants should have experience

in the design and detailing of structural steel, reinforced concrete and foundation works.

The appointments are permanent with prospects of promotion. Excellent conditions, including participation in Superannuation Scheme.

Applications, stating age, experience, and qualifications, to be addressed to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 8963

YOUNG ASSISTANT, Intermediate R.I.B.A. standard, with office experience, required in small recently formed Architects Department at London Head Office of Multiple Company, for work on both maintenance of Company's properties and New Contracts. Some travelling involved. Write stating age, experience, salary, etc., Box 8983.

ARCHITECTURAL DRAUGHTSMAN for Precast Concrete design required by large firm of Manufacturers in Wolverhampton area. Apply stating age, experience and salary required to Box 9004.

ARCHITECTURAL ASSISTANT required; fully qualified or approaching final. Mixed practice, mainly commercial and industrial. Watson, Johnson Stokes, Victoria Square, Birmingham, 2. 9002

ARCHITECTURAL ASSISTANT, qualified, with experience of design and working drawings required in Glasgow Office. Good salary to suitable applicant. Superannuation scheme operative. Box 8984.

RESIDENT ARCHITECT wanted, to serve in Gold Coast near Accra, and to take up position in August. Tour of 12 to 18 months, as may be agreed, with leave at the rate of ten weeks per annum. Bungalow and car provided. Salary and other emoluments about £2,000 per annum. Passages for wife and family would be provided. Reply Box 9041.

ARCHITECTURAL ASSISTANT required immediately for general practice. Salary: £400 to £600, according to experience. Apply H. N. Jepson & Partners, Midland Bank Chambers, Nuneaton. 9042

EXPERIENCED ARCHITECT (age 35 to 40) required in London office, with view to taking charge of overseas office in 1954. Good technical knowledge absolutely essential, coupled with organising ability and capacity to interpret clients' requirements. Box 9044.

PERMANENT Male ARCHITECTURAL ASSISTANT, not below Intermediate standard, required by private Architects in London with varied practice. Reply, with particulars and salary required, to Box 9030.

ARCHITECTS require intermediate ASSISTANT at once. Interesting country practice, York & Calvert, 3, Raglan Street, Harrogate, Yorkshire. 9047

ARCHITECTURAL ASSISTANT, with sound knowledge of Building Construction and able to prepare working drawings and details from sketch plans, required for Manchester office. Unqualified persons will be considered if they have not had less than 7 years' experience. Salary according to experience. Box 9046.

ARCHITECT'S ASSISTANT required for a varied work. Intermediate standard or higher, and at least two years' office experience. Apply in writing, stating age, etc., and salary required. Cordingley & McIntyre, Chartered Architects, The College, Durham. 9029

ARCHITECT. Vacancy occurs in a leading Belfast practice—varied interesting work—for competent Assistant of Intermediate to Final standard. Reply in writing, stating training, experience, age and present salary, to John MacGeagh, A.R.I.B.A., Chartered Architect, Scottish Provident Building, Donegall Square West, Belfast. 9013

ASSISTANCE required with Working Drawings. Part-time, evening or week-ends. Box 9027.

QUALIFIED ARCHITECT wanted immediately for temporary post. Salary: £52 10s. per month. Sanctuary & Son, Chartered Surveyors, Bridport, Dorset. Telephone 2215. 9045

ARCHITECT'S ASSISTANT required for private practitioner's office in Liverpool, preferably with some experience. Salary: £500-£600. Apply Box 9031.

SENIOR ASSISTANT required by Architects in Kensington area. Must be fully qualified and competent in all aspects both as regards design and experience. Five-day week and good salary for man of ability. Apply Box 9032.

THE following vacancies occur in the Architect's Department of a leading Oil Company:—

(a) **ONE SENIOR ASSISTANT**. £550-£700. Should be qualified or studying for Final examination. Sound practical experience of contemporary design and construction is essential, including levels, specification, and site supervision.

(b) **TWO ASSISTANTS**. £350-£500. Of Intermediate standard, with sound practical knowledge. All these appointments are permanent, progressive, and pensionable.

Reply, giving full particulars, to Box 9011.

ARCHITECTURAL ASSISTANT required, to work in South Wales on large industrial project. Must be capable of detailing from sketch drawings. Applications stating age, experience, and salary required, to Box 9009.

ARCHITECT. Vacancy occurs in a leading Belfast practice—varied work of Public Building class—for qualified Architect capable of taking responsible charge contracts, drawings, specifications, and office business. Remuneration by arrangement. Reply in writing in full, and state age, in confidence, to John MacGeagh, A.R.I.B.A., Chartered Architect, Scottish Provident Building, Donegall Square West, Belfast. 9012

Architectural Appointments Wanted

THIRD year ARCHITECTURAL STUDENT, three years' general office experience, seeks junior position in progressive office in London area. Box 711.

ARCHITECT, 18 years' varied experience in well-known private offices, seeks responsible senior appointment in London area. Box 9028.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.
The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

METALWINDOW DRAUGHTSMAN required. Good salary; pension scheme; canteen on premises; modern drawing office. Morris-Singer Co., Ferry Lane Works, Walthamstow, London, E.17. 8936

LEFT LAYOUT DRAUGHTSMAN required. London area. Canteen. Pension Scheme. Excellent prospects. Write Parn & Dunwoody (Lifts), Ltd., Union Works, Bear Gardens, S.E.1. WAT. 7107. 9039

REPRESENTATIVE required in Yorkshire by old established Company of Reinforced Concrete Engineers and Cast Stone Manufacturers. Must have technical knowledge, one already known to Architects, Engineers and Contractors in Yorkshire preferred. Pension Scheme in operation. State age, experience, with full particulars to Box 8962.

For Sale or Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.
OAK PANELLING.—Very fine panelling and 20 ft. by 30 ft. for sale. Can be viewed South Kensington. Box 9048.

FREEHOLD SHOP SITE FOR SALE at Perry Vale, Forest Hill, S.E.23. Plans passed for shop and living accommodation over. Licence ready. Price £400. Apply Box 9038.

**COLD CATHODE FLUORESCENT
LIGHTING**

Complete Electrical installations and maintenance for
FACTORIES, WORKS and OFFICES

METAL LETTERS

For SHOP-FRONTS, SIGNS & VANS
In Stainless or Enamelled STEEL and CAST BRONZE

**CHASE PRODUCTS
(Engineering) LTD**

27 PACKINGTON ROAD, ACTON, W.3 • Acorn 1153-4 • And at Leeds.

books

an illustrated catalogue of books on
architecture, planning, building practice
and kindred subjects will be sent on
application to

THE ARCHITECTURAL PRESS
9-13 Queen Anne's Gate Westminster SW1

BUILDINGS FOR SALE—Prefabricated Factories, Stores, Workshops, Canteens, Offices, Halls, Clubs, Garages, etc.; large and small. Apply for details and prices, stating your requirements, to J. Thorn & Sons, Ltd., Box No. 126, Brampton Road, Bexleyheath, Kent. (Tel.: Bexleyheath 305.) 7947

RECONDITIONED EX-ARMY HUTS, and manufactured buildings. Timber, Asbestos, Nissen type, Hall type, etc. All sizes and prices. Write, call, or telephone, Universal Supplies (Belvedere), Ltd., Dept. 25, Crabtree Manorway, Belvedere, Kent. Tel.: Erith 2948. 6803

STEEL TRACING DESKS. Heavy gauge steel throughout, as new, four only, 5 ft. 4 in. high, 2 ft. 1 1/2 in. wide, 2 ft. 9 in. front to back, large drawer and cupboard, retractable dust covers to top, £5 19s. 6d. each. Four only, 3 ft. 4 in. high, 4 ft. 2 in. wide, 2 ft. 9 in. front to back, 2 large locking drawers (no cupboard), retractable dust covers, £9 19s. 6d. each. Carriage extra to provinces. Office Furniture Co., 182, Vauxhall Bridge Road, London, S.W.1. 9033

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s. **SURVEYING** and Levelling of Sites, Bills of Quantities, Variation Accounts, Survey of Buildings and Reports. Qualified Surveyor. LIV. 1839. Box 8922.

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s. **A. J. BINNS, LTD.**, Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works, 96/107, St. Paul's Road, N.1. Canonbury 2061.

PICTURE FRAMING—Drawings, Maps, Photographs, etc., framed at short notice. Over 200 mouldings in stock. Samples and prices on request. Blackman, Harvey, Ltd., 11, Bateman's Buildings, Soho Square, London, W.1. GER. 3463. 8416

PHOTOGRAPHY of Architecture carried out by specialist in this field. Please phone Henry Lewes, MAIDA VALE 6667 (or messages to WELbeck 6655 when no reply). 8945

HIGH HOLBORN: 2 light offices and waiting-room. £275 p.a. inc. Box 8985.

BRICKS—High quality Facings, for quick delivery London area only. FREmantele 9546. 9040

MODELS made to order by man with wide experience for Architects, Students, Building Societies, etc. Reasonable charges. Send me your plans. Garbutt, 10, Haley Hill, Halifax. 9026

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s. **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.R.I.B.A., M./A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.), prepare Students by correspondence tuition. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

RIBA INTER, FINAL & SPECIAL FINAL

Postal Courses in all or any subjects including Design and Professional Practice, Consultation arranged
THE ELLIS SCHOOL
Principal: A. E. Waters, M.B.E., G.M., F.R.I.B.A., 103B, OLD BROMPTON RD., LONDON, S.W.7
Phone: KEN 4477/8/9 and at Worcester

PICKERINGS' LIFTS

STOCKTON-ON-TEES Tel: 65287
LONDON OFFICE:
116 VICTORIA ST. S.W.1. Tel: VIC 9860

MUMFORD BAILEY & PRESTON LTD

**AIR CONDITIONING & HEATING
HOT & COLD WATER SERVICES
SANITARY ENGINEERING ETC.**

NEWCASTLE HOUSE - CLERKENWELL CLOSE - LONDON - E-C-1
Phone: Clerkenwell 6344 Branches at Bournemouth & Dublin

Offices at: — Bournemouth. Tel: 4377. — Plymouth. Tel: 2651

WHITE FACING BRICKS

(S. P. W. BRAND)

Telephone: BULwell 78237-8 • Telegrams: "Maclime", Bulwell, Nottingham.

M. MCCARTHY & SONS, LTD
BULWELL • NOTTINGHAM

CORONATION OFFER!

★ The coupon below will save you money

PREPARE FOR PROFESSIONAL EXAMINATIONS. Many brilliant successes are gained each year by I.C.S. students in R.I.B.A., R.I.C.S., I.Q.S., I.Struct.E., I. Mun. E. Examinations.

To mark the Coronation I.C.S. offer their standard home study Courses at specially reduced fees for a limited period only.

Complete the coupon below, stating the exam. you wish to pass, and post today! **ACT NOW!** Don't miss this chance to obtain an I.C.S. training at reduced terms.

Dept. 5B I.C.S. 71 Kingsway, W.C.2.

★ **INTERNATIONAL CORRESPONDENCE SCHOOLS**
Dept. 5B, International Buildings, Kingsway, London, W.C.2.
I am interested in your Coronation offer.
Please send FREE Book on
Name..... Age.....
(BLOCK LETTERS PLEASE)
Address

Since 1945 I.C.S. have trained 150,000 ambitious men

FENCING
BOULTON & PAUL LTD.
NORWICH

Space saving steel furniture for halls, canteens, cafes and sports pavilions

SEBEL • STAK - A - BYE • FOLD - A - BYE • NEST - A - BYE

Sebel Products Ltd, 177 West Street, Erith, Kent

GIMSON LIFTS

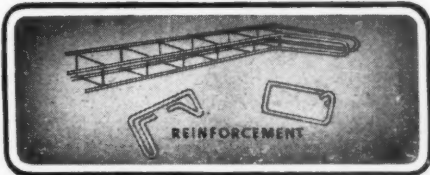
Service is available throughout the country. Technical literature will be sent on request.

GIMSON & CO. (LEICESTER) LTD.
VULCAN ROAD, LEICESTER

Phone: Leicester 60272 Grams: Gimson Leicester

LIGHTNING PROTECTION
By **FURSE**
W. J. FURSE & CO., LTD.
10, TRAFFIC STREET, NOTTINGHAM
LONDON - MANCHESTER - BRISTOL

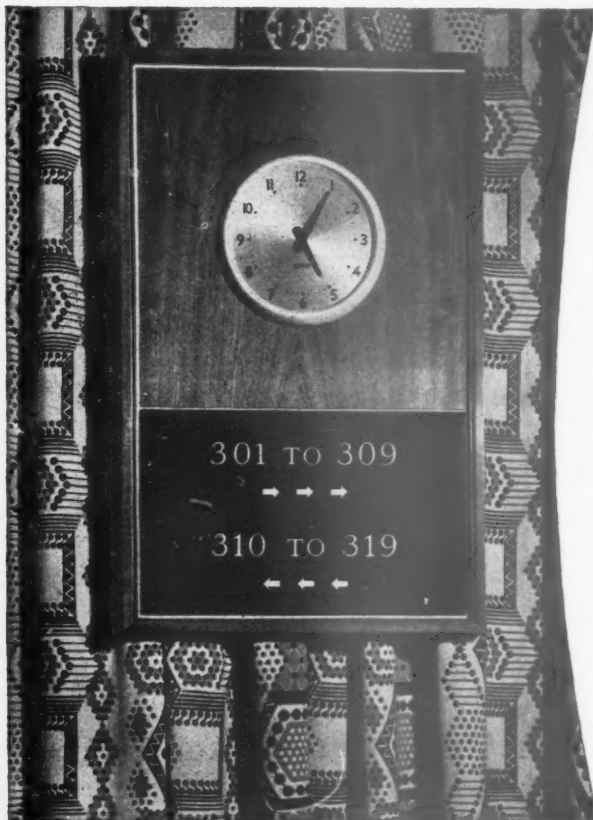
ANOTHER *Sommerfelds'* PRODUCT
LONDON OFFICE: 167, VICTORIA ST. S.W.1. TEL. VIC. 1000
SOMMERFELDS LTD. WELLINGTON • SHROPS • TELE 1000



Alphabetical Index to Advertisers

Aberdare Electric Co., Ltd., The	PAGE lxxii	Falk Stadelmann & Co., Ltd.	PAGE xlxiii	National Federation of Clay Industries, The.....	PAGE xvii
Adamite Co., Ltd., The	ix	Fordham Pressings, Ltd.....	lxxvii	Neuchatel Asphalte Co., Ltd., The.....	lxxix
Adeshead, Ratcliffe & Co., Ltd.	ii	Furse, W. J., & Co., Ltd.....	lxxviii	Ozalid Co., Ltd.	lxvi
Anderson Construction Co., Ltd.	lxxvii	Gas Council, The.....	v	Paragon Glazing Co., Ltd.	lxv
Architectural Press Ltd., The	lxxv, lxxvi	General Electric Co., Ltd.	lxxi	Permanite, Ltd.	lxv
Armstrong Cork Co., Ltd.	lxxlii	Gent & Co., Ltd.	lxxviii	Phillips Electrical, Ltd.	lxli
Atlas Stone Co., The	lxix	Gimson & Co. (Leicester), Ltd.	lxxvii	Phoenix Rubber Co., Ltd.	lxxvii
Bainbridge Bros.	xi	Greenwood's & Airvac Ventilating Co., Ltd.	iii	Pickerings, Ltd.	lxxv
Baillister, Walton & Co., Ltd.	xii	Gyproc Products, Ltd.	lxxxi	Pilkington Bros., Ltd.	xxx
Bayless, Jones & Bayliss, Ltd.	xxiv	Hall, John, & Sons (Bristol & London), Ltd.	lxxviii	Poles, Ltd.	ii
Beckett, Laycock & Watkinson, Ltd.	lxxii	Harper & Tunstall, Ltd.	lxxliii	Prodorite, Ltd.	lxviii
Berry, Z. D., & Sons, Ltd.....	lxxii	Harvey, G. A. (London), Ltd.	iii	Pyrene Co., Ltd., The	lxxviii
Bigwood Bros. (Birmingham), Ltd.	lxxii	Hills (West Bromwich), Ltd.	lxxix	Radiation (Group Sales), Ltd.	lxxvii
Blackburn, Thos., & Sons, Ltd.	x	Hobbs, Hart & Co., Ltd.	lxxix	Rawlings Bros., Ltd.	lxii
Boulton & Paul, Ltd.	lxxlii, lxxvii	Hollway, W. F., & Brother, Ltd.	lviii	Remploy, Ltd.	lxix
B.P. Fuel Oil.....	xi	Hope, Henry, & Sons, Ltd.	iv	Riley Stoker Co., Ltd.	lii
Bradford, F., & Co., Ltd.	lxxv	Horseley Bridge & Thomas Piggott, Ltd. Industrial Engineering, Ltd.	lxxvi	Rom River Co., The.....	lxvii
Briggs, Wm., & Sons, Ltd.	lxxv	International Correspondence Schools... Ioco, Ltd.	lxxvii	Ruberoid Co., Ltd., The	lxvii
British Constructional Steelwork Associ- ation, The	lxvi	Johnson & Phillips, Ltd.	lxxii	Salter, T. E., Ltd.	lxiv
British Plumber, Ltd.	lxvii	Johnson Bros. (Contractors), Ltd.	lxxii	Saro Laminated Wood Products, Ltd.	lxxvii
Broad & Co., Ltd.	ii	Kenyon, Wm., & Sons, Ltd.....	lxxii	Scaffolding (Great Britain), Ltd.	vi
Cafferata & Co., Ltd.	lxxvii	Kwikform, Ltd.	lxxii	Sealanco (St. Helens), Ltd.	lxii
Cape Asbestos Co., Ltd.	lxxiii	Leaderflush, Ltd.	lxliii	Sealcrete Products, Ltd.	lxvii
Cargo Fleet Iron Co., Ltd.	lxxii	Lead Industries Development Council... Leatherlor, Ltd.	lxxiv	Sebel Products, Ltd.	lxvii
Celcon, Ltd.	lxxii	Leigh, W. & J., Ltd.	lxxi	Semtex, Ltd.....	lv
Celotex, Ltd.	lxxii	Lignacite (N.E.), Ltd.	lxxi	Sign Service	lxv
Cement Marketing Co., Ltd., The	vii	Lion Foundry Co., Ltd.	lxxvii	Smith & Pearson, Ltd.	lxv
Chase Products (Eng.), Ltd.	lxxvi	London Brick Co., Ltd.	lxxvii	Smith, Thos., & Son, Ltd.	lxv
Clark, James, & Eaton, Ltd.	lxxviii	Lovell & Hanson, Ltd.	lxlii	Snowcem	vii
Clarke Ellard Eng. Co., Ltd.	ix	Mallinson, Wm., & Sons, Ltd.	lxlii	Sommerfeld's, Ltd.	lxxvii
Clyde Structural Iron Co., Ltd., The	i	Mander Bros., Ltd.	lix	Spencer Lock & Co., Ltd.	lxvii
Colt Ventilation, Ltd.	l	Marley Tile Co., Ltd., The	lxxvii	Steel Radiators, Ltd.	lxiv
Concrete, Ltd.	lxxvii	Marryat & Scott, Ltd.	lxxvii	Storry, Smithson & Co., Ltd.	lii
Corben, R., & Son, Ltd.	lxxviii	McCarthy, M., & Sons, Ltd.	lxxvii	Tarmac, Ltd.	lxvii
Costain Concrete Co.	lxxviii	McKechnie Bros., Ltd.	lxx	Thornton, A. G., Ltd.	lxxix
Crane, Ltd.	xv	Metal Sections, Ltd.	lxxviii	Townson, Wm., & Sons, Ltd.	viii
Critical Mfg. Co., Ltd.	lxxvii	Midland Woodworking Co., Ltd.	lxxviii	Trefol, Ltd.	lxvii
Croggon & Co., Ltd.	lxxvii	Mills Scaffold Co., Ltd.	lxxx	Trussed Concrete Steel Co., Ltd.	lxvii
Docker Brothers	lxxvii	Moler Products, Ltd.	lxxvii	Turners Asbestos Cement Co., Ltd.	lxvii
Doulton & Co., Ltd.	lxx	Morris, M. A., Ltd.	lxi	United Kingdom Provident Institution	lxvii
Ductube Co., Ltd.	lxv	Moulded Components (Jablo), Ltd.	lxxix	Walls, Ltd.	i
Dunlop Rubber Co., Ltd.	lxv	Mumford, Bailey & Preston, Ltd.	lxxvii	Ward, Thos. W., Ltd.	xx
Econa Modern Products, Ltd.	lxv	Myton, Ltd.	lxliii	Wheatly & Co., Ltd.	xxi
Edgar, Wm., & Son, Ltd.	lxxvii			Williams, John, & Sons (Cardiff), Ltd....	lxix
Ellis School of Architecture, The	lxxvii			Williams & Williams, Ltd.	lxix
English Electric Co., Ltd.	lxxvii			Williams & Watson, Ltd.	lxix
				Zinc Development Association, The	liii

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc.,
Education, Legal Notices, Miscellaneous Property, Land and Sales, lxxv, lxxvi, lxxvii



Photograph by permission of Architectural Review

"The right Time for Life"

The headline of this advertisement, we feel, adequately conveys the real value of a Gents' Controlled Electric Clock System.

The complete installation of 24 standard slave clocks and a number of special architect designed slave clocks, all controlled by one Master Clock, ensures accurate uniform time throughout the new Time-Life-International Building, New Bond Street, London.

Precisely the same accurate time is available for all establishments if you specify . . .

GENTS'
OF LEICESTER

**Controlled Electric
Clock Systems**

Fully illustrated details are free on request, along with a list of other notable users

GENT & COMPANY LTD • FARADAY WORKS • LEICESTER

London Office and Showrooms: 47 Victoria Street, London, S.W.1.

Also at NEWCASTLE • BIRMINGHAM • BRISTOL and GLASGOW

And agents in 51 countries throughout the world

on
vil
xix
xvi
xlv
xii

vii
xx
ii
viii

xii
xli
xix
lii

liv
cix
vi

clii
vii
lv

liv
xxv
vii
viii

civ
lii
vii
cix

lvii
ciii
l
cxi
lix
liv
cix
liii



C

R





WHY ON EARTH
DON'T THEY USE
OZALID?

It is easy to understand why people, once having seen an OZALID print, make the inevitable comparisons—the quality is unmistakable.

OZALID is a dry printing process and from the moment it leaves the developing unit every copy is clean, perfectly flat, and clear in every detail.

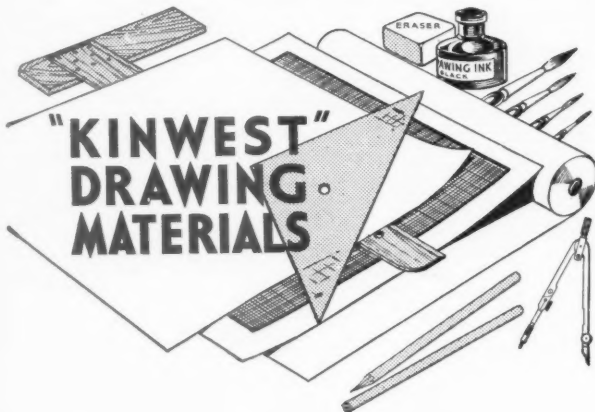
The process of continuous reproduction is of course the quickest, cleanest and most economical in existence



Dry Developed
**PLAN PRINTING
PROCESS**

OZALID COMPANY LIMITED
62 London Wall, London, E.C.2.
Telephone: MONarch 9321 (8 lines)

OZALID PRINTS THE BEST



"KINWEST"
DRAWING
MATERIALS

We are the largest manufacturers of high-grade Drawing Instruments and Slide Rules in the British Empire, and our Kinwest Drawing Materials have gained a reputation throughout the world for superb quality and accuracy. Insist on using only Thornton's for complete satisfaction.

Our illustrated Catalogue, which includes particulars of Drawing Boards, Tee and Set Squares, Scales, Slide Rules, Drawing Instruments, Curves, Protractors, Drawing Materials, etc., is sent Post Free on request.

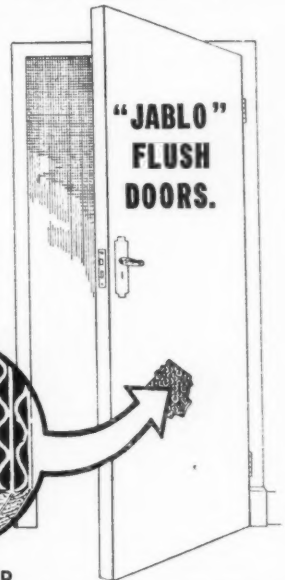
A. G. THORNTON LTD
Drawing Instrument Specialists
WYTHENSHAW, MANCHESTER
Tel: WYThenshawe 2277 (4 lines)

JABLO FLUSH DOORS

PATENTED—EXTON LICENCE
MODERATELY PRICED HIGH QUALITY
British Made CELLULAR CORE Flush Doors
FACED WITH PLYWOOD OR HARDBOARD.

- Freedom from warp and wind.
- Exceptional Lightness.
- High Thermal and Sound Insulating Properties.
- The Utmost Timber economy (.002 Standard per door).

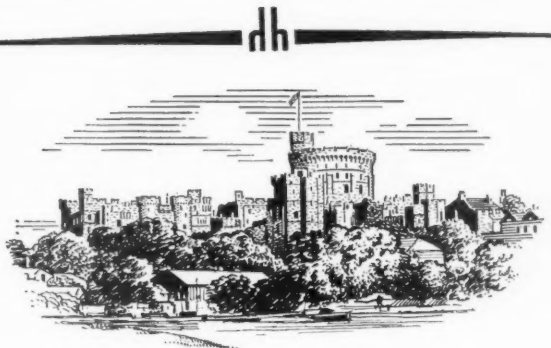
Tested and approved by the Department of Scientific and Industrial Research.
Reviewed by Chief Advisor's Division, Ministry of Works.



FULLY GUARANTEED

The Jablo Flush Door has all the advantages of a solid core door at less than half the cost and weight—the cellular construction provides continuous adhesion and support to the facings, ensuring dead flat surfaces; undulating surfaces so often associated with hollow framed doors are impossible.

MOULDED COMPONENTS (JABLO) LTD.,
JABLO WORKS, CROYDON.
Telephone: CRO 2201-6922



FOR SECURITY REASONS

*Windsor Castle
is one of many famous
buildings fitted with*

HOBBS HART
Security Equipment

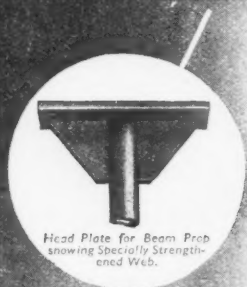
LOCKS • WALL SAFES • SAFES & STRONG ROOMS

Details gladly sent on request.

HOBBS HART & Co. Ltd., 76 Cheapside, London, E.C.2. Tel: City 1709

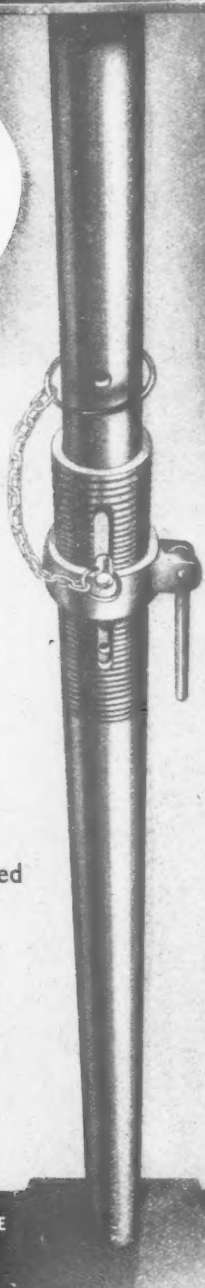
MILLPROPS

make it
a **FAST**
job



Head Plate for Beam Prop showing Specially Strengthened Web.

- Robust and dependable
- High Tensile Steel Pin
- Adjusted by Nut and Handle
- In three sizes Standard and Beam Types
- Individually tested to Safe Load



TYPE	HEIGHT		APPROX. WEIGHT IN LBS.	SAFE LOAD IN TONS	
	FULLY CLOSED	FULLY EXTENDED		FULLY CLOSED	FULLY EXTENDED
A	5 ft. 7 ins.	9 ft. 9 ins.	50	5.00	4.12
B	8 ft. 1 in.	12 ft. 3 ins.	58	5.00	3.57
C	10 ft. 7 ins.	14 ft. 9 ins.	72	5.00	2.17

AVAILABLE FOR SALE OR HIRE
IMMEDIATE DELIVERY

MILLS SCAFFOLD CO. LTD.

(A subsidiary of Guest, Keen & Nettlefolds, Ltd.)

Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6. (RiVerside 5026/9)

Agents and Depots: BELFAST · BIRMINGHAM · BOURNEMOUTH · BRIGHTON · BRISTOL · CANTERBURY · CARDIFF
COVENTRY · CROYDON · DUBLIN · GLASGOW · HULL · ILFORD · LIVERPOOL · LOWESTOFT · MANCHESTER
NEWCASTLE · NORWICH · PLYMOUTH · PORTSMOUTH · READING · SHIPLEY · SOUTHAMPTON · SWANSEA · YARMOUTH

(9)
FF
ER
H