

# 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

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

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. 11, Gower Street, W.C.1.	Museum 9200
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	MARS 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's 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 7243
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
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 3933
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3333
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. 14, Moorgate, London, E.C.2.	Central 4444
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
TGC	The Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 69, Cannon Street, E.C.4.	City 4444
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 74, Victoria St., S.W.1.	Victoria 5783
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

No. 2978]

[Vol. 115

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.



## S T E E L for STRENGTH

for Power Stations and Generating Plants, Refinery, Bridges, Steel Framed Buildings, Railway Sheds and Station Roofs, Findlay is prepared to meet your demands efficiently. Wide and long experience in the industrial Engineering and Constructional fields assures clients the finest in planning and architectural engineering skill.

If your plans call for new construction or expansion, at your invitation a Findlay expert will gladly make a complete survey for you.

**Designers :: Fabricators :: Erectors**  
 Head Office: PARKNEUK WORKS · MOTHERWELL · SCOTLAND  
 Phone: Motherwell 496  
 London Office: High Holborn House, 52/4, High Holborn, W.C.1.  
 Phone: Holborn 7330

**ALEX. FINDLAY & Co Ltd**  
*Structural Engineers*  
 MOTHERWELL · SCOTLAND



### Overhead Efficiency without Overhead Expense!

We may justifiably claim that a Paragon Glazed Roof or Lantern Light, once installed, "stays put" for the lifetime of the building without any necessity for that periodical maintenance characteristic of less thorough installations. The reason is that all products used in our manufactures, as well as the process of manufacture itself (which is carried out entirely in our Works), are subject to the closest scrutiny as to quality and detail. May we suggest that the experience of upwards of 40 years of all the varied aspects of roof glazing are not without value?

★ We shall welcome the opportunity to tell you more in our Brochure "A" about Paragon Glazing.



**PARAGON GLAZING CO. LTD.**  
 1 VICTORIA STREET, LONDON, S.W.1  
 Telephone: ABBey 2348 (P.B.X.)  
 Telegrams: "Eclairage, Sowest," London.

# PARAGON GLAZING

L  
H

inery,  
ds and  
mands  
ustrial  
ts the  
skill.

your  
survey

ctors  
LAND  
W.C.I.



hout

!

Glazed  
ys put "  
out any  
character-  
season is  
, as well  
which is  
bject to  
il. May  
wards of  
f glazing

ON  
G



is

**FREE**  
full s  
rang  
avai  
for l





*Installation of COLT S.R.  
Ventilators on the roof of  
Lister & Co. Ltd.,  
Manningham Mills, Bradford.*

# Colt Ventilation is vital to Industry...

All over Britain, the Colt Organization is solving the vital problem of ventilation for industrial undertakings large and small. Years of experience ensure that Colt ventilation is installed simply, quickly, economically — without structural alterations or interrupting production.

**FREE MANUAL** with  
full specifications of the wide  
range of Colt Ventilators is  
available on request. Write  
for Manual C.151

## **COLT VENTILATION**

**INDUSTRIAL AND DOMESTIC**

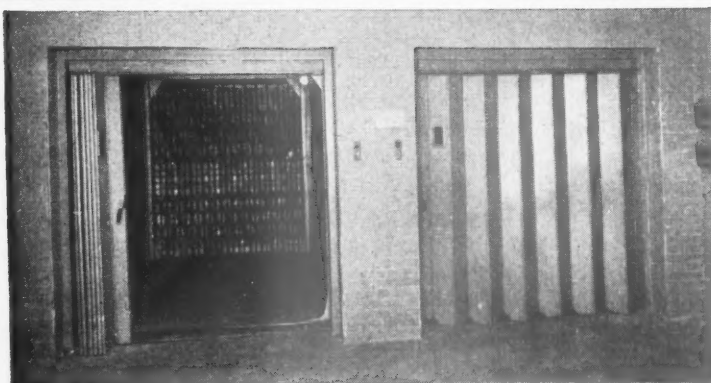
*chosen by over 4,000 firms throughout the country.*

**COLT VENTILATION LTD. • SURBITON • SURREY • ELMbridge 6511-5**

*Also at Birmingham, Bradford, Bristol, Kilmarnock, Manchester, Newcastle, Newport (Mon.) and Sheffield.*



SEE COLT ABOUT VENTILATION — WHATEVER YOU DO



## The Public appreciates them...

Public appreciation of easy transport to the upper floors is reflected in the substantial increases in weekly sales. The sight of a moving Escalator or waiting Lift has a psychological appeal which few people can resist. We have installed a large proportion of the lifts and escalators now in use, in department stores of this country and overseas and there is no doubt as to the continuous satisfaction afforded in every instance.

## ... and so does the Staff

*For Modern Shops, where many and varied classes of goods are to be handled, goods lifts are essential. All types are manufactured by J. & E. Hall and special care is taken to ensure that every part of the equipment will withstand continuous use and rough treatment.*

LIFTS & ESCALATORS  
BY  
**J & E. Hall**

LIMITED

DARTFORD · KENT

## THE SNOWCEM CASE BOOK



HOUSING SCHEME—Kinlochleven Village Improvement Society Ltd.

The houses in this pleasantly situated highland village have been redecorated with Snowcem. The dark surrounding hills accentuate the clean, attractive appearance that Snowcem provides. For housing estates such as this, Snowcem meets the need for an exterior decorative treatment combining attractiveness, economy, and protection against the weather. Architect: Herbert G. Dunn, Esq. Contractors: Messrs. A. Gilchrist & Sons, 13 Newton Terrace, Glasgow.

**SNOWCEM** is easily applied to concrete, stone or suitable brickwork by brush or spray. It is available in seven colours: White, Cream, Deep Cream, Buff, Pink, Silver-Grey, and Duck-Egg Green. Our Technical and Advisory Department is at your service.

**SNOWCEM** WATERPROOF CEMENT PAINT  
*DECORATES and PROTECTS at low cost*



THE CEMENT MARKETING COMPANY LIMITED

Portland House, Tothill Street, London, S.W.1.

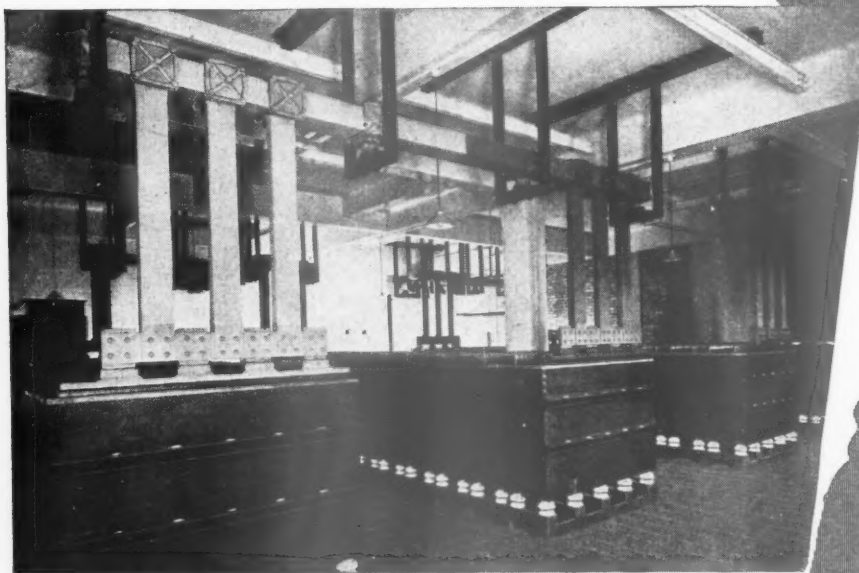
or G. & T. EARLE LTD., Cement Manufacturers, Hull.

THE SOUTH WALES PORTLAND CEMENT & LIME CO. LTD., Penarth, Glam.



T552

# P & G BATTERIES in the public service



These batteries in the Museum Telephone Exchange, London, are typical of many P & G batteries installed throughout the country to maintain telephone efficiency. Our 60 years' experience in the battery business covers a vast and varied field ; including batteries for generating stations, railway electrification work and emergency lighting systems. P & G 3 point service working on the sound principle of two heads being better than one, exists to provide : **1. Detailed specifications or an impartial second opinion on any scheme. 2. Complete equipment and installation. 3. Regular inspection and report.**

**PRITCHETT & GOLD and EPS Co. Ltd**

50 GROSVENOR GARDENS • LONDON • SW1

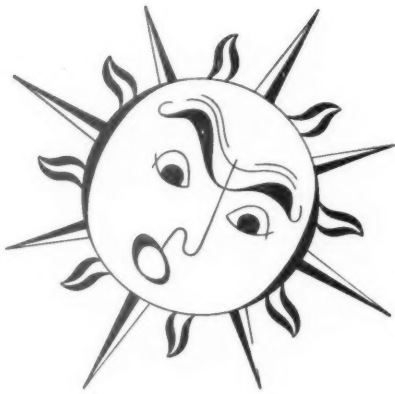
Batteries and Control Panels for Emergency Lighting

**2** heads are  
better than **1**

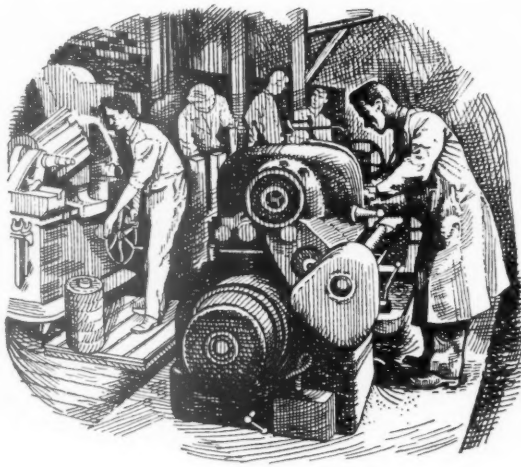


P&G





## **'Why work in the dark?'** **says** **DAYLIGHT**



There's no need for them to go on fumbling about in that old-fashioned gloom. If only someone would let me in to flood that factory with daylight their jobs would be a lot easier. Just between you and me their boss has only to install a few sheets of corrugated 'Perspex' in the roof in the right places and I will give them all the shadow-free light they want.

• • • • •  
**fit corrugated**  
**'PERSPEX'**  
**and give Daylight**  
**a chance**



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

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



C.P.63



**I**N hotels, flats, private homes and offices; in hospitals, schools, public and factory buildings, MURAC gives a finish to walls that is quickly and economically applied, beautiful to see, easy to clean and *long lasting*!

#### MURAC SUPERSEDES DISTEMPER & WATER PAINT

Here's a matt oil paint as easy to put on as distemper, using a 6" flat wall brush. What a saving in labour costs alone! MURAC dries with a beautiful dull sheen, and its surface is so hard that not only can it be rubbed and scrubbed again and again, but it is also hygienic and impenetrable to dirt. MURAC is long-lasting, won't powder or flake, and comes in eighteen basic colours, easily blended to any shade you could want. It is made in the Brolac works by John Hall & Sons Ltd., who will gladly send you a **free colour scheme booklet** if you will write to them at the address below.

**YOU CAN  
WASH IT, RUB IT, SCRUB IT!**

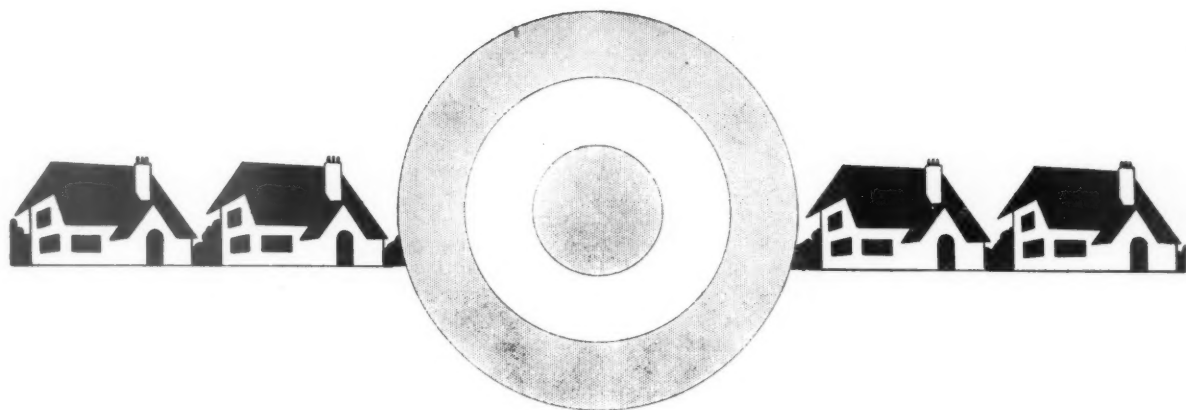


# MURAC

MATT OIL FINISH FOR WALLS

JOHN HALL & SONS (BRISTOL & LONDON) LIMITED, HENGROVE, BRISTOL, 4

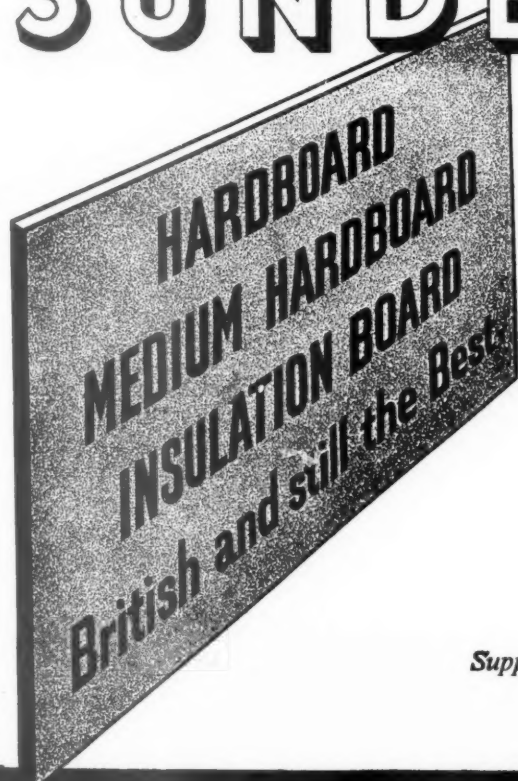




## BRITAIN'S NEW HOUSING TARGET

*calls for more and more Home-produced*

# SUNDEALA



Entirely home-produced by the world's pioneer manufacturers of fibre building boards, Sundeala Boards are unsurpassed for every interior and exterior building need.

Waterproofed throughout during manufacture, Sundeala will not deteriorate through exposure to damp, whilst its super-smooth surface will accept and retain any decorative finish. The Sundeala range includes Medium

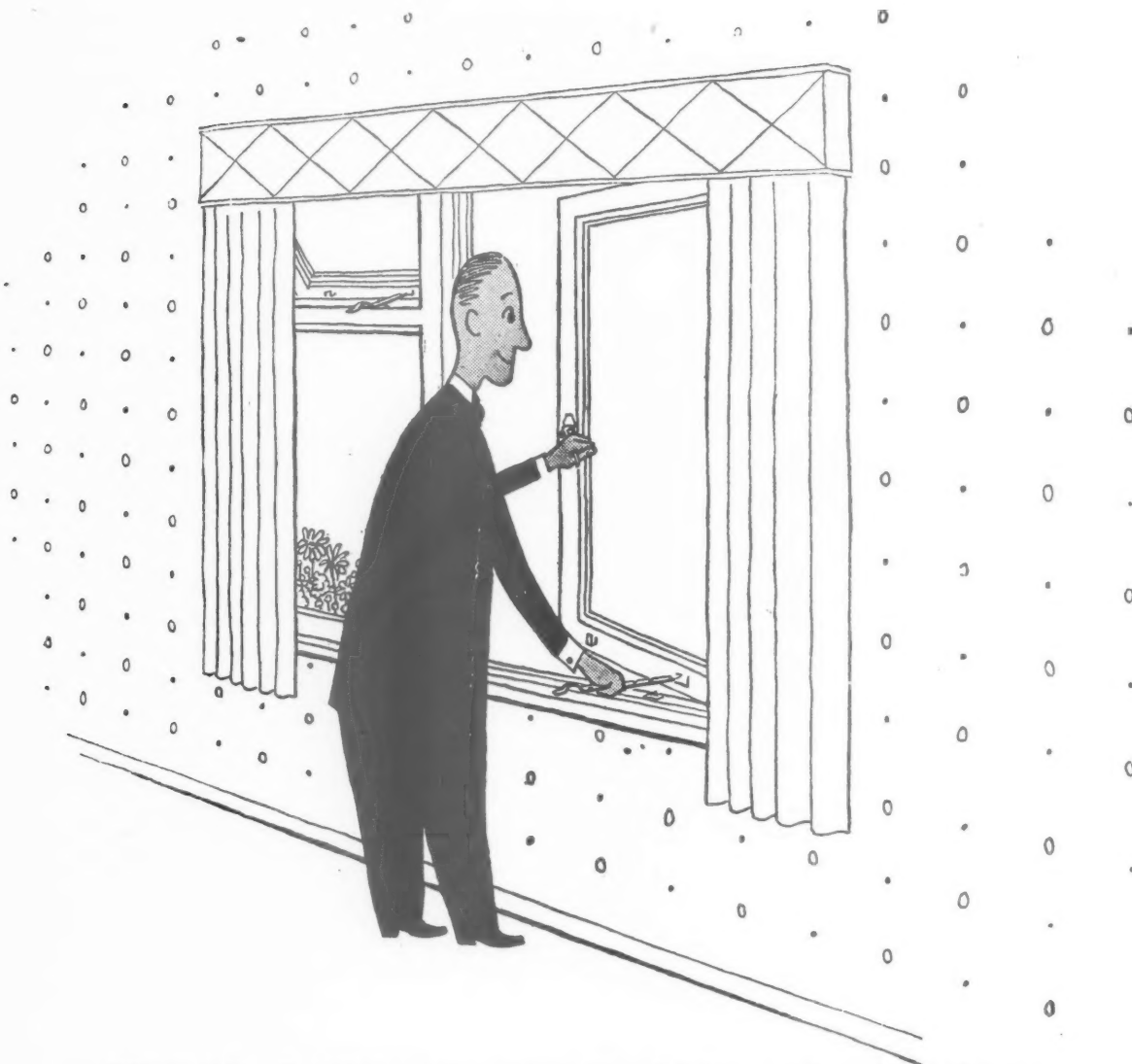
Hardboards, Hardboards, Ultra Hardboards, Insulation Boards, Flameproofed Boards & Metal Fixings, in an unequalled range of sizes and thicknesses.

*Supplies available from distributors throughout U.K.*

### SUNDEALA BOARD CO LTD

ALDWYCH HOUSE · LONDON · W.C.2 · TEL: CHANCERY 8159 · WORKS: SUNBURY-ON-THAMES, MIDDX.

GLASGOW: BALTIC CHAMBERS · 50 WELLINGTON STREET C2 — NEWCASTLE-UPON-TYNE: NORTHUMBRIA HOUSE · PORTLAND TERRACE 2



***You'd have to open lots of windows***

***before you'd find a better window than an Austin window***

***The same high quality is found in staircases, kitchen units, doors—in fact any Austin joinery***

***Austins*** of East Ham  
The Biggest Name in Joinery

AUSTINS OF EAST HAM LTD., LONDON, E.6. GRANGEWOOD 3444  
the parent Company of  
THE AUSTIN-HALL GROUP OF COMPANIES



© 214.17





# the draughtsman's pencil

Eagle Chemi-Sealed Turquoise Drawing Pencils are now made with 100% "Electronic" Graphite. "Electronic" is Eagle's trade name for a blend of crystalline graphites of highest purity from Madagascar and Ceylon reduced to particles of micronic fineness in our patented Attrition Mill.

To the draughtsman this means :

## Perfect Prints

because the finer the particles of crystalline graphite, the blacker, denser and sharper is the line made. So opaque and densely uniform is every line from a TURQUOISE DRAWING PENCIL that you can make sharp, perfect prints direct from your pencil tracings.

## Amazing Strength

because upon reduction the graphite crystals break down into microscopic particles of infinitely varied, close interlocking shapes. The clay binder completes an extremely dense ceramic structure... the strongest lead structure ever achieved. However finely the point of your TURQUOISE Drawing Pencil is sharpened it will stand up to its job.

## Unmatched Smoothness

because Crystalline graphite is nature's perfect lubricant. Leads made with it 100% have a frictionless, easy gliding quality impossible in leads with a content of amorphous graphite which contains harsh, foreign materials. In addition, the Eagle super bonding process gives TURQUOISE Drawing Pencils stronger points and seals in the waxes for permanent smoothness.

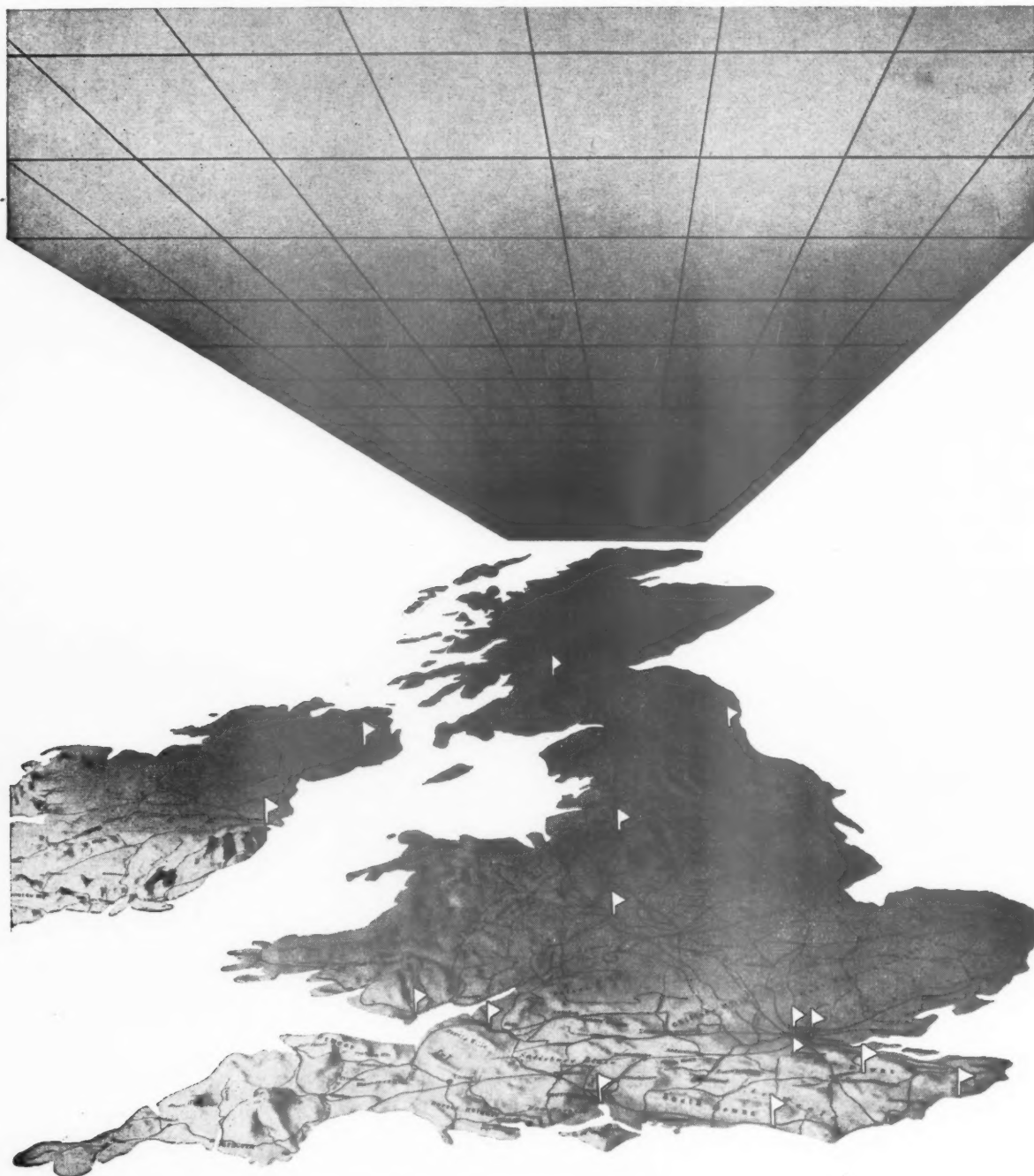
## Non-crumbling Needle Points

because the particles of "Electronic" Graphite are so fine that millions more crowd into the air spaces in the lead, producing a richer, tighter lead that deposits more particles, more evenly, at every stroke. For this reason the new TURQUOISE Drawing Pencils hold a needle point better than ever and give a uniformly dense and unbroken line.

EAGLE PENCIL COMPANY, TOTTENHAM, LONDON, N.17

THE ARCHITECTS' JOURNAL for March 27, 1952

# ABOVE ALL—SPECIFY **AND** CEILINGS



*For full particulars, apply to your nearest Contracting Agent:*

**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.

**DUBLIN:** P. AND I Ltd., 16 Christchurch Place.

**FOLKESTONE:** Hall & Co. Ltd., Junction Station.

**GLASGOW:** W. Gibson & Co. Ltd., St. James Street, Paisley.

**MAIDSTONE:** Hall & Co. Ltd., Canning Street.

**MANCHESTER:** Beaumonts (Manchester) Ltd., Victoria Park.

**NEWCASTLE-UPON-TYNE:** Wm. Gibson & Co. (Builders) Ltd., 19 Baltic Chambers, Quayside.

**ROMFORD:** Hall & Co. Ltd., Manor Road.

**SOUTHAMPTON:** Jenkins & Sons Ltd., 76, The Hundred, Romsey, Hants.

## **ANDERSON CONSTRUCTION CO. LTD.**

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

EUSTON 7465

*It's a good job-it's*  
**ROBBIALAC**

**AT CROYDON AIRPORT**



Visitors from many parts of the world see England for the first time at Croydon Airport. How important, therefore, that their first impression should be a favourable one of bright and attractively decorated buildings. We are proud that paints from the Robbialac range were used for the recent redecoration of the Airport Buildings, as they have been for many famous public buildings where the highest standard of decoration is required.

*Robbialac Lead Base Gloss Paint, over Robbialac Lead Base Undercoat, was used for the exterior redecoration of Croydon Airport by the Contractors, Messrs. E. H. Smith (Croydon) Ltd.*

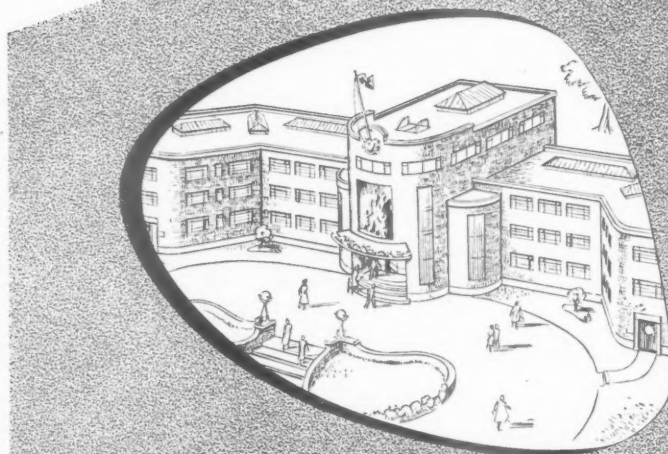
**JENSON & NICHOLSON LTD**  
**Robbialac Paints**

JENSON HOUSE, CARPENTER'S ROAD, STRATFORD, LONDON, E.15



# PLIMBERITE

FOR  
PARTITIONING  
PANELLING  
WALL LINING  
SUSPENDED FLOORING  
ROOF DECKING  
PANEL DOORS  
SHELVING  
SKIRTING  
BUILT-IN FURNITURE  
VENEER CORE



PLIMBERITE is an interior constructional material sufficiently versatile to fulfil the demands of both architects and contractors. Manufactured from pulverised wood chips bonded with synthetic resin under heat and pressure to a density of 50 lbs/cu. ft., PLIMBERITE is produced to specification in the standard size of 8' x 4' and in thicknesses of  $\frac{1}{2}$ " and  $\frac{3}{4}$ ".

PLIMBERITE can be worked with standard tools and may be painted in the usual way. If desired the specifications for various finishes will be supplied. Moisture movement and load tests carried out by the Department of Scientific and Industrial Research prove the stability and strength of PLIMBERITE. Reports on these tests are available from



**BRITISH PLIMBER LIMITED**

20 ALBERT EMBANKMENT • LONDON • S.E.11 • RELiance 4242

*from whom may be obtained technical literature and the name of the nearest supplier*



**PUBLIC HYGIENE**  
*and the*  
**FOOD & DRUGS ACT**  
*DEMAND*  
**HOT WATER**

*For plenty of cheap*  
**HOT WATER on tap**

-FIT A  
**EWART**  
**GAS**  
**WATER HEATER**



Ewart Multipoints are made in a number of types and sizes giving an instant and constant supply of hot water from  $1\frac{1}{4}$  to 16 gallons per minute. Wherever hot water is required in the home, factory or business premises, and to conform with the requirements of the Food and Drugs Act, in shops, hotels and restaurants, a EWART gas water heater is available which exactly meets the need. A EWART water heater is designed to give maximum hot water supply at minimum cost of fuel and maintenance. The water *never* runs cold.

**FOR HOT WATER INSTANTLY—DAY AND NIGHT**

Please send particulars of your requirements to  
EWART & SON LIMITED, SALES OFFICE, 14 WIGMORE STREET, W.1

**EWART**  
**WATER HEATERS**  
MULTIPOINT  
BATH • SINK

**EWART & SON LTD., 14 WIGMORE ST., LONDON, W.1. Works: LETCHWORTH, HERTS. Estd. 1834**

# ROOF WATERPROOFING AND PROTECTION WITH EVODE PASTES The 1952 Set-up

- 1** The brake on new construction gives added importance to the need for vigilantly conserving roofed buildings. The modern practice is to use the Evode Insulating Paste technique which ensures an efficient job with less labour.
- 2** There is no reason to anticipate a shortage of Evode Pastes. How about the labour side?  
  
Hundreds of tons of these insulating pastes have been supplied to British Railways, the London Boroughs and other clients for application with their own labour. The technique is quickly grasped. We supply 'foolproof' guides for the use of foremen in charge of work. Our expert demonstrators are readily available to show how to new users. Own-labour use of Evode Pastes will be the trend in 1952.
- 3**
- 4** Millions of square feet of concrete and asphalt roofs, corrugated iron and corrugated asbestos have been waterproofed by the Evode Contracts Department. It will continue giving efficient service but our 1952 policy will be to train a 'float' of expert labour.

*Evode has a big job in 1952 and will do it by the resilient application of technique to practice. Never hesitate to ask for advice. 'Phone, wire or write and we'll be with you.*

**EVODE LIMITED • GLOVER ST. • STAFFORD**  
Telephone: 1590/1/2      Telegrams: Evode, Stafford



## POLISHING...

### *to Peglers standards*

The skill of the men who polish them is one of the many good reasons why Peglers taps are sound *right through*. They undergo a polishing prior to plating which—like all stages of manufacture at Peglers—is really thorough. It begins with a coarse abrasive, goes through a fine buffing, and ends with 'mopping' to give an unmarked mirror surface which can be nickel-chrome plated without a flaw. The result is a Peglers tap—a tap not just 'made to standard' but made to Peglers even higher standards—a tap that satisfies everyone.

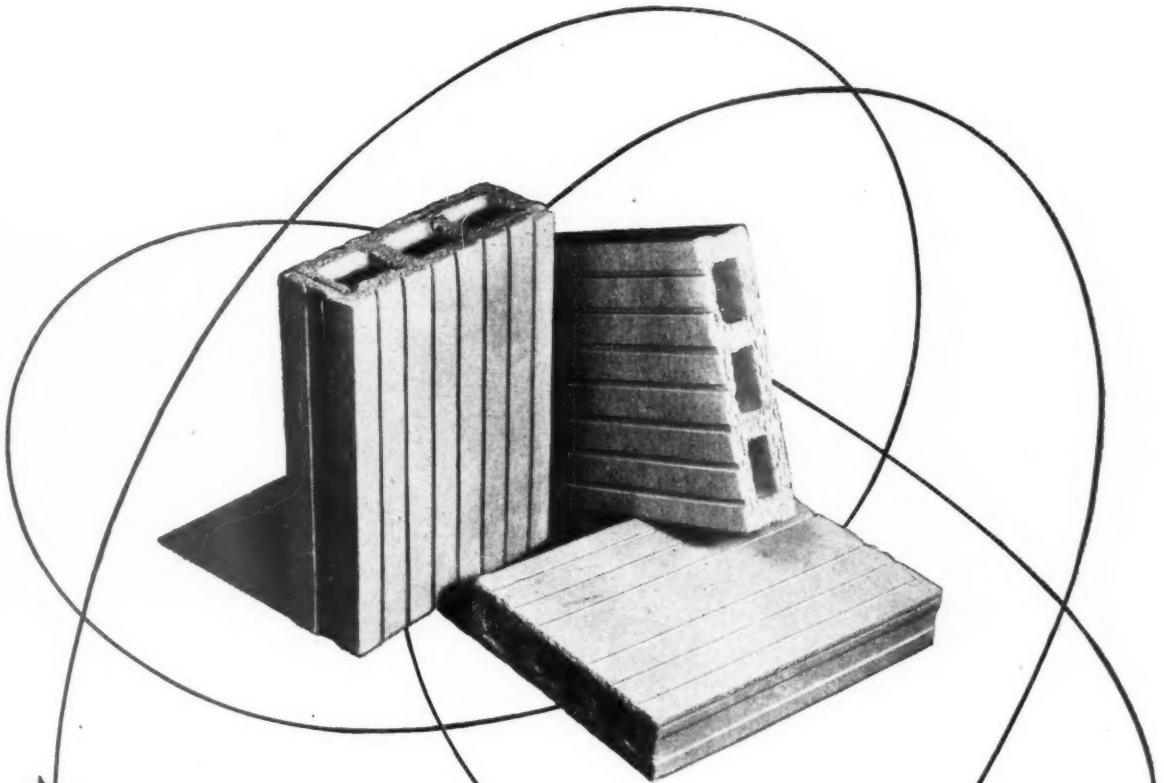


**Peglers**  
Limited

*The name is the guarantee*

**BELMONT WORKS • DONCASTER**

Also at PRESTEX HOUSE, MARSHALSEA ROAD, LONDON, S.E.1.



## ★ Ensures efficient insulation

The ideal partition block is made from moler earth whose minute cellular structure ensures heat and sound insulation in the highest degree. The blocks are extremely light, but have ample crushing strength for normal partition loads. Shape and size are uniform and the blocks will not warp after fixing. Supplied with keyed or smooth sides.

For co-operative service in carrying out architectural specifications and prompt delivery, get in touch now with Cellactite and British Uralite Ltd.

- ★ Will not warp or twist after fixing.
- ★ Uniform in size and shape
- ★ Keyed for plastering
- ★ Light in weight
- ★ Fine heat insulators
- ★ Good sound deadener
- ★ Made of Moler Earth



**CELLACTITE & BRITISH URALITE LTD.**

CELLACTITE HOUSE, WHITEHALL PLACE, GRAVESEND, KENT  
Telephone: Gravesend 4911 (6 lines)      Telegrams: Cellactite, Gravesend

WORKS: HIGHAM, KENT

CELLACTITE BUILDING PRODUCTS

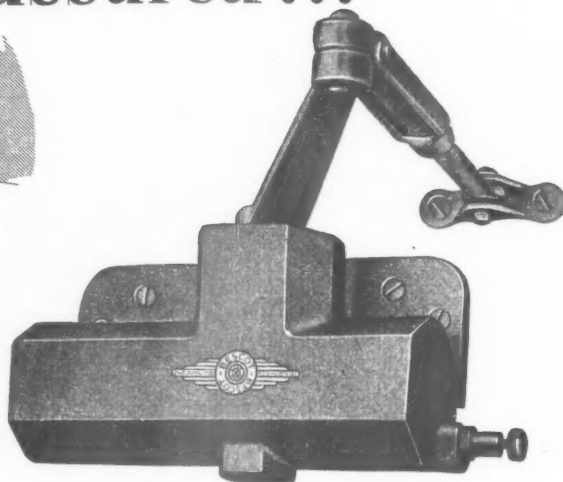
# Quiet efficiency assured...



- The compression spring avoids breakage.
- Oil expansion chamber prevents loss of oil.
- Direct drive gives perfect engineering movement.
- Easy to fit.      ● Guaranteed for two years.

**ALL THIS BUILT INTO A PLEASING DESIGN AND YOU HAVE  
THE IMPROVED BESCOT DOOR CLOSER**

Write for leaflet "Steps in the Development of a Door Closer"



... with



S. B. & N. LTD. BROCKHURST CRESCENT, BESCOT, WALSALL, STAFFS.



## 5 ft. 3 ins. wide

"I'm an architect as you've probably guessed and with all this re-housing I'm in for a very busy time! One of the most important materials these days is hardboard and as far as I am concerned I always specify Ahlström 'Five-Three'. That extra width they give you makes all the difference and saves time, timber, trouble AND money—which, after all, is vital in these days of economy. Amongst the infinite variety of uses I find these extra large boards ideal for concrete shuttering. Be sure to try Ahlström 'Five-Three'—the hardboard with the extra width."



THE HARDBOARD WITH THE EXTRA WIDTH

**AHLSTRÖM  
FIVE-THREE**

Enquire from your local merchants or from  
Plywood & Timber Products Agencies Ltd.,  
Gallardo House, Arthur Street, London, E.C.4

Manufactured by A. AHLSTRÖM OSAKEYHTIÖ, FINLAND



SAXONE SHOE STORE,  
OXFORD STREET,  
LONDON, W.1.



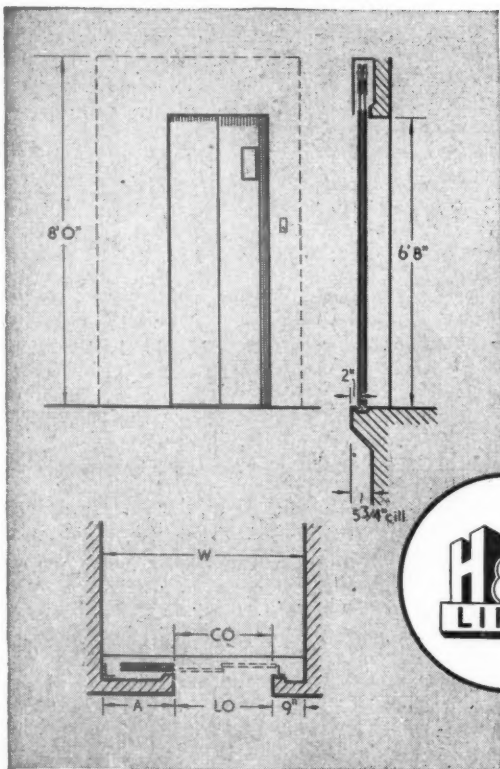
LIFTS

FOR A

SHOE

STORE

Architects: Lewis Solomon & Son, F.F.R.I.B.A.  
Consulting Architect: Michael Egan,  
A.R.I.B.A., A.A. Dipl.



A two-speed H. & C. passenger lift has been installed for the Saxone Shoe Company in their Oxford Street premises. The lift serves five floors and is fitted with full automatic push-button control. Two speed sliding doors to the landings provide a wide entrance in proportion to the well width and are quiet and swift in operation.

**Hammond & Champness Ltd.**

HEAD OFFICE & WORKS: GNOME HOUSE, BLACKHORSE LANE,  
LONDON, E.17. Telephone: LARKSWOOD 1071



—of helicopters, furniture, of seats, hotels and bins. It would be difficult to imagine a more varied collection, for each article is destined to be used under widely divergent conditions—yet each has been improved and protected by a finish from the Cellon range. Cellon Limited have developed paints and finishes of unvarying high quality to meet the production requirements of *any* industry whether its particular need is cellulose lacquers for wood or metal, synthetic finishes for air, sea and land transport—or decorative paints for buildings.

The range of Cerrux Decorative Paints includes Gloss, Satin and Matt Finishes, Flat Undercoatings, Primers for every type of surface as well as Cerrusco Texture and Water Paints.

# CERRUX

## DECORATIVE PAINTS



CELLON LIMITED • KINGSTON-ON-THAMES • PHONE KINGSTON 1234

CVS-726



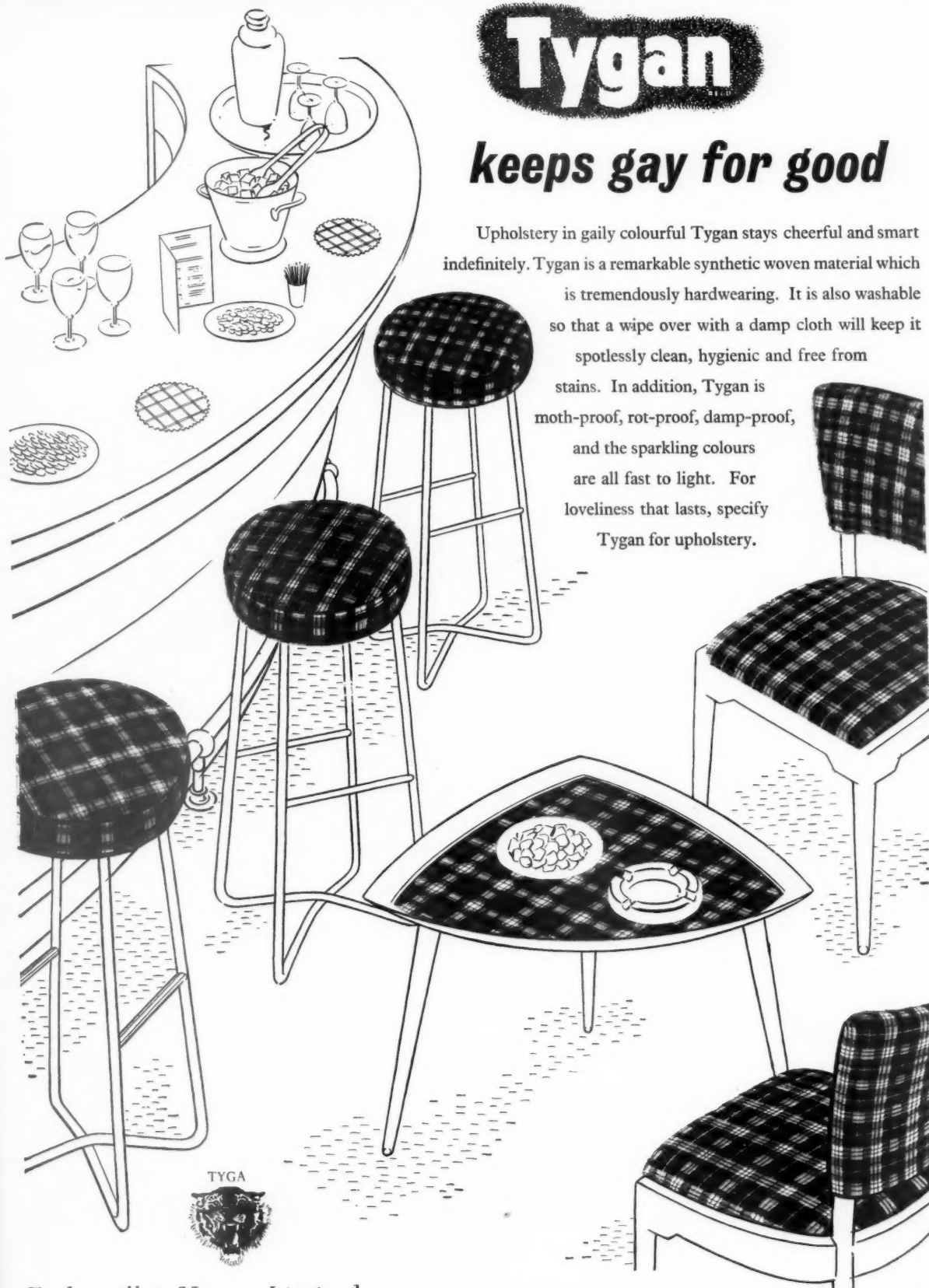




# Tygan

## *keeps gay for good*

Upholstery in gaily colourful Tygan stays cheerful and smart indefinitely. Tygan is a remarkable synthetic woven material which is tremendously hardwearing. It is also washable so that a wipe over with a damp cloth will keep it spotlessly clean, hygienic and free from stains. In addition, Tygan is moth-proof, rot-proof, damp-proof, and the sparkling colours are all fast to light. For loveliness that lasts, specify Tygan for upholstery.



Fothergill & Harvey Limited HARVESTER HOUSE, PETER STREET, MANCHESTER, 2

PC1



*Photograph by courtesy of the Architect :  
Jack S. Thompson, Esq., A.R.I.B.A.  
Roofing by Wiggins-Sankey, Ltd.*

## **SISALKRAFT for SARKING**

ROOFING COSTS can be REDUCED CONSIDERABLY when SARKING material is SISALKRAFT—the supreme building paper—reinforced, waterproof, pliable, clean and inodorous.

For even better insulation SISALATION Reflective (Thermal) Insulation is recommended, and was specified by the Architect for his own house pictured above.

Technical information and samples on request.

Sole Distributors for British Sisalkraft Ltd.

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

**SISALKRAFT**  
TRADE MARK

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2 Phone: HOLborn 6949 Grams: Brickwork, Estrand, London









# Adamsez Ltd

54 VICTORIA ST. S.W.1

"BEAN" Basin as supplied to "Templewood" School,  
Welwyn Garden City, Herts.

Architect: C. H. Aslin, Esq., F.R.I.B.A.

# FIRE ESCAPE STAIRS



We have made and erected fire escape stairs for the last 60 years all over Britain for :—

Government Buildings  
Local Authorities,  
Hospitals,  
Office Blocks,  
Theatres, etc.



The fire escape stairs shown here are typical of many made and erected by Lion Foundry.



Nothing equals perforated cast-iron treads and landings for resistance to wear and weather.

## LION FOUNDRY Co., LTD.

ARCHITECTURAL & SANITARY IRONFOUNDERS

CONTRACTORS TO H.M. GOVERNMENT

KIRKINTILLOCH, near GLASGOW

London Office : 124 Victoria Street, S.W.1

Telephone : Victoria 9148



## WHY

*it pays to specify*



## EXTRUSIONS

M K B extrusions are extremely handsome in appearance, faultless in finish and minutely close to size. This reduces or entirely eliminates further machining. Time, tools and labour are saved, leading to increased output and reduced costs.

There is virtually no limit to the applications of McKechnie extrusions in brass, bronze and nickel silver.



*See our exhibit at The London Building Centre, Store Street, London, W.1*

FOR FULL  
DETAILS PLEASE  
WRITE TO  
McKECHNIE  
BROTHERS LTD.,  
14, BERKELEY ST.,  
LONDON, W.1.  
Telephone: Mayfair 6182

**B.I.F.**

You are cordially invited to our Stand No. D.3.5 at the B.I.F. Castle Bromwich

**McKECHNIE**  
Metal Technique

McKECHNIE BROTHERS LIMITED

Metal Works : Rotton Park Street, Birmingham, 16.  
Branch Offices : London, Leeds, Manchester, Newcastle-on-Tyne.  
Solder Works : Stratford, London, E.15.  
Copper Sulphate and Lithopone Works : Widnes, Lancs.  
Enquiries for Lithopone and Solder to : 14, Berkeley Street, London, W.1.  
South African Works : McKechnie Brothers S.A. (Pty) Ltd., P.O. Box No. 382, Germiston, S.A.  
New Zealand Works : McKechnie Brothers (N.Z.) Ltd., Carrington Road, New Plymouth.

**WHITE  
LEAD  
PAINT  
LASTS**



*... it's cheaper  
because it lasts  
.....*

**SPECIFY**

**MAGNET**

**HARD GLOSS**

**WHITE LEAD BASE PAINT**

Magnet costs more in the tin—but less on the job.

It goes further and lasts longer. Specify Magnet for all *outdoor* painting. You have a choice of 23 intermixable colours, all with a fine hard gloss finish.

For best results lead priming paints should *always* be used. Associated Lead are specialists in the manufacture of lead pigments and lead paints including Cookson's Crescent Genuine White Lead Paint and Ibex White Lead Base Oil Paint.

**ASSOCIATED LEAD** MANUFACTURERS LIMITED

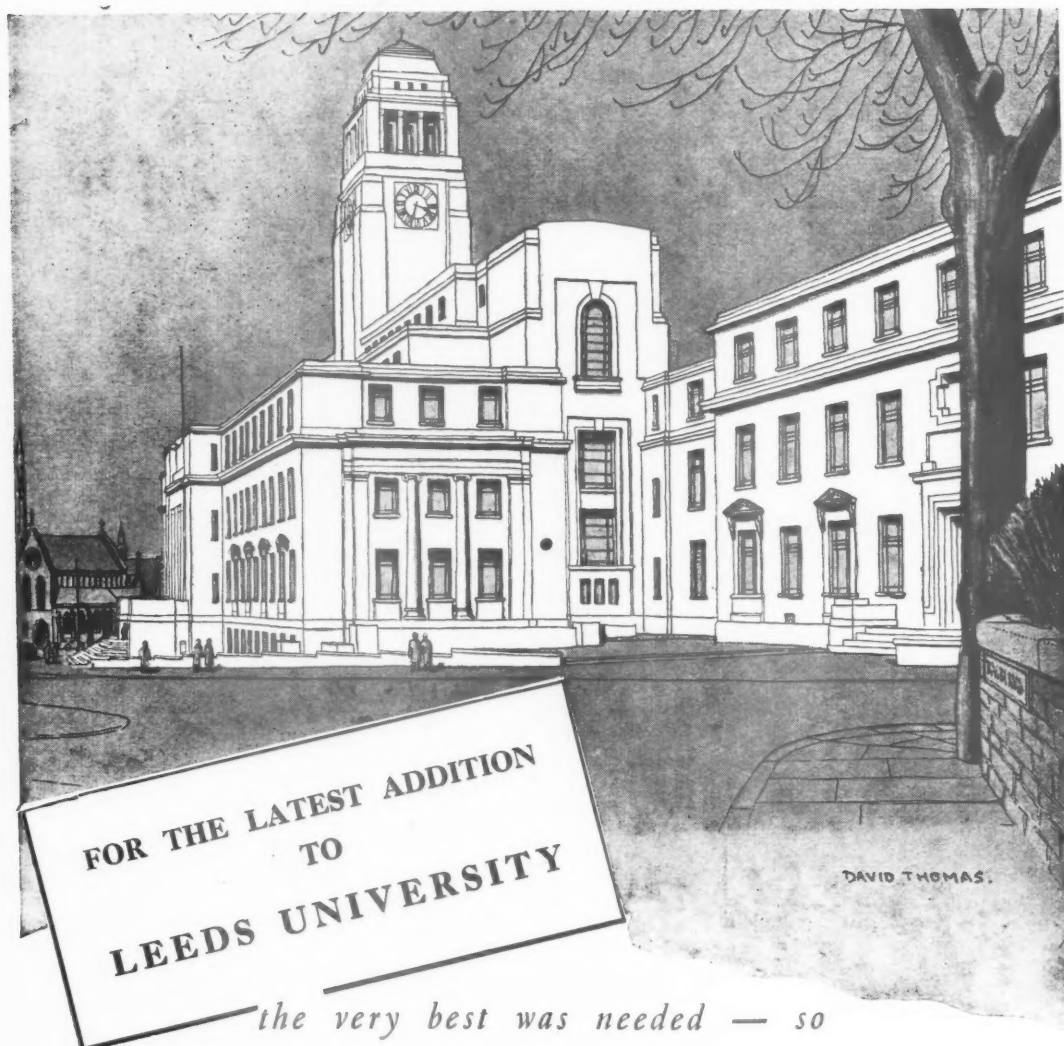
IBEX HOUSE, MINORIES, LONDON EC3

CRESCENT HOUSE, NEWCASTLE

LEAD WORKS LANE, CHESTER



EXPORT ENQUIRIES TO: THE ASSOCIATED LEAD MANUFACTURERS EXPORT CO. LTD., IBEX HOUSE, MINORIES, LONDON EC3



## NORTH BRITISH RUBBER FLOORING

*was specified*

In thousands of Britain's largest buildings our rubber flooring has been laid. We undertake the laying, if desired, thus relieving architect and builder of trouble and responsibility.

THE NORTH BRITISH RUBBER CO., LTD., EDINBURGH, LONDON & BRANCHES



## NEW ROLLING MILLS *for* PARK GATE IRON & STEEL CO., LTD



Consulting Engineers :  
A. V. Waddell, A.M.I.Struct.E.,  
Messrs. Bylander & Waddell

# STRUCTURAL STEELWORK

*By*

**THO: W. WARD LTD**  
**ALBION WORKS · SHEFFIELD**

PHONE: 26311 (22 LINES)  
GRAMS: FORWARD SHEFFIELD

OF recent years WARDS have helped to build many important buildings for steelworks, engineering works and other heavy industries. One such is that shown in the photograph reproduced above which shows part of the structural steelwork in course of erection for the new 11-inch continuous bar mill now being constructed at Parkgate, near Rotherham. The building when completed will provide a covered area of approximately 254,000 sq. feet.

NO matter what the construction may be—if it involves structural steelwork—then WARDS can bring to the contract half-a-century's experience and all the facilities necessary to carry out the project.

**TWW**

LONDON OFFICE :

BRETENHAM HOUSE, LANCASTER PLACE, STRAND, W.C.2.

BRANCHES :

BIRMINGHAM  
MANCHESTER

LIVERPOOL  
BRITON FERRY

GLASGOW  
MIDDLESBROUGH

CS/8

# Thermal Insulation . .

A SPECIALISED SERVICE FOR THE ARCHITECT AND BUILDER

A RECENT  
INSULATION  
ORDER

## GRANGE PARK PRIMARY SCHOOL • ASSEMBLY HALL

BOROUGH ARCHITECT, BLACKPOOL, LANCs.

Suspended ceilings in Lloyd Concealed Fixing System of  $\frac{3}{4}$  in. boards 24 in. by 24 in. Rear wall  $\frac{1}{2}$  in. Lloyd board, fixed to plastered surface for decorative purposes.

★ One of our latest orders:

### DENBIGH TOWN HALL, North Wales

— BOROUGH ARCHITECT, DENBIGH

The installation of  $\frac{1}{2}$  in. Celotex Insulation Board Ceilings with Patented Alloy tee sections has transformed this old building

WE WILL BE PLEASED TO QUOTE YOU

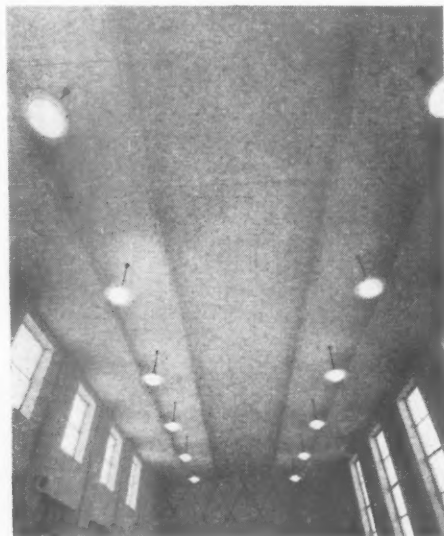
FOR SUPPLY AND FIXING, COMPLETE

# HOLLWAY

W. F. HOLLWAY & BROTHER LTD.

STRUCTURAL INSULATION AND WALLBOARD SPECIALISTS

42 Grafton Street • Liverpool 8 and Widnes • 'Phone: ROYal 5315



PLANNED DEVELOPMENT is no empty slogan at Crawley New Town where these trim houses have been designed for rehousing

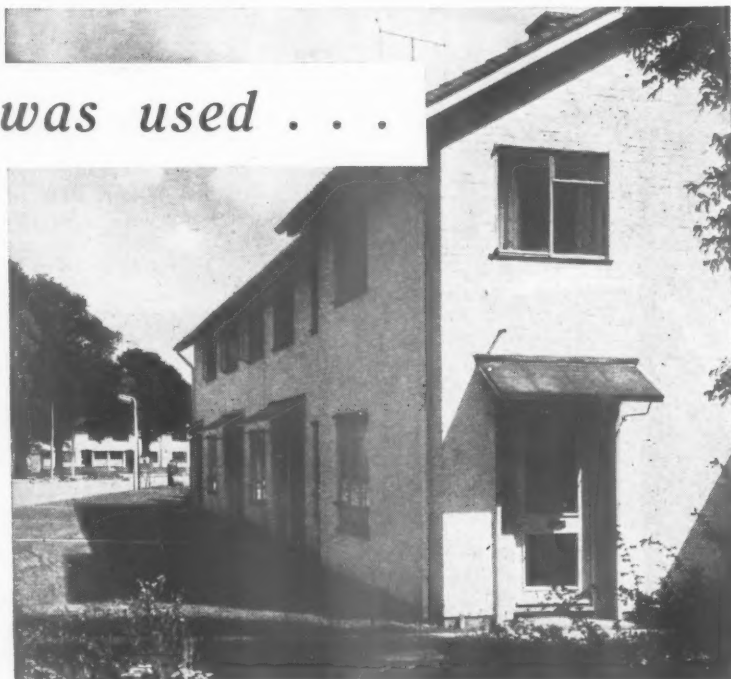
London families. An added touch of colour was provided by Tretolin Paint, specified for new exterior asbestos cement fixtures without prior sealing treatment. This coating combines first-class finish with unusual durability under severe weather conditions. Tretolin's waterproof, chemical resistant properties make it an ideal choice, on housing schemes and also in factories where acids and alkalis used in manufacturing processes demand *really effective* protection of concrete and brickwork.

▶ Resistant to acids, alkalis and Industrial atmospheres.

▶ Waterproofs external porous brickwork and cement renderings.

Please write for descriptive leaflet No. 13 (A)

## Tretolin was used . . .



Houses at Crawley New Town. Chief Archt.: A. G. Sheppard Fidler, B.Arch. F.R.I.B.A., A.M.T.P.I

# TRETOLIN PAINT

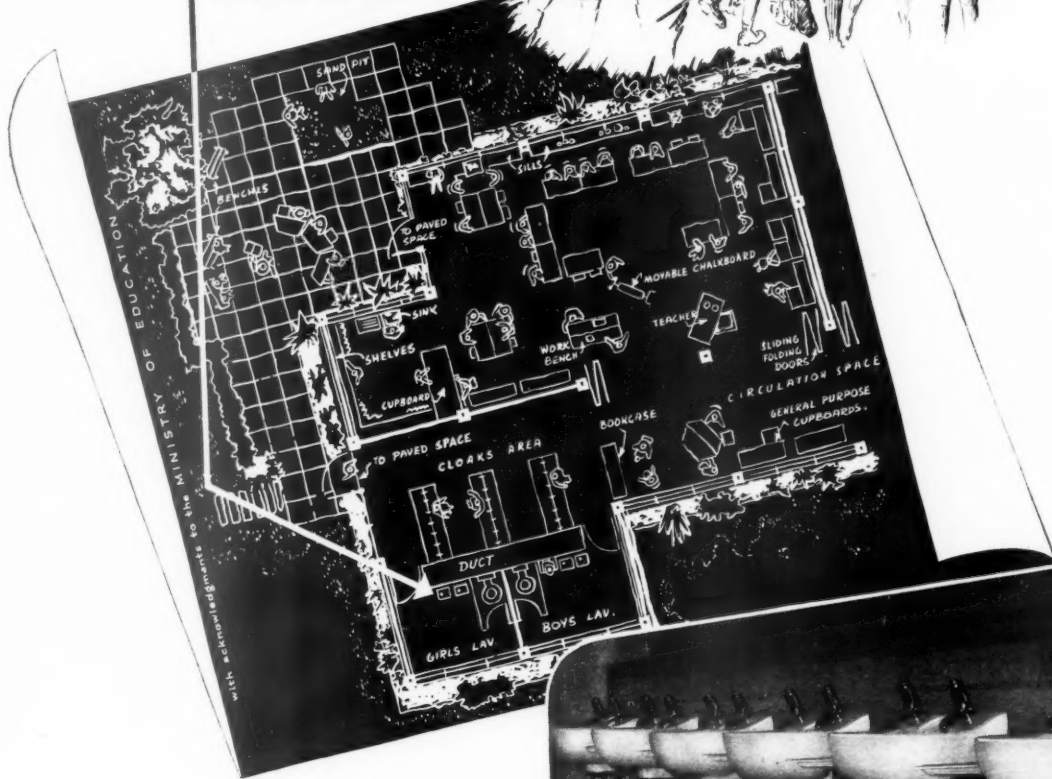
APPLIED DIRECT TO NEW ASBESTOS CEMENT, CONCRETE, ETC.

TRETOL LTD., 12/14 NORTH END RD., LONDON, N.W.11. Tel.: SPeedwell 4621 (5 lines). Works SLOUGH

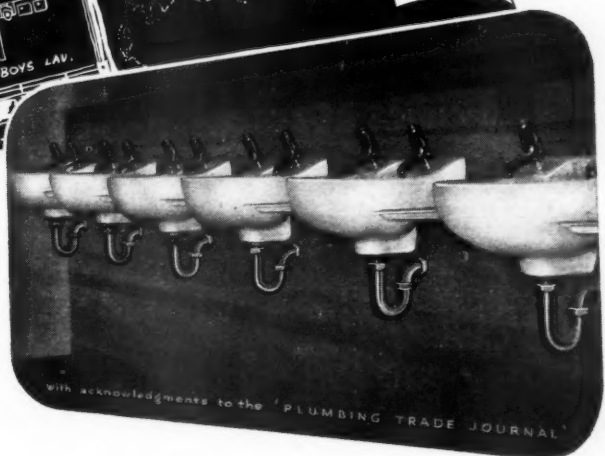
according to

**PLAN** reproduced by permission  
of the Ministry of Education  
leave this to...

**Econa**



Architects of many leading Education Authorities throughout the country purposely leave much to Econa. Given a drawing such as that illustrated above, we will design the waste-pipe work in its entirety. Architects are happy to pass this responsibility to Econa in the confidence that the job will be completed to the satisfaction of all concerned.



**Econa**

can help you...

**ECONA MODERN PRODUCTS LIMITED**  
AQUA WORKS · WARWICK ROAD · TYSELEY · BIRMINGHAM 11

Telephone: Acocks Green 2211

... and in the design and supply of Traps and pre-formed Waste Ranges—all of which are made from smooth bore copper tube.

We also supply complete Soil Pipe systems for multi-storey schools. Econa traps are used by the London County Council for all its new work.

Econa Traps now have outlets with the correct gradient to prevent self-syphonage in single and one-pipe plumbing.

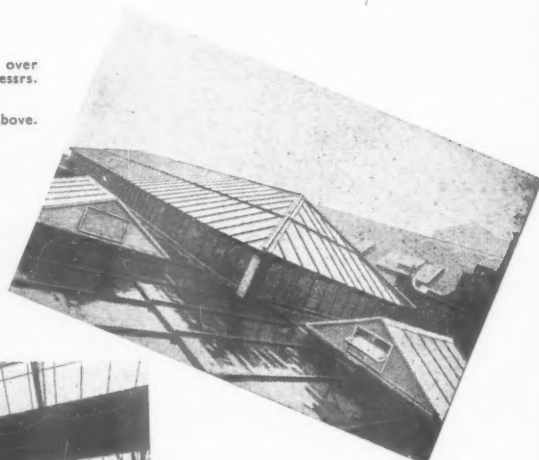
# PENNYCOOK PATENT ROOF GLAZING



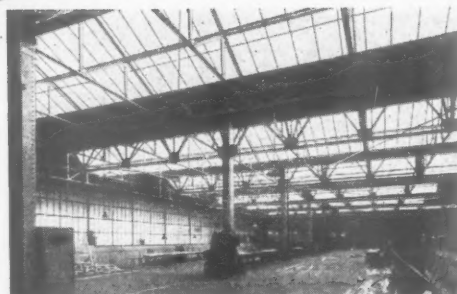
RIGHT: Lantern Lights over Drawing Office of Messrs. Bodec, Ltd., Battersea.

LEFT: Interior view of above.

BELOW: Roof Glazing over Joiners Shop of Messrs. Harland Wolff Ltd. North Woolwich.



The Pennycook Patent Roof Glazing System is guaranteed Watertight, Dust-proof and Permanent, requiring no further maintenance after the initial installation. The Pennycook Steel Bar is entirely Lead Sheathed and suitable for all types of glazing.



The Pennycook System is giving trouble-free service throughout the world. Plans and estimates supplied for Roof Glazing, Dome, Lantern and Cupola Lights, upon request, or should you wish further details please write for copies of our illustrated matter.

## THE PENNYCOOK PATENT GLAZING & ENGINEERING CO. LTD.

Phone: Bishopbriggs 1117/9

ST. MUNGO WORKS, BISHOPBRIGGS, GLASGOW, N.

Grams: "PENNYCOOK," Glasgow

London Office: 3 VICTORIA STREET, WESTMINSTER, S.W.1. Phone: ABBEY 6610.

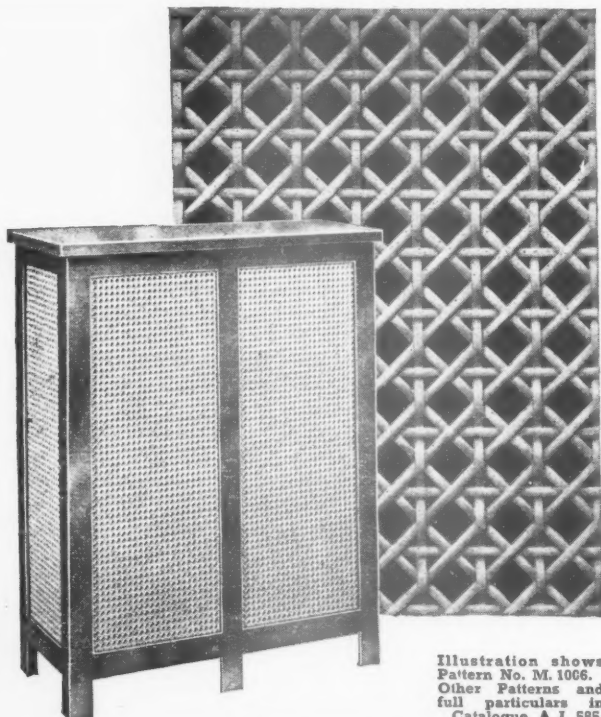


Illustration shows Pattern No. M. 1006. Other Patterns and full particulars in Catalogue A.J. 585.

## 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



ble-  
world.  
Roof  
pola  
you  
for

ow



## ROCHESTER TIMBER BUILDINGS

*for every purpose*



Rochester Sectional Timber Buildings comprise standard, fully-prefabricated units which can provide:

**Bungalows for Senior Staff. Offices, Dormitories,  
with or without cubicles. Recreation Rooms.  
Hospital Quarters, Dining Rooms and Kitchens.  
Workshops. Ablutions. Stores. Sports Pavilions.  
Complete Camps.**

They are available in 10', 15', 20' and 25' spans in any required length. These buildings can be dismantled as speedily as they are erected and used over and over again on different sites.



Other Rochester products include watchmans' shelters, contractor's huts, latrine huts, etc. of any size.

No timber licence is necessary for any of these buildings. Fully detailed quotations will be given for single huts or complete camps, at home or overseas.



## ROCHESTER TIMBER BUILDINGS

**MEDWAY BUILDINGS & SUPPLIES LTD. (B. Div.)** 72 Victoria Street, London, S.W.1  
Telephone: Victoria 8631

## Part of the English Scene . . .

We can direct you in almost any part of the country to buildings, large and small, roofed with Marley Tiles. The tiles may have been there only a few years—none more than 30—but you will notice that the roofs are as much part of their surroundings as any that have been there a hundred years or more. And, unlike most modern things they will remain so for many decades to come. For you can be sure that no company would guarantee its tiles for 50 years against lamination or decay unless those tiles have proved beyond all doubts in all circumstances their ability to endure.



"Not for an age—but for all time"

*The Marley Tile Company Ltd., London Rd., Sevenoaks, Kent Sevenoaks 2251-8*

**Scotland:** *Bishopbriggs 1093*

**Wales:** *Pencoed 376*

**Northern Ireland:** *Belfast 2447*

**Eire:** *Dublin 51794*

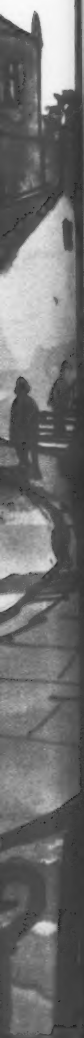
# MARLEY



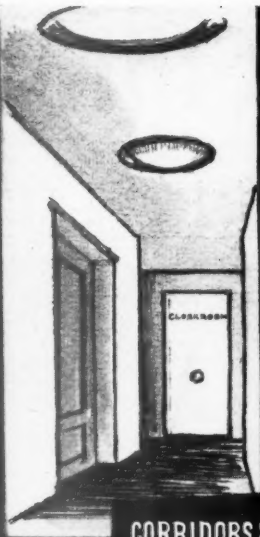
**THE MARLEY TILE COMPANY GUARANTEES**

- 1 That Marley Tiles will not laminate or decay for 50 years.
- 2 Free maintenance of roof tiling fixed by Marley craftsmen for 10 years.

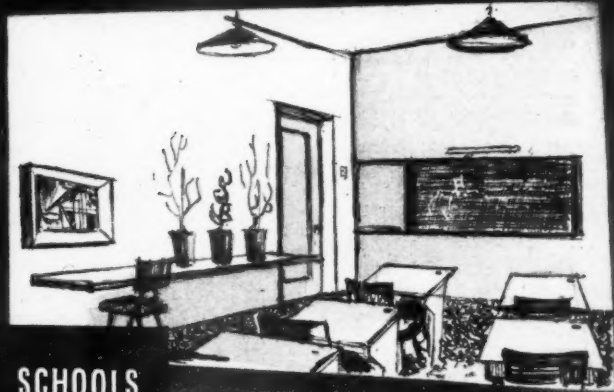








**CORRIDORS &  
CONVENIENCES**



**SCHOOLS**



**STAIRWAYS**



**CANTEENS**

**Emalux**  
REGD TRADE MARK  
GLAZED WALL FINISH

## WILL WEAR AS LONG AS THE WALL ITSELF!

Walls treated with glass-hard EMALUX-GLAZED CEMENT offer the perfect solution to the problem of maintaining interior walls unblemished, spotless, hygienic—especially in such frequented public

places as Cloakrooms, Corridors, Conveniences, Entrance Halls, Shelters, Canteens, and Staircases. EMALUX (in all colours) offers wall beauty of a new order of permanence and economy. Washable, it neither fades nor loses its gloss during years of service. Applied by our own specialist craftsmen to cement-screeded walls, EMALUX welds to the wall surface and becomes an integral part of it. For fuller information and samples write or telephone to us.

**JOHN ELLIS & SONS, LTD., 21 NEW WALK, LEICESTER** Leicester 5682

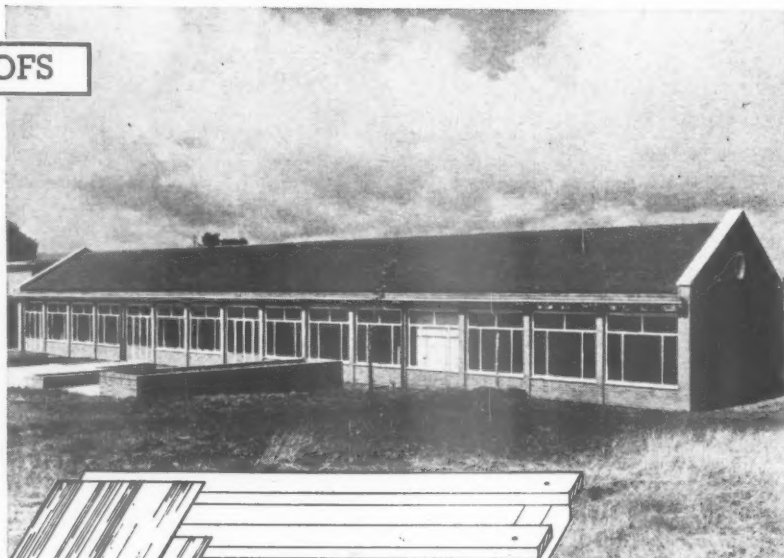


# COLT *Canadian Cedar Wood* SHINGLES

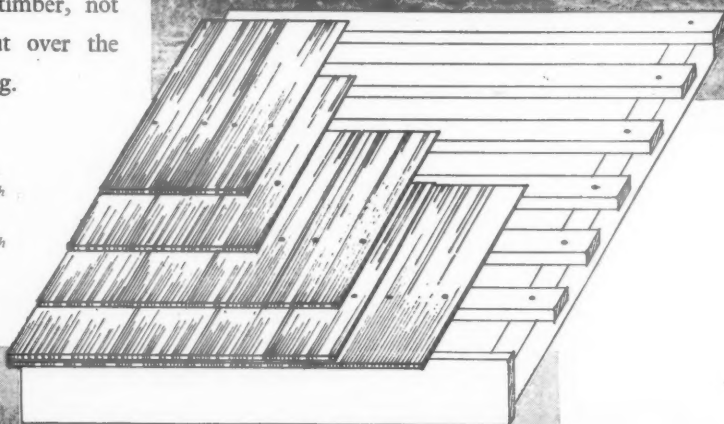
## FOR ROOFS

COLT Cedar Shingles weather to a beautiful silver-grey and are a highly durable roofing material which is 21 times more waterproof than clay tiles. Lightness in weight (only 144 lbs. per square) permits a very considerable saving to be effected in structural steel and timber, not only in the roof but over the whole of the building.

**TIMBER DIMENSIONS** →  
3" × 2" Rafters at 2' 8" c.c. with  
2" × 1" battens;  
or  
3" × 1½" Rafters at 2' 0" c.c. with  
1½" × 1" battens



LEAGRAVE COUNTY  
PRIMARY SCHOOLS,  
Luton, Beds.  
Architect: Howard V. Lobb,  
F.R.I.B.A.



A HOUSE IN SURREY.

Architects: Taylor & Green, F.F.R.I.B.A.

**Shingles are licence free — available from stock, and competitive in price.**

Experts fixers are available to undertake contracts throughout the country.

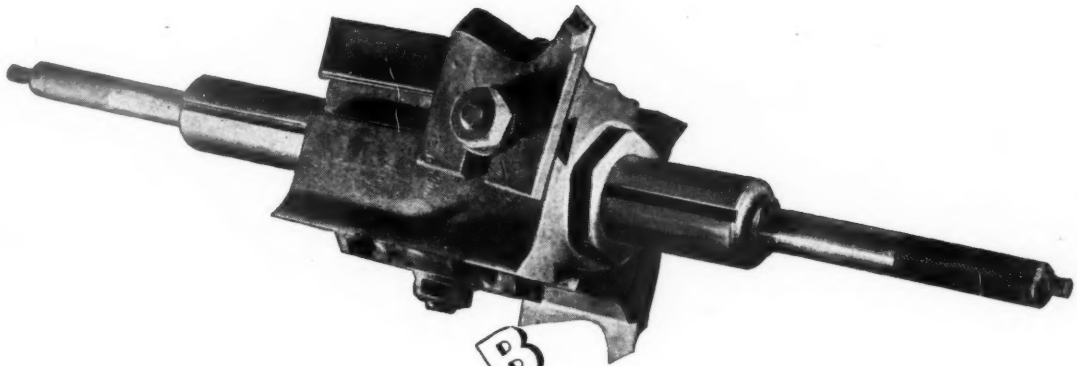
## FOR WALLS

Warmth, colour, and pleasing appearance are equalled by the high insulation value of cedar shingles which is 9 times greater than brickwork. Great economies can thus be made in structural materials without reduction of standards of weathering and insulation.



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

## Keeping a Balance—



**B  
A  
L  
A  
N  
C  
E**  
**or  $\frac{1}{2}$  oz may = 28 lb**

One essential for obtaining first class results in moulding is setting all cutters in balance. A difference of half an ounce between the weight of two cutters when the block is stationary may become at, say, 4,000 r.p.m., equivalent to 28 lbs., with consequent vibration—and inferior cutting results.

At Sadds the correct balancing of cutters and head is a precision job. Each cutter is tested for dead weight and even distribution of weight. The head with cutters positioned is then tested and retested until balance and symmetry of cutting edge is obtained. Then, and then only is the cutter head passed for machining.

Thus the knowledge of our technicians and the skill of our craftsmen coalesce to produce the fine workmanship evident in Sadds' moulding or planing, in Sadds' windows or doors, Sadds' kitchen units or stairs.

# John Sadd & Sons Ltd

STATION ROAD WHARF 1, MALDON, ESSEX. Telephone: MALDON 131

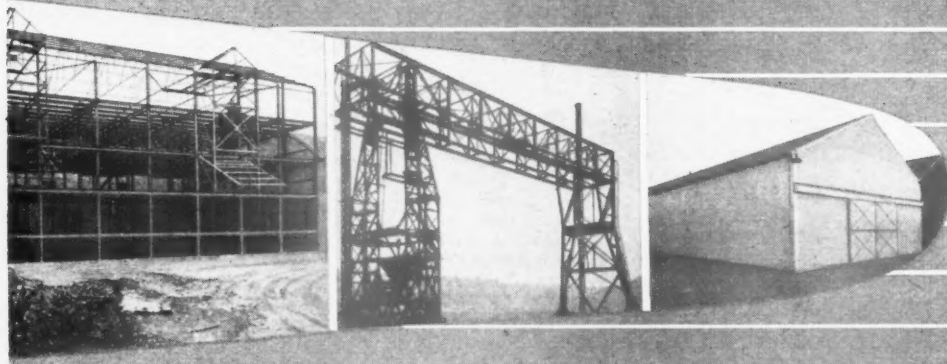
MAKERS OF STAIRCASES • WOOD WINDOWS • PANEL AND FLUSH DOORS • KITCHEN UNITS

London Office and Showrooms: ALDWYCH HOUSE, LONDON, W.C.2.

Telephone: CHAncery 7214/5



## A WORLD WIDE SERVICE



Walker Brothers' service to Architects, Builders and Civil Engineers

covers every phase in constructional engineering. Whether the project is

at the talking stage or planning is complete, Walker Brothers are interested.

**WALKER BROS.**  
*Ltd.*  
CONSTRUCTIONAL ENGINEERS  
WALSALL • STAFFS • ENG.

**CRAFTSMANSHIP IN STEEL CONSTRUCTION**

TELEPHONE • WALSALL 3136-7-8-9 • ESTABLISHED 1867

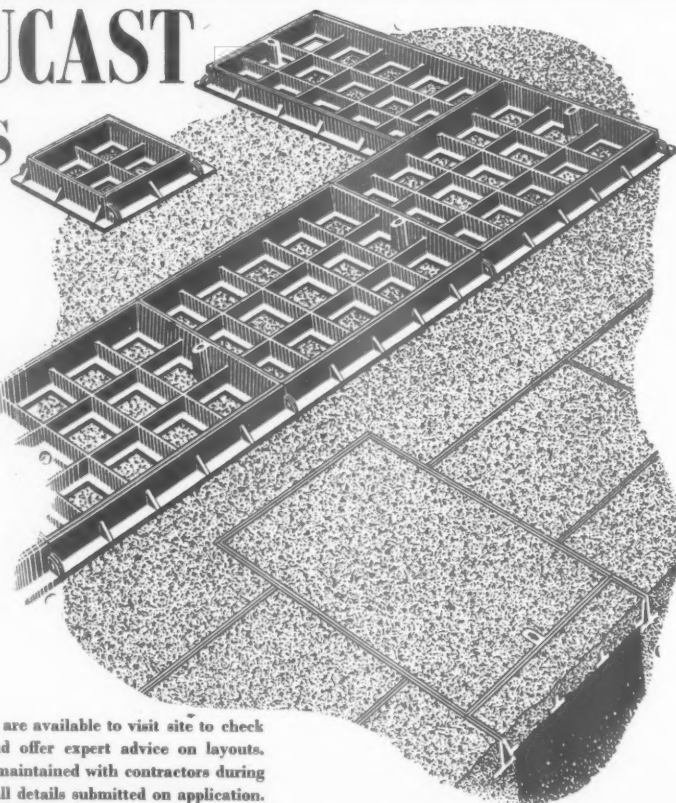
LONDON OFFICE: 66 VICTORIA STREET, S.W.1 TELEPHONE: VICTORIA 6049

## 'BROADS TRUCAST' DUCT COVERS

*Specially designed  
for use in —*

POWER STATIONS, HOSPITALS  
SCHOOLS, KITCHENS  
LABORATORIES, BOILER HOUSES, ETC.

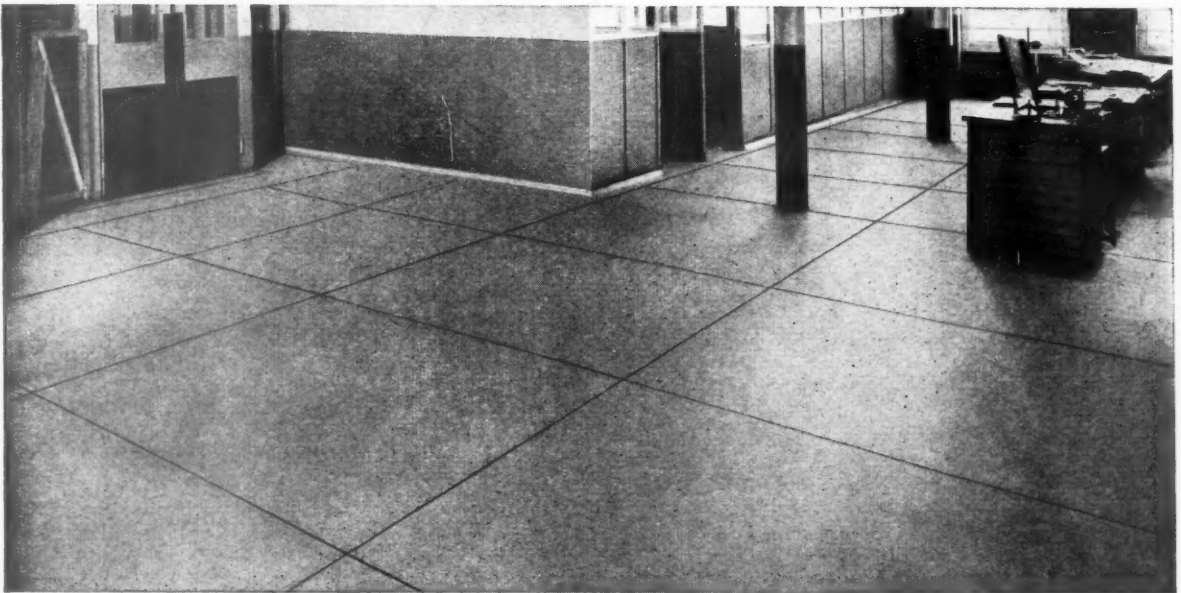
'Broads Trucast' Duct Covers are available in widths from 6" to 36", with Cast Iron Sectional Frames for bolting together to form continuous runs, with necessary angles and branches of various sizes. The Cast Iron Covers and Frames have machined seatings and the covers are recessed for fitting on site to match the surroundings.



**BROADS**

★ Technical Staff are available to visit site to check final details and offer expert advice on layouts. Liaison is also maintained with contractors during installation. Full details submitted on application.

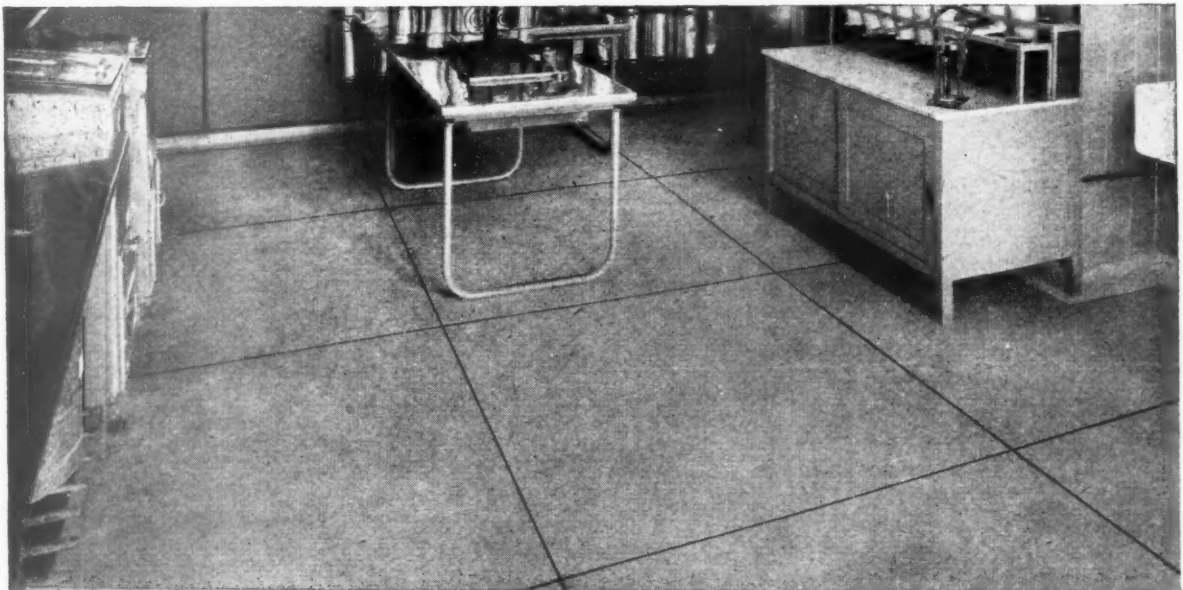
MANUFACTURING CO. LTD. 4 SOUTH WHARF, PADDINGTON, LONDON, W.2. Tel.: PAD. 7961 (20 Lines)



## MARBOLITH Flooring in a Tobacco Factory

Over a period of more than twenty years many thousands of square yards of Marbolith Flooring have been laid in the premises of Ardath Tobacco Co. Ltd., manufacturers of the famous State Express cigarettes. The floors are laid

both in the factory and offices, and Marbolith was chosen because of its ability to stand continuous heavy wear including truck traffic, for its comfort under foot, and for its ease of cleaning—an essential feature in a factory of this kind.



**The Marbolith Flooring Co. Ltd.** *One of the Carter Group of Companies*  
29 ALBERT EMBANKMENT • LONDON S.E.11 • RELIANCE 2062

# Demonstration Housing - Eastcote

Messrs George Wimpey & Co. Ltd., have selected Fleetwood Paints exclusively for this project including SYNDURA Decorative Coating—the remarkable *one coat* finish for New Plaster, Asbestos, Woodwork and most interior and exterior surfaces.

**f**leetwood

PAINTS LIMITED

STET HOUSE, 40 PARKGATE ROAD, BATTERSEA, S.W.11



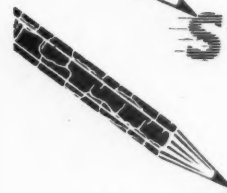
**Strong...**

Pressure proofed by patented process and tested at every stage. Only proven leads go into Venus Drawing Pencils



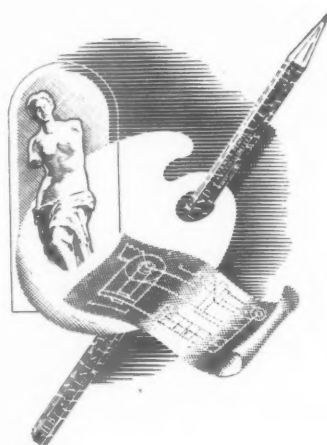
**SMOOTH...**

A patented colloidal process removes all grit and impurities—they must be smooth



**ACCURATE...**

Accurate through and through—graded and tested by experts, Venus Drawing Pencils make the right mark every time



THE PENCIL WITH  
THE CRACKLE FINISH

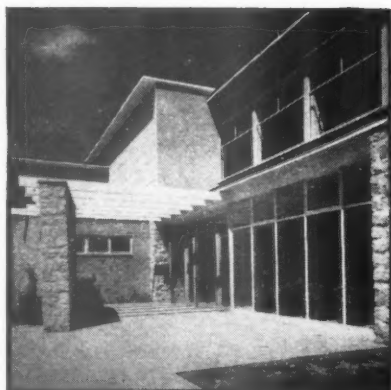


**VENUS**

*Perfect* PENCILS

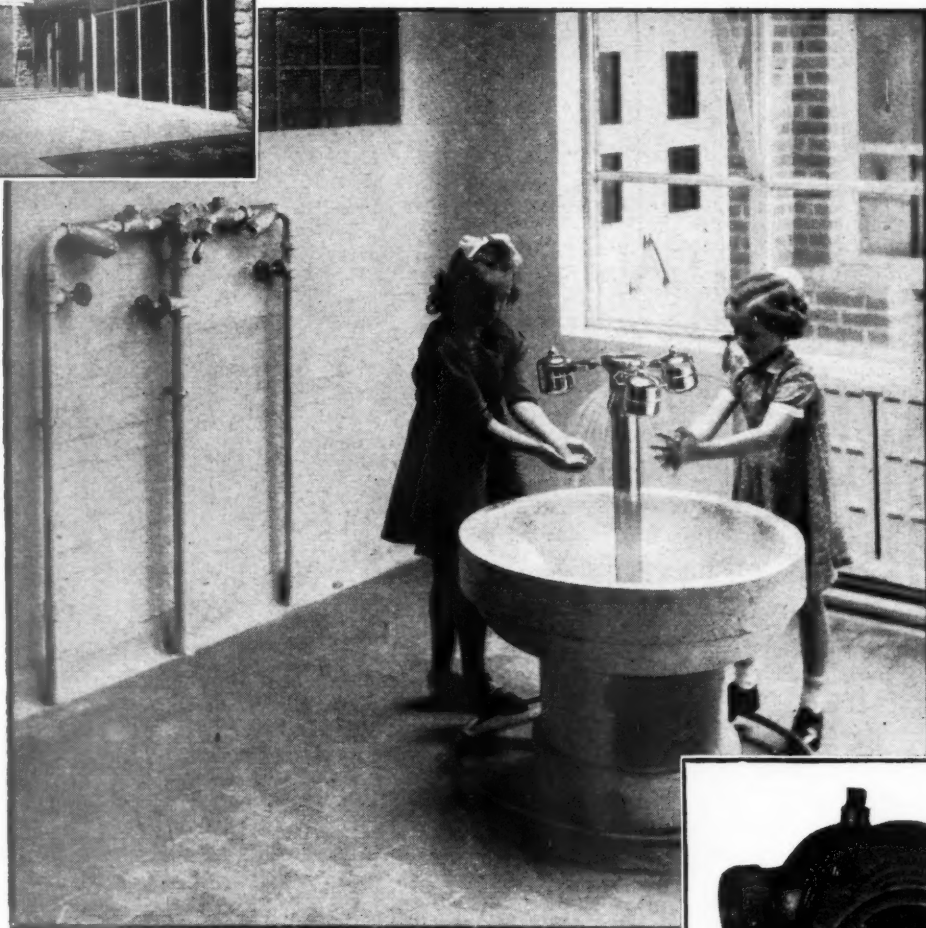
THE VENUS PENCIL CO., LIMITED. LOWER CLAPTON ROAD, LONDON, E.5





"To prevent scalding, particularly in the case of younger children, controlled mixing facilities should be provided for basins and showers."

*Ministry of Education Memorandum on  
the Building Regulations—1945*



**SPECIFY LEONARD**  
**THERMOSTATIC MIXING VALVES**  
FOR SHOWERS AND WASH BASINS  
IN SCHOOLS AND HOSPITALS



LEONARD Thermostatic mixing valves automatically mix Hot and Cold water to give Warm water at the right temperature for showers and washbasins. By preventing too high a temperature being used, they not only protect the user from scalding, but also give marked economies in fuel and water.

*Send for Pamphlet No. RD/2.*

**WALKER, CROSWELLER & Co. Ltd., CHELTENHAM, GLOUCESTERSHIRE**

Tel. : Cheltenham 5172 (3 lines)

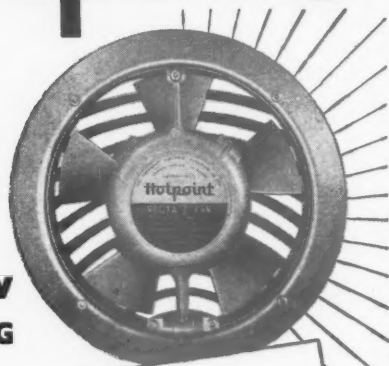
London Office : HOLborn 2986.

Manchester Office : Blackfriars 0058



# NOW— ventilation by Hotpoint

**WINDOW  
FITTING**



**VECTA  
7-inch fan**

Before settling on a ventilating system consider and investigate this new 7-inch fan. It has been specially designed for Hotpoint whose reputation for dependability is undisputed. Engineers who added speed to the Spitfire and Hurricane and are now researching in Jet propulsion, have applied their knowledge of air movement to this fan design.

With an extraction rate of 17,500 cu. ft. an hour it is suitable for public rooms, offices and homes, flats, factories and farms. Send for detailed specification list HEA.382/1.



# Hotpoint

**domestic appliances**

**THE HOTPOINT ELECTRIC APPLIANCE CO. LTD.,  
PETERBOROUGH,**

*Member of the A.E.I. Group of Companies*



# Solignum wood preserve it!



There are 3 kinds of SOLIGNUM:

**SOLIGNUM WOOD PRESERVING STAIN** — the standard preservative used throughout the world to give protection against dry rot, decay and the ravages of insects. It preserves and stains and is available in a variety of colours.

**V.D.K. SOLIGNUM WOOD PRESERVATIVE** — the grade that can be painted over; and which should be used on seed boxes, garden frames and the inside woodwork of greenhouses.

**SOLIGNUM WOOD BEETLE DESTROYER** — for woodworm in furniture.



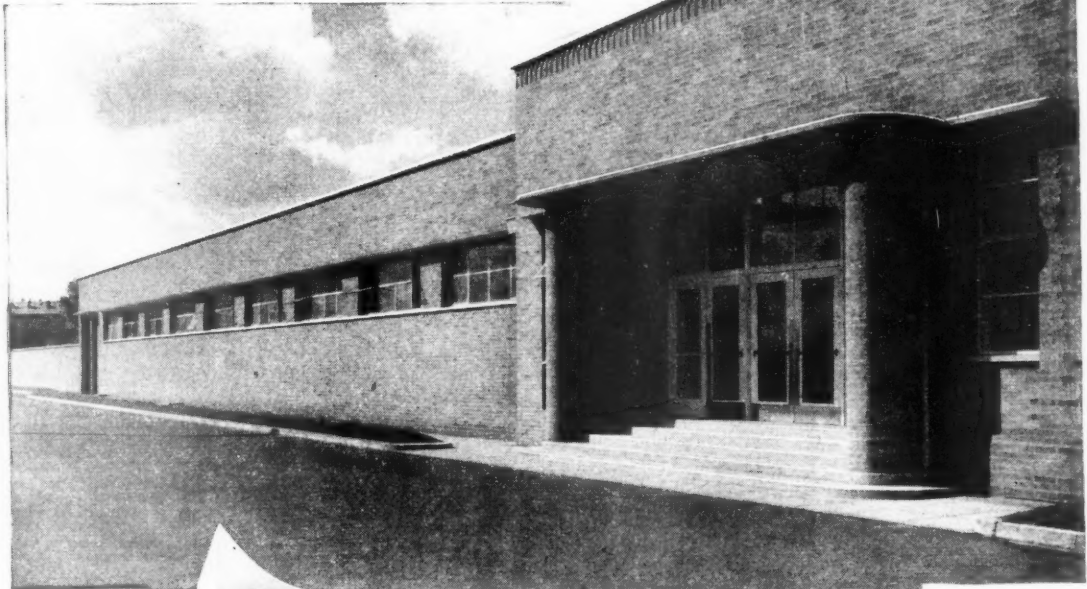
**WOOD PRESERVATIVE**

Solignum Ltd., 30, Norfolk Street, London, W.C.2

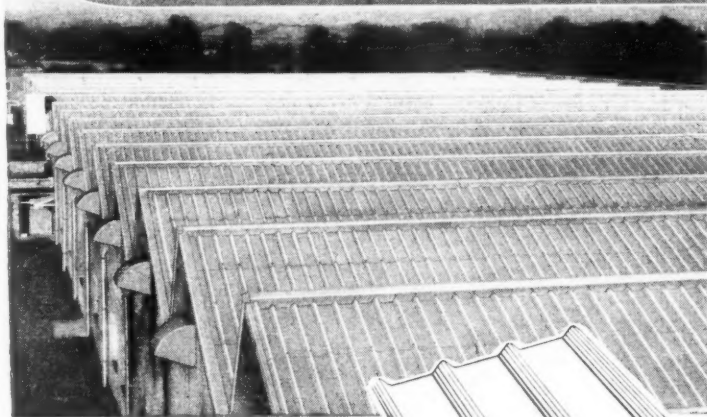




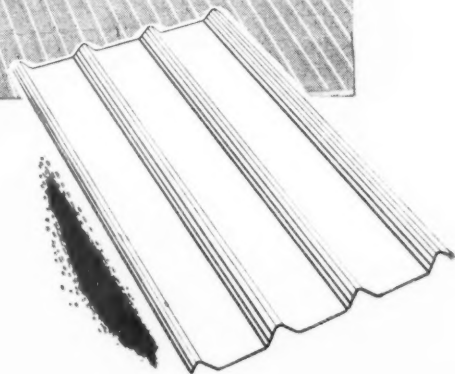
# ASBESTOS-CEMENT in 1951 Winning Design



*The Needle Industries Ltd.,  
Architects :—  
S. N. Cooke & Partners.  
F.F./A.R.I.B.A.*



"TURNALL" Asbestos-Cement  
TRAFFORD TILES  
were selected by the Architects for this  
imposing Factory at Studley, Warwickshire.  
The excellence of the design was awarded the  
R.I.B.A. Bronze Medal and Diploma for a  
building of outstanding merit erected 1946/50  
in the province of the B'ham & Five Counties  
Architectural Association — the first time  
it has been presented for a Factory Building.



**TURNERS ASBESTOS CEMENT CO LTD**

A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK

MANCHESTER 17



STRUCTURAL STEELWORK BY  
**REDPATH BROWN**  
3 DUNCANNON STREET, LONDON, W.C.2



The photograph shows approximately half of the structural steelwork at Brunswick Wharf Generating Station, Poplar, being erected on behalf of the British Electricity Authority, London Division.

Consulting Engineers: John Bruce & Partners. Civil Engineers: L. G. Mouchel & Partners Ltd.







THE

No.



MA

T

tha

the

As

by

me

lat

Ho

is

In

the

is

ha

giv

ve

ex

ne

th



THE ARCHITECTS' JOURNAL

No. 2978 MARCH 27, 1952 VOL 115

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury, 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) *Technical Editor*, R. Fitzmaurice, B.Sc., M.I.C.E., Hon. A.R.I.B.A. (5) *Editor Information Sheets*, Cotterell Butler, A.R.I.B.A. (6) *Editorial Director*, H. de C. Hastings.

GUEST EDITORS: (7) Robert Gardner-Medwin, F.R.I.B.A., M.T.P.I.; Donald Gibson, C.B.E., M.A., A.R.I.B.A., M.T.P.I.; S. A. W. Johnson-Marshall, A.R.I.B.A.; Robert H. Matthew, C.B.E., A.R.I.B.A.

SPECIALIST EDITORS\*: (8) Planning (9) Practice (10) Surveying and Specification (11) Materials (12) General Construction (13) Structural Engineering (14) Sound Insulation and Acoustics (15) Heating and Ventilation (16) Lighting (17) Sanitation (18) Legal.

ASSISTANT EDITORS: (19) *Chief Assistant Editor*, D. A. C. A. Boyne, (20) *Assistant Editor*, K. J. Robinson, (21) *Assistant Editor* (Buildings), L. F. R. Jones, (22) *Assistant Editor* (News), M. B. Farr, (23) *Assistant Editor* (Information Sheets), E. G. Johnson, (24) *Assistant Technical Editor*, M. Jay, (25) *Photographic Department*, E. R. H. Read, H. de Burgh Galwey, (26) *Editorial Secretary*, Rachael Tower

\* 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

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.



## MANNERISM AND MANNERISMS

There can be very few aspects of life that are not affected by fashion. For the fourth time in a few weeks ASTRAGAL has heard of a friend laid up by a slipped disc in his spine. This ailment, most painful it is said, was only lately invented and is now prevalent. How people managed without it before is just one of those mysteries.

It might be said that the equivalent of the slipped disc in art and architecture is Mannerism—a phenomenon that we have heard a lot about since it was given a name. Here, too, we got along very well before we even knew it existed. The danger with an intriguing new conception like this is, of course, that, having come into fashion, it gets

applied so widely that it loses its real usefulness. That is what has impelled Eric Newton to write his new book\* which sets out to prove that Tintoretto was not, as is often said, a mannerist.

Well, isn't he? Eric Newton's arguments are not wholly convincing. Tintoretto's painting represents a definite development away from the classical repose of the High Renaissance, but it is not yet Baroque. And mannerism is, by definition, a phase between the High Renaissance and the Baroque. Tintoretto, it is true, doesn't go in for those deliberate illogicalities that are associated with mannerism—the disc, that is to say, hasn't absolutely slipped—but these are special to mannerist architecture, as Anthony Blunt emphasized in his talk at the RIBA in February, 1949.

But it doesn't matter whether or not Eric Newton succeeds in converting the scholars, and rescuing Tintoretto from the mannerist pigeon-hole. The theme has given him an excuse for writing a brilliant book that will appeal to a great many besides the scholars. He is quite right in feeling that every now and then an artist, however well known, needs reassessment in the light of the changing vision and interests of a new generation. His appreciations of Tintoretto's paintings are masterly; a book to take to Venice with you and keep you rooted there for weeks.

Incidentally, the book has an appendix in which Stella Mary Pearce plays a most delightful new parlour game: exactly dating Tintoretto paintings by the clothes the figures are wearing.

\* *Tintoretto*, by Eric Newton, Longmans, Green and Co., 1952. Price, 50s.

after detailed and exhaustive research into the day by day changes of fashion that took place in renaissance Italy. It is surprising no one has attempted a similar investigation before.

## MARSHALL AID AND MAJOR ASH

You may have noted the remark made in the Upper House about the skyscraper hotel which, with the approval of the Marylebone Council, is to be built on the vacant site at the north-west corner of Portman Square—a good site. I can say little about the project architecturally except that the architect is Major Ash and that it isn't to have all the earlier Ash traits.

The whole affair is rather a mystery. Civilian Marshall Aid has always been indirect or discreetly veiled in this country, and imported buildings—apart from Swedish houses—a novelty. The analogy is, of course, the Milan block designed by Studio BBPR, but with its steelwork prefabricated in the US. As Ernesto Rogers will be here this week for the Italian Exhibition at the RIBA, I shall certainly ask him how this particular madness of the currency underworld is managed. If one hotel, why not six? If six hotels, why not six theatres? There is no end to the vistas opened up.

## CHAMP DE MARS

Rogers will return to Italy by way of Paris to perform an important task as a member of the "jury" for the UNESCO building. If, to a simple mind like mine, the currency underworld is mad, then the political intrigue that is necessary in order to arrive at a design





# AVOID DELAYS & EXPENSIVE SITE LABOUR BY USING HOPE'S STEEL DOOR FRAMES

which are supplied complete with hinges, patent adjustable lock-strike and adjustable lugs ready for building in, saving time and labour on the site.

SEND FOR CATALOGUE NO. 254: HENRY HOPE & SONS LTD.  
SMETHWICK, BIRMINGHAM & 17 BERNERS ST., LONDON, W.1

for an international building is nothing more or less than a matted jungle. I forget how the Peace Palace at the Mayne came into being—not that anyone could ever forget the design—but the League of Nations Building at Geneva was the result of a competition, though not of the award! The UNO building had nominally fourteen architects and at least two claimants!

Now comes UNESCO. Beaudouin had been proclaimed architect. Why on earth couldn't the poor man have been left alone to get on with it? All the stars had to be brought in somehow. Howard Robertson and Saarinen are to be consultants. Designs produced with their advice will then be considered by a "jury" consisting of Rogers, Costa, Gropius, Corb, Old Uncle Tom CIAM and all. But Beaudouin, please note, is still the architect, whatever that may mean. It is, of course, the old, old game of trying to please everyone a little, and thus pleasing no one very much.

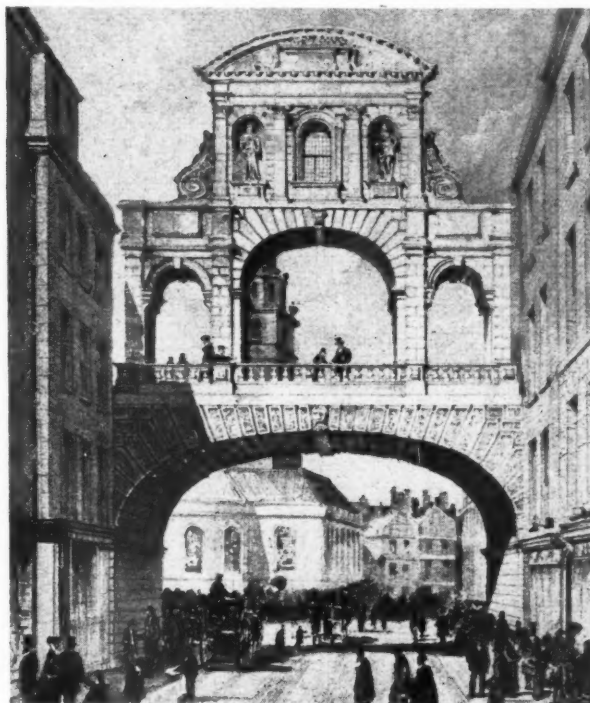
#### HULL'S DELIGHT

The students of Hull are to be congratulated on having staged a "question forum" on the new Ravensft Building and, more important still, on getting their forum a four-column wide headline and an illustration in a local paper. The Ravensft Building is, I take it, a shop. It is also Egypto-Doric. A Lieutenant-Colonel Alec-Smith rather liked it and Mr. Vincent Galloway, Director of the Ferens Art Gallery and member of the Georgian Society, did too. The general conclusion of the forum was that "there is no such thing as a modern building in Hull." How true; but then Hull isn't unique; but then Hull wouldn't like to be.

#### LANTERN LECTURE

Spare a guinea, if you can, for the restoration of the octagonal lantern at Ely, whose timbers have been ravaged by death watch beetle. The surveyor's report makes astonishing reading, if only for the dimensions of the eight vertical angle posts, each of oak 63 ft. by (hold your hat on) 3 ft. 4 in. by 2 ft. 8 in. (In case you're interested, a double page opening of the *Times* is 3 ft. by 2 ft.) It is hard to imagine that there can be any larger oak timbers any-

*This method of dealing with Temple Bar—an attempt to reconcile conflicting opinion that it was ugly, that it was an obstruction to traffic and that it should be pulled down was submitted to the RIBA by a Mr. Ernest Turner in 1869 and is now in the Institute's library. Astragal comments below.*



where in the world. And it is something of a mystery that the 14th century builders managed to plumb them nearly 100 ft. above ground level.

#### JAMB YESTERDAY . . .

The illustration on this page again brings up the question of what to do with Temple Bar—the kind of question that is guaranteed to run for a week in any respectable newspaper's correspondence column, but one which I'm getting tired of. This idea of Mr. Turner's does, however, suggest the possibility of a competition for a design for a 'bus—the upper deck to go through the upper arch, the lower deck through the lower one.

Historically I may be underestimating Temple Bar; on the day of the Duke of Wellington's funeral the crowd was such that Karl Marx and his two little daughters were almost crushed to death against the jamb of the central opening. And if you're thinking what I'm thinking, no more need be said.

#### . . . AND EVEN JAM TODAY

Tucked away at the tail end of the Budget speech, and so far scarcely noticed, is a reduction in stamp duty on conveyances for houses. It doesn't come into force until August, but it will be down to 1 per cent. (halved) on houses up to £3,000 and 1½ per cent.

from these up to £3,400. A comparatively small concession, but one which architects should know about. Another point is that we shall, presumably, have a rise in building industry wage rates, and also, presumably, in all other industries where wage earnings are linked to the cost of living index. Odd, isn't it, that the index takes no account of the income tax rate, which is, after all, the major influence on spending.

#### PUBLIC LINEN-WASHING

Fear, as we all know, is the most compelling of motives in all our activities, whether it is Air Supremacy we are after or just membership of the After-Shave club. Throughout our lives we are haunted by it—fear of our parent's hats on Speech Day, of the Yellow Peril, or shabby carpets, by Coco-Colonization or lack of personal daintiness, or whatever it may be.

But it would be wrong, I think, to suggest that these fears are but the creation of politicians week-ending in their constituencies and the ad. men in their silk-shirted and chandeliered conference rooms. For most of us, in fact, it begins in the nursery. How many of you, I wonder, remember the threat, which was always handed out to me with the Sunday pair of clean pants. "Suppose," it used to run, "you met



## *River Access or Traffic Axis?*

This one surviving stretch of Chelsea's old river front is in danger of being sadly changed. A scheme for re-building the river wall (see page 390) envisages the extension of the wall for 171 feet over the foreshore. The scheme has been approved in principle by the Chelsea borough council, though it has met with much opposition from residents in the area as well as from the Chelsea Society, which has prepared an alternative plan (also published on page 390). If the council's £210,000 scheme is carried out more traffic will be attracted to the riverside, and the

little harbour, with its score of house boats, will be no more. No amount of provision of open spaces in the new scheme will compensate for such a loss of amenity in a unique, picturesque part of London that is known the world over. All who have a hatred for needless destruction will wait with anxiety to hear if Chelsea's council is prepared to ignore public opinion, modern planning principles (which certainly do not recommend the running of traffic arteries through recreation areas) and the obvious absurdity of spending so much money at the present time



## POINTS FROM THIS ISSUE

Flats by Corbusier at Hamburg.....	page 386
Illustrations of Chelsea Society's river-front scheme.....	page 390
Development charge: how to make rough assessments..	page 391
Herts. school given bronze medal by counties' society.....	page 395

## The Editors

## THE FUTURE OF DEVELOPMENT CHARGE

**I**S the present Government likely to abandon development charge and the compensation fund? In fifteen months' time it has to decide whether or not to amend the financial provisions of the Town and Country Planning Act. Under this Act the Treasury is obliged to produce, in July, 1953, a scheme for the allocation of the £300 m. compensation fund. (This, as will be remembered, was set up to meet the losses of all whose development value in land had come to an end on July 1, 1948, when the Act came into force). According to Harold Macmillan, the Minister of Housing, the Government has not yet made up its mind what to do about the development charge and the compensation fund.

The longer the Government takes to decide its policy, the less likely it is that the whole financial scheme will be abandoned. The owners of land with valid claims—the Central Land Board expects these claims to be between £345 and £350—must be feeling hopeful. What was once a forlorn hope is now much more of a vested interest. And if the compensation fund remains, so, too, it seems, will the development charge. But need the development charge retain its present form, which our Legal Editor describes on page 391? There are arguments now—and they may become more violent—that a 100 per cent. development charge, even if morally defensible, is socially bad in that it destroys initiative and enterprise, the spark in the engine of social improvement. But there are also arguments that the machinery needed to assess and collect the development charge under the existing regulations is not worth its cost. In three years the Central Land Board has collected (or set off against admitted claims) some £9 million in development charges. Nobody outside the civil service can estimate accurately the cost of assessing and collecting this £3 million a year, but it may well be that the cost is somewhere near 50 per cent. of the proceeds. However right in theory the impost may be, is there really any justification for a scheme of revenue collection which, from the aspect of net receipts, is so inefficient? Surely a more simple plan could be devised. If assessments for development charge were based on any increase in rateable value resulting from the development, all that the authors of the 1947 Act sought in their strivings for a perfection of social justice would be achieved.

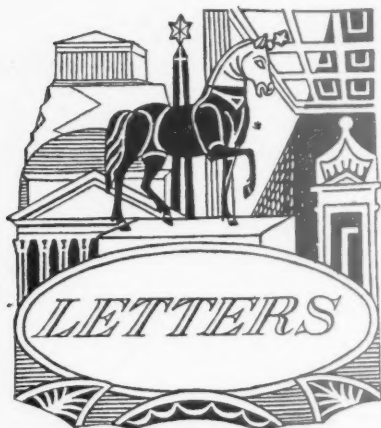
with an accident and were taken to hospital in grubby underclothes"! The obvious flaw in the argument—that the victim of an accident is always picked up covered with dust and blood anyway—was never perceived. The threat was unanswerable, the clean pants therefore unquestioned. But strangely enough this hypothetical accident has always remained faintly at the back of my mind ever since, and I was reminded of its presence last week when travelling to the country with a colleague.

He was an architect, who had reached what I can only call the New-Yorker-Story stage of life, i.e., fortyish, married, two children, Liberal, balding, reasonably well read, though liable at literary parties to confuse F. L. Green with Henry Green (or even Henry Reed), and wearing, presumably, clean underwear. "Suppose," I said, as the train rocked violently over the points, "you were actually in a train accident in a few minutes; how would you make out in the casualty ward—or for that matter on the slab?" A quick check-over and all seemed well. "But how," I pursued, "about what the police call 'the deceased's effects'?" He had to admit that this week-end case contained, besides a sponge bag, a gruesomely complete nurse's uniform for a child of five, bonnet, apron, wrap, stiff cuffs and all—not to mention a horrid little box of safety pins, bandages, etc. Here, then, were all the makings of a misunderstanding—if not more. Picture, if you can, the puzzled coroner's jury trying to discover what had happened to the midget nurse, who was presumably the weekend companion of the dead architect. Imagine, if you dare, the strange perversions which could be hinted at should no trace of the tiny victim be found.

Shaken and irresolute, the architect got out of the train at Winchester, wondering, I suspect, whether next time it wouldn't be safer to pack a small explanatory note in the case. And the moral? There is none—we all carry something difficult to explain away—a yellow newspaper cutting perhaps, or the pocket-smoothed insignia of some schoolboy society; and my advice is, keep right on carrying it (and wear clean pants, of course).

ASTRAGAL





*Neil Martin-Kaye, F.R.I.B.A.,*

*Donald Boyd*  
Chief Assistant, BBC Talks

*R. G. Hollis*

## Salaries of Local Authority Architects

SIR.—The letter signed by Messrs. Duncan Brown and Jack (AJ: March 13) does not, in my opinion, do full justice to the RIBA. To compare the RIBA with the BMA is to make a false analogy for the latter does not concern itself, so far as I am aware, with the academic standards and requirements of the medical profession.

A much truer comparison could be made between the BMA and one of the other architectural bodies; the Institute of Registered Architects for instance. This body is constituted to serve the architectural profession as the BMA does the medical. It is not at present an examining body, is open to all registered persons and is primarily concerned with the day-to-day, bread-and-butter problems which confront the architect seeking to make a livelihood from his profession.

In the province of maintenance and safeguarding of the high academic standards for and within the profession—and all matters incidental thereto—the RIBA stands supreme, its prestige and dignity beyond dispute.

If it appears less successful in other spheres, may it not be because, in them, it is operating at variance with its basic and essential function which most of its members would prefer to see remain sacrosanct?

The Institute of Registered Architects by its constitution, is concerned solely with the practical affairs of professional life and work; it is not in conflict with, but is complementary to, the RIBA in whose natural field it does not presume to trespass.

I write as a member of both bodies.

NEIL MARTIN-KAYE.

London.

## Pastry Cookery Aesthetics

SIR.—Does even ASTRAGAL, most humane of critics, become just a little high-toned when writing about criticism? He will only allow comment on the inside of a building when a "final judgment" is attempted. When a housewife says a sink is in the wrong place and must be moved I dare say that is a final judgment; it may be a valid comment certainly. Why shouldn't we talk about the insides of any buildings whose uses we understand? Most of us spend the greater part of our lives actually in build-

ings, and should have a great deal more sense about their insides than we probably have about the aesthetics of the outside.

If ASTRAGAL says we mustn't talk about the insides we shall be driven back to the aesthetics of pastry cookery, from which he helped to convert us (along with W. R. Lethaby of course). That will not only be backsliding, it will also be insufficient. A building may be wholesome inside and still wear a nasty face. To judge it by its face alone would, I say, be unfair to the profession of architecture. It would most certainly be unfair to the architects.

DONALD BOYD.

London.

## Transport and Street Congestion

SIR.—I would appreciate the opportunity of replying to Mr. Sisley's rather frivolous and scornful comment upon my suggestions concerning the above subject, in his letter in the AJ on February 28.

I do not in any way discount the veracity of the unqualified facts as he gives them; obviously the ground coverage of sixty-one cars greatly exceeds that of one bus, but I do declare that it is just as foolish for Mr. Sisley to frighten himself by his so narrow interpretation of the idea, as it would be for him to become panic stricken by the equally truthful and similarly bald statement that the multiplication of insects in this country is of such proportions as to enable these insects to eat us literally out of existence within a year.

Of course, there are difficulties—since when has anything worthwhile been achieved without them? On the other hand, to enlarge them out of their proper proportion by misleading and over-simplified statements is to achieve nothing but a grossly deformed perspective, prejudicial to imaginative and constructive thought.

The underlying principle of the idea of substituting the highly concentrated "omnibus" forms of transport for more individual means, is that of dispersal or, more simply, the process of spreading load. This principle has proved itself of great practical value and significance in connection with many present day problems, and I think it is especially noteworthy that no less than £20 million have been saved this winter

alone, as compared with the losses of the previous winter, solely due to the application of this fundamental to the notorious power shortage.

It may be said, in fact, that wherever loss or damage may occur through excessive concentrations of forces or the overloading of limited facilities or resources, dispersal of such concentrations is as logical and beneficial, as it is eventually inevitable.

R. G. HOLLIS.

London.

## DIARY

*London: The Next Twenty Years.* Exhibition explaining the 1951 County of London Plan. At County Hall, Westminster. (Sponsor: LCC.) 10 a.m. to 8 p.m. (except Sundays). Saturdays: 10 a.m. to 6 p.m.  
UNTIL MARCH 28

*Modern Swedish Architecture.* At the Building Centre, Store Street, Tottenham Court Road. (Sponsors: Swedish Society of Architects and the Swedish Institute.) 9.30 a.m. to 5 p.m. Saturdays: 9.30 a.m. to 1 p.m.  
UNTIL MARCH 29

*Architectural Teachers' Conference.* At RIBA, 66, Portland Place, W.1. 10.30 a.m. to 4.45 p.m.  
MARCH 29

*Exhibition of Italian Contemporary Architecture.* At 66, Portland Place, W.1. (Sponsor RIBA.) Closed from April 11 to 15 inclusive. Mondays to Fridays: 10 a.m. to 7 p.m. Saturdays: 10 a.m. to 5 p.m.  
UNTIL APRIL 30

*Living in Flats.* Discussion led by Henry Brooke. At 13, Suffolk Street, S.W.1. (Sponsor: HC.) 1 p.m.  
APRIL 1

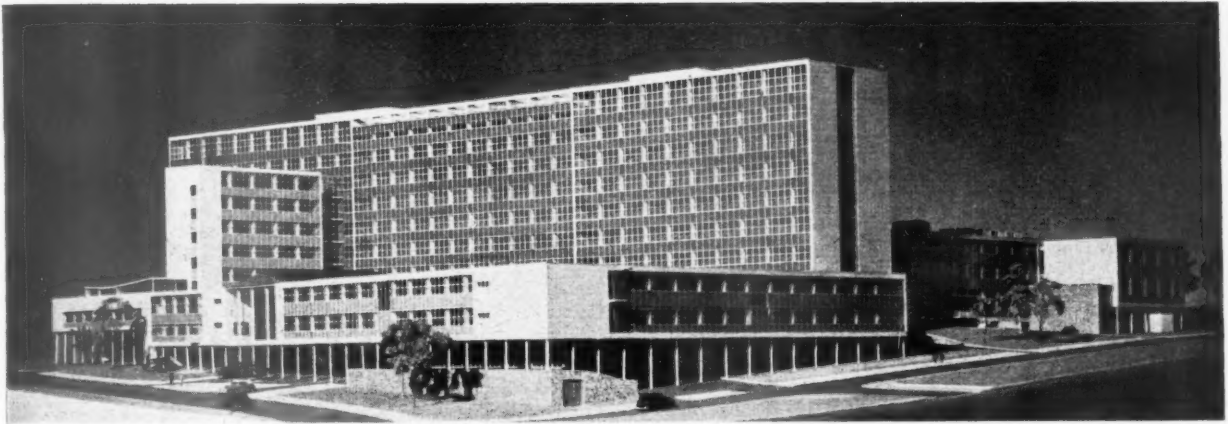
*Can the Standard Method of Measurement be Improved?* Discussion to be opened by P. T. Walters, A. Prichard and E. S. Chalkley. At 12, Great George Street, S.W.1. (Sponsor: RICS.) 6 p.m.  
APRIL 16

*Survey and Plan for Woolwich Town Centre.* Discussion led by Arthur Ling. At 13, Suffolk Street, S.W.1. (Sponsor: HC.) 6 p.m.  
APRIL 22

## CORBUSIER DESIGNS FLATS FOR HAMBURG

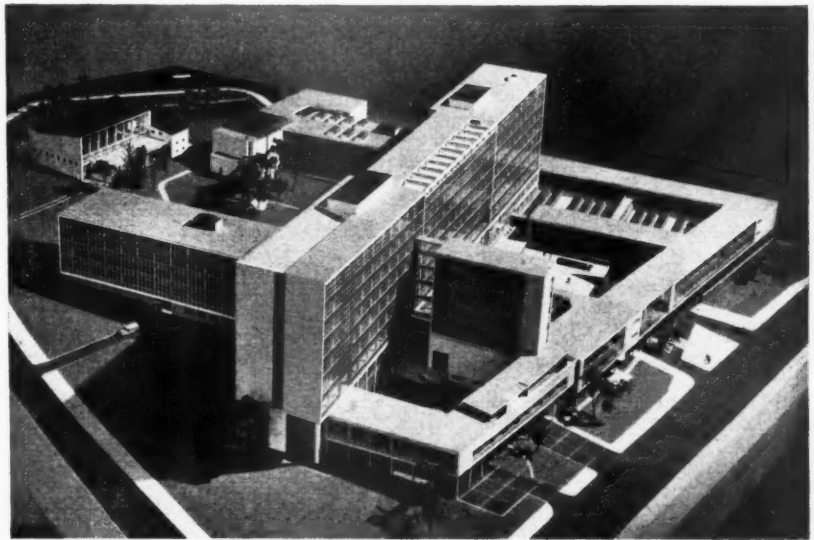


*With an astonishing lack of publicity this and similar blocks of flats designed by Corbusier have been built in Hamburg. The block includes flats for single people as well as for families, children's playrooms, roof gardens and a covered shopping arcade with restaurants for residents.*



## COLLEGE FOR LEEDS

F. R. S. Yorke, E. Rosenberg and C. S. Mardall designed this college building for Leeds in collaboration with R. A. H. Livett, the City Architect. The scheme, which comprises departments of technology, art, commerce and housecraft, has been designed with one concourse from which all common facilities, except the gymnasium and swimming pool, can be used. The greater part of the buildings will be constructed in reinforced concrete. If finances permit the large areas of wall without windows and the perimeter buildings will be clad in Portland stone slabs and certain lower walls forming the base and retaining walls will be of random York stone walling. There will be small areas of coloured glazed tiles and of rendering in colour.



## LMBA

### Past Chairman revives Tendering Custom

For some years the LMBA has been urging that builders' tenders should be opened in the presence of the firms submitting them. This pre-war custom was revived recently by the Holborn borough council. Its revival has been brought about by the chairman of

the council's housing and planning committee, W. E. Mullen, a former mayor of Holborn and a past chairman of the LMBA's Central Area No. 3.

Tenders had been invited from eight firms for a substantial contract for the Holborn borough council, and on March 12 representatives of the firms tendering were invited to be present when the tenders were opened.

## NFBTE

### "Experiments in Freedom Wanted" says President

J. Ian Robertson, president of the NFBTE, recently told a meeting of the LMBA council that he congratulated the Minister of Works on his courage in removing price controls from a number of building materials. For far too long, he said, there had been experiments with controls. What we wanted now were more experiments in freedom and he hoped that the action taken by Mr. Eccles would soon be followed by a move to test the effect on the rate of house building of doing away with licences for houses built for sale or letting privately, at any rate for houses below a certain size. At the same time the definition of need should be widened because in most cases the building of a new house released accommodation all the way down the line and so enabled several families to improve their living conditions.

The speaker said he was confident not only that action on these lines would speed up

the rate of housebuilding but that, owing to the limited spending power of would-be owner-occupiers, the dislocation of the building programme which some of the planners thought would result from the starting of too many new houses if controls were lifted would not, in his opinion, materialize.

## ABT

### Resolution on School Cuts

The ABT has issued a statement expressing its concern about the "dangerous economies in the education service proposed by this present Government."

It is particularly perturbed at the fact that these economies will: (a) result not in a decrease (which is long overdue) in class sizes, a large proportion of which are already 45 or over in primary schools, but in an increase in the number of classes of 50 or more; (b) involve the loss of nearly a complete year's programme of new school building at a time when new school places are urgently needed; (c) still further restrict the development of many branches of technical and further education in which this country is already falling behind and upon which its future in the world depends.

The above resolution was passed by delegates representing architects, surveyors, civil engineers, town planners, and clerks of works in all parts of the country at the Annual General Meeting of the ABT held recently. It goes on to say:—

"Furthermore the meeting is of the opinion

that the threatened continuation of the present cost limits in a period of rapidly rising costs must, if it is maintained, result in a serious fall in building or planning standards, or both.

"Finally, this meeting points out that the achievement of even the revised programmes now to be authorized is entirely dependent on an adequate supply of building labour and materials, particularly steel, lack of which is bringing the civil building programme nearly to a standstill. This meeting, therefore, calls upon the Government to recognize the fundamental importance of education to the wealth and well being of this country and to withdraw the cuts now proposed and increase the amount spent on education to compensate for increased costs."

The meeting also passed a resolution "protesting strongly at the cuts in housing standards announced by the Government"; it also fully endorsed the action and recent statement of its executive committee on the same subject which had been sent to the Prime Minister and the Minister of Housing and Local Government.

## MOW

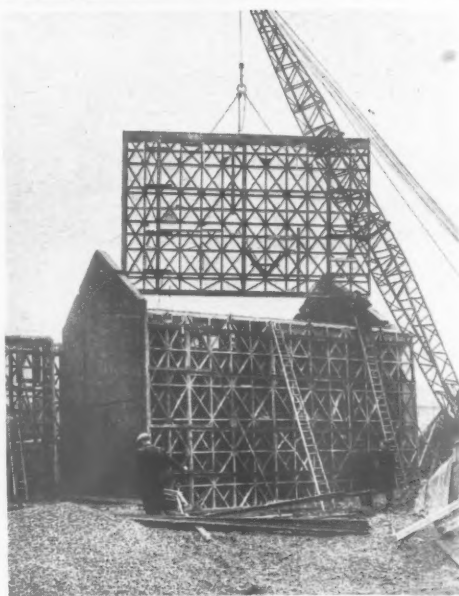
### Minister Speaks on Controls

"People are beginning to ask whether the licensing system could now be removed," said David Eccles, Minister of Works, when he spoke recently at a dinner of the Wiltshire Federation of Building Trade Employees, at Chippenham. "It is always right," he said, "to re-examine this question because men so easily become accustomed to controls and after a time forget what freedom was like. Indeed the whole system of building licensing does more than slow up work; it puts temptations in our way and has strained human nature; it means that the Ministry has to employ building policemen in the form of licensing officers and inspectors. In short, while licences may be essential for Government policy, they are without doubt bad for the citizen's character. It is therefore a good thing constantly to study the possibilities of easing or removing these controls."

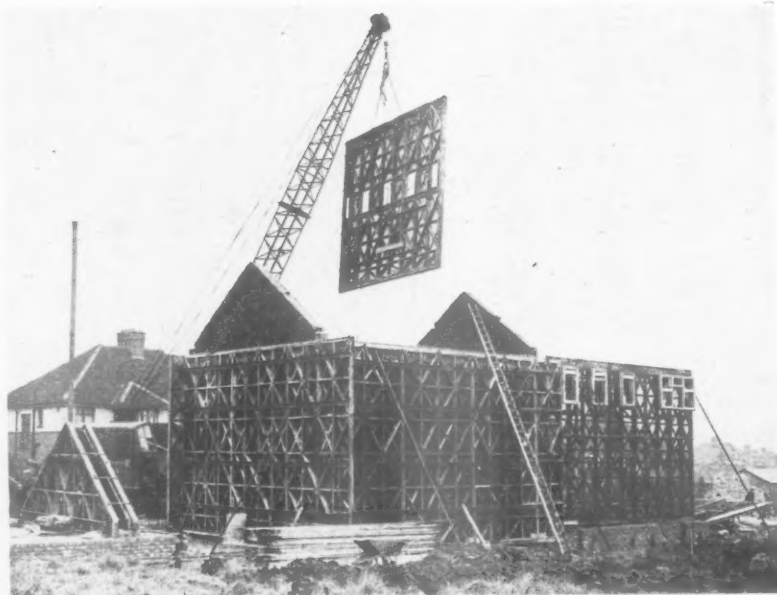
"I think you will want to know whether a Conservative Government is acting differently and on sounder principles than the Socialists. Take first, building on Government account; here we have a temporary demand from the defence programme—it is a large volume of work but we must do it. I would tell you this: that we found great opportunities to make economies in the work for defence which the Socialists had put down on paper as essential. Mr. Churchill brought out his famous comb and removed the extravagant and unnecessary frills in this programme. But in spite of this much essential work remains to be done for the Armed Services, and on civil account we must press on with power stations, building for coal and steel, factories and of course homes for the people. Our plan is therefore a stiff budget and increases in the interest rate to reduce some of the demands from private building owners. You will get a benefit from the high rate of money which I know is a matter of great concern to the building industry. It will, though it makes things more expensive and difficult, bring nearer the time when I can remove licensing."

"Our plan is to keep building on Government account to a figure which we know the industry can do and, as it were, to transfer housing into the sector which does not have a fixed ceiling and is not therefore kept down by Government controls. When we have done what the Government must get done on military and civil work, then the amount of houses that you build will depend on the resources that you find available and the use you make of them. This is really a challenge to the power of the industry to expand."

## EIGHT "NO FINES" CONCRETE

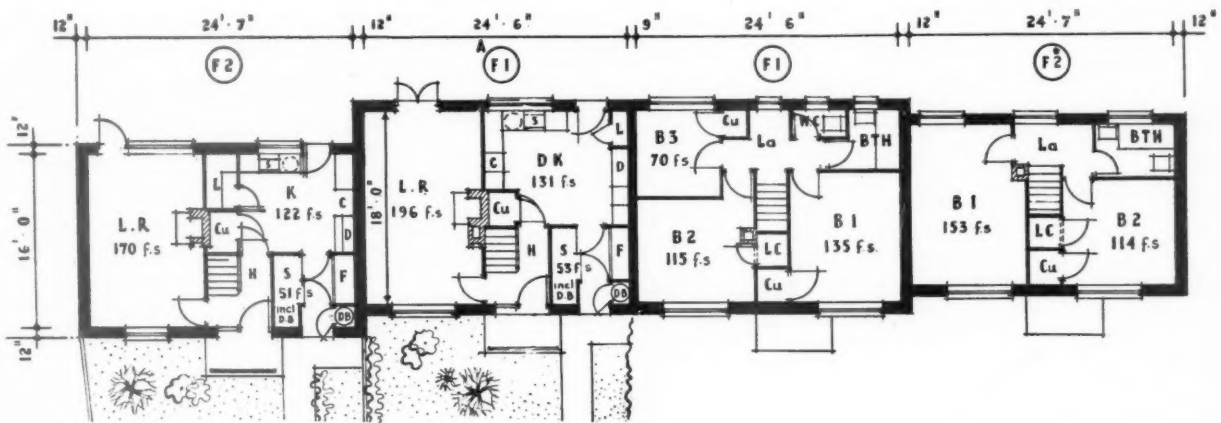


Eight demonstration houses at Eastcote, Middlesex, constructed by George Wimpey & Co. Ltd. by their "no fines" system, were opened on March 7 by the Minister of Housing and Local Government—less than two months after they were started. Six of the houses form a terrace and are based on MOHLG designs F1 and F2. (Plans on opposite page.) The other two houses are semi-detached. Shuttering for the "no fines" concrete (seen left and below)

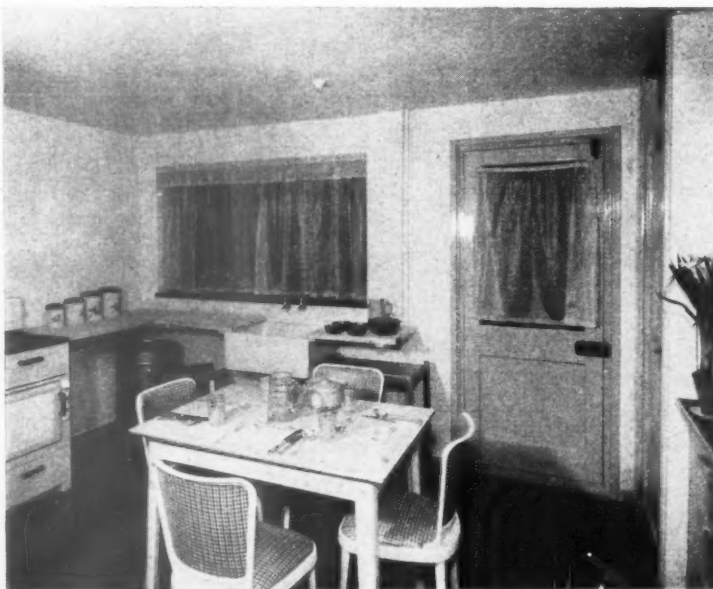




## DEMONSTRATION HOUSES AT EASTCOTE, MIDDLESEX

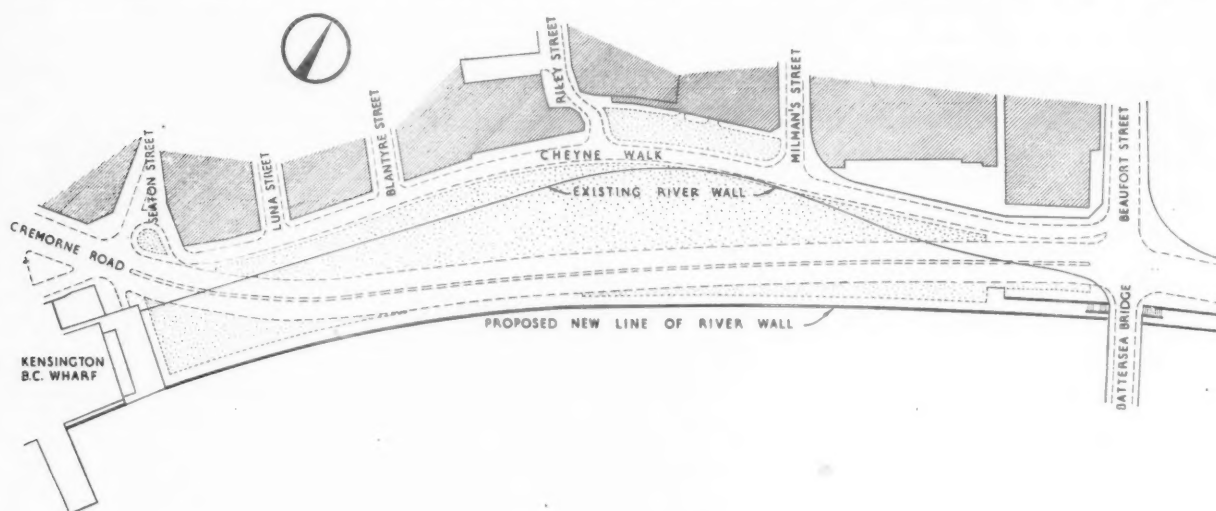


is full house height and consists of timber framing faced with metal mesh. External walls are 12 in. thick, the concrete being poured from a hopper at eaves level. The hopper is filled by crane. By this method a pair of houses can be poured in a day and the shuttering moved on to the next pair the following day. The roof is erected next so that tradesmen can work under cover. Built in lots of 100 or more, these houses would cost (in Eastcote) : £1,320 for the 2-bedroom end house, £1,350 for the 3-bedroom intermediate house and £1,330 for the 3-bedroom semi-detached house. The furnishing of the demonstration houses, seen right and below, was carried out by Druce & Co. Ltd. See page 403 for the Technical Editor's comments on "no fines" concrete construction.

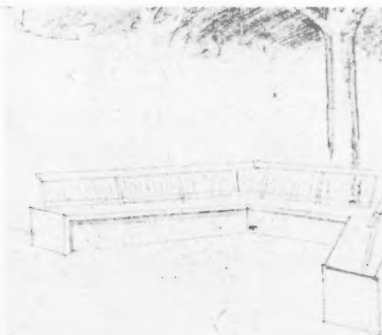
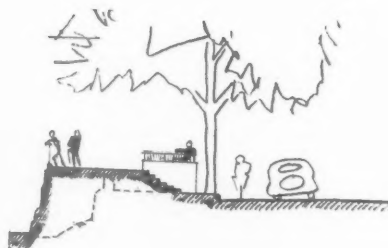
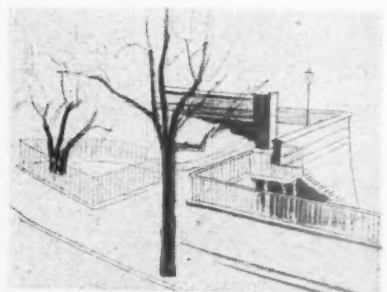
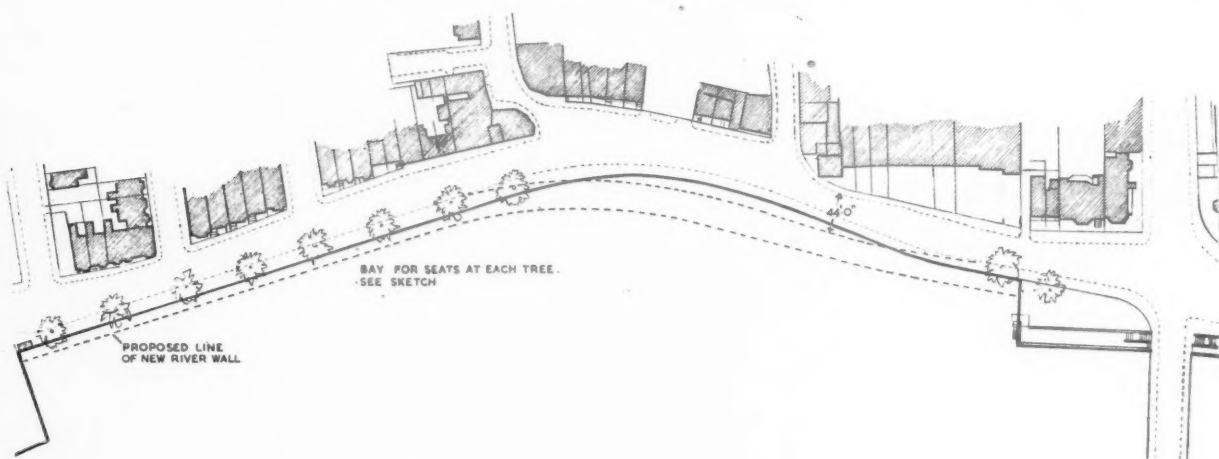




CHELSEA WATERFRONT: BOROUGH COUNCIL'S RE-BUILDING SCHEME....



... AND A NON-DESTRUCTIVE ALTERNATIVE



The scheme (top) to rebuild the river-side embankment at Cheyne Walk has been approved in principle by Chelsea BC. The alternative scheme (left and below), prepared for the Chelsea Society by James Ellis shows that the necessary rebuilding of the river wall can be carried out, together with road widening, without destroying the charm of this bay (picture, page 384). Extreme left: top and bottom, end of embankment west of Battersea Bridge as existing and as replanned with link to new wall. Left: top, section showing maximum height of new embankment above road; bottom, one of seat bays.



*Now that private building is being encouraged many architects will be wondering how much money they will have to allow for development charge when preparing a budget for a group of houses. The author of this article tells how rough assessment can be made.*

## ERNEST WATKINS

### Development Charges

There must be times, now, when the thoughts of every architect in private practice turn idly to the moment when a client will say: "I've a mind to build a dozen houses, for sale. What can we do it for?" It is no longer impossible. Not every local authority is determined to prevent the building of any house which saves the community the cost of a subsidy. The Droitwich Council, to name but one, believes in encouraging private building and has been given permission to buy land which it intends to sell to people who wish to build their own houses. So, when the moment has come and when the first sketches are on the pad, the pencil must move on to a budget. One of the headings in that budget will be Development Charge. What should one allow for that?

There are, of course, a number of building operations which escape the development charge. It may not be necessary to obtain planning permission in the first place. The new building may be a replacement of a former one and of the same cubic content, plus the permitted tolerances. The operation may be specially exempt from development charge liability, as, for instance, fencing or agricultural building. The land may be dead-ripe and the owner hold the necessary certificate. But, let us assume that a client owns five acres of unbuilt-on land, on which no house ever stood before; that the land has a reasonable main road frontage, and that the services can be made available without too much difficulty. What is his position over the development charge?

First, let us make sure we know what

the development charge is. It arises only when planning permission is given; it is the element of additional value given to the land covered by the fact that the permission is now a reality, no longer a hope. To quote the words of Section 70 of the 1947 Act, the Central Land Board must determine "the amount by which the value of the land with the benefit of planning permission . . . exceeds the value it would have without the benefit of such permission." The crucial word is "value" and the valuation of land is an art, not a science. It is not entirely a matter of arithmetical calculations.

### "CONSENT" AND "REFUSAL" VALUES

What is the "value" this section seems to contemplate? In effect, the building owner has to find two values, which, in Central Land Board parlance, are called the "consent" value and the "refusal" value, meaning the value with the permission and the value without the permission. But the use of the word "refusal" is misleading. It must be obvious that the value of land for which permission to develop has been given is likely to be greater than the value of that land when the question of permission is still open. But the Board is not entitled to start its initial valuation for development charge purposes on the assumption that permission has been refused. That would produce an unjustifiably low figure. The first value might better be called the "absence of consent" value and the later the "with consent" value. If they differ, and the "with consent" value is the higher, the gap between them is, roughly, the development charge figure. In our hypothetical case the "with consent" value is likely to be the higher.

A useful definition of the meaning of the word "value" comes from a Scottish case. In the words of the Scottish judge, "value," unadorned and unqualified, means exchangeable value, "the price which the subject will bring when exposed to the test of competition." That may be amplified by a quotation from a Privy Council decision, given by the Land Board itself in its Practice Notes (Para. 37): "The (computation) must be determined by reference to the price which a willing vendor might reasonably expect to get from a willing purchaser. . . . Neither must be considered as acting under compulsion." For development charge purposes this willing vendor is deemed to be selling a piece of freehold land with possession. He is willing to let it go to any purchaser who will pay what he regards as the market price. If he cannot get that price, then, by assumption, he is content to keep the land and whatever benefit he gets from it under its existing use.

Equally, the purchaser is free from

compulsion. True, he is interested. He has obtained planning permission for his chosen scheme of development. But, while the grant of the permission binds the person to whom it is given to carry out the work in the one way when he starts, it does not compel him to make a start. If the price of the land is too high, he may decide that his expectation of benefit has become too remote and drop the project.

That is the theory and it must be stated in that way because it must be applied to each actual case on the merits and circumstances of that case. For the purposes of valuation, each parcel of land is unique. It may have similarities to other land. It is bound to have differences, if only in its map reference (which affects its accessibility, if nothing else). In short, there are not, nor can there be, any set of tables giving the development charges for the Counties of X, Y or Z. The only possible test is that of the "exchangeability" of the land, the market value, and that inevitably lets in a whole range of factors, from the Government's monetary policy to the state of the Korean war, that have no direct connection with land at all.

But, it may be argued, the District Valuers who assess the development charge are at this moment engaged on valuations for alleged losses of development rights. Surely the two sets of valuations could be married? Our imaginary client may have bought the five acres of land before 1948, when the 1947 Act came into operation. In that case he has probably lodged a claim for compensation from the Fund for the rights he lost on July 1, 1948. If he bought the land since then, he was probably told what the claim was when his purchase went through and he may well have taken an assignment of the former owner's rights on the Fund. He may well be able to say what the District Valuer thinks the lost development rights are worth.

### PRESENT DAY VALUES

It is true that this figure may provide a clue to the development charge, but it can do no more, for these reasons. The development value calculations must be made on the basis of the land, and its attendant circumstances, as they were on the date fixed by the Act for the assessment, January 7, 1947. Then, the prospects for private development were remote, certainly more remote than now. During the five years since then there may have been development in the area of this land, which will inevitably (in the opinion of the District Valuer, that is) have advanced the chance of development for your client's land. It is that which the District Valuer must assess in fixing the development charge, the situation as it stands today.

Yet it must also be remembered that the District Valuer, the antagonist over

assessments, will be well armed with figures. In his official capacity, he receives (a) details of all sales and purchases of land in his district (these come to him because this information must be given to the Inland Revenue when conveyances of land are stamped); (b) details of all land passing on death, for he is required to advise the Inland Revenue on the value of the property for death duty purposes; (c) details of all holdings and occupancies, under the 1948 Act provisions for the new rating assessments and (d) details of all the claims for loss of development rights, for he is the valuer to the Central Land Board in that. Further, he will be aware that, while his determinations of values for loss of development rights are subject to appeal to the Land Tribunals, there is no appeal to any independent tribunal in respect of his determination of the development charge.

#### ROUGH ASSESSMENT OF DEVELOPMENT CHARGE

All these seem to lead back to the centre of the maze. Is there no way in which an architect, not primarily a valuer, can arrive even at an approximate figure for the development charge entry in his draft list of costs? There are ways, provided they are accepted as no more than rule-of-thumb methods.

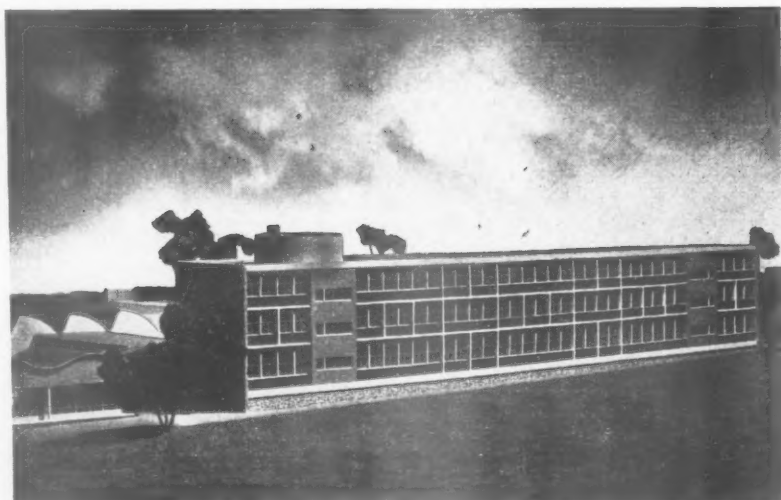
First, there is a comparison of the totals of development charge levied during the year with the total of those cases where an assessment was made, based on the annual reports of the Central Land Board. In 1949, the Board collected £2,084,616 from 16,511 cases, an average of £126 per case. In 1950, the figures were £3,159,492 and 14,992, but, so the Board said, two exceptional cases produced more than £250,000 between them. Making an adjustment, therefore, the 1950 average was £193 per case. That is one guide. A guide to the range of "absence of consent" values can be found in the reports of the cases coming before the Land Tribunals, mainly cases of dispute over compensation on compulsory purchase or the assessment of development rights. The following come from reports over the second half of last year:—"Arable land at Oakley, Beds (described as good market land in the Ouse valley), £150 per acre. Agricultural land at Haltwhistle, Northumberland, £40 per acre. Pasture land at Chew Magna, Somerset, £165 per acre. Site of war-demolished houses in suburban Middlesex, £15 per foot frontage, £7 10s. per foot for adjoining land suitable for garden space."

A well-tried method of valuation is the residual method, which has the advantage, from the non-professional point of view, of starting from the assumed value of the land when the development is complete. From this estimated figure, deductions are made for the total cost of the development, fees, loss of interest

#### PROPOSED SECONDARY MODERN SCHOOL



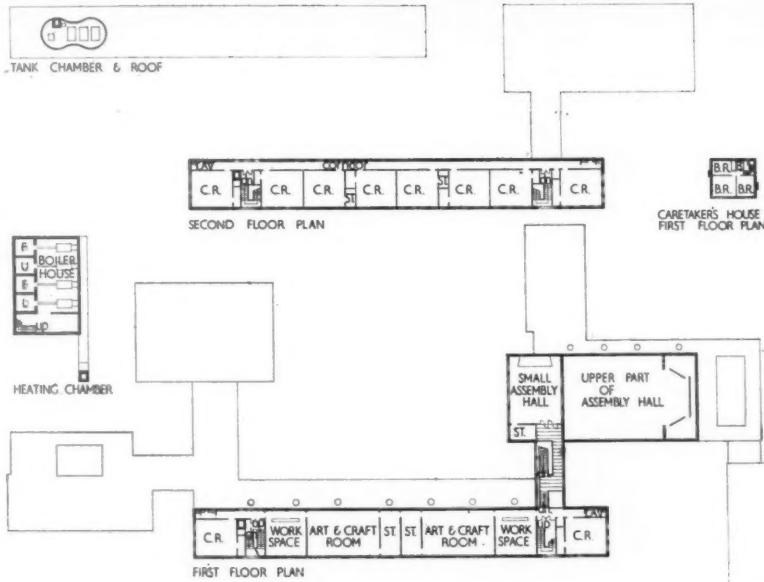
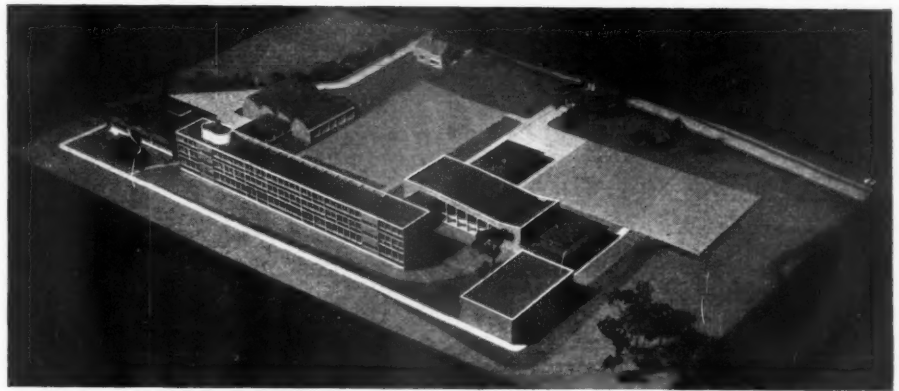
The four-form entry secondary modern school illustrated on this and the following two pages has been designed by Gollins, Melvin and Partners in association with W. G. Davies, the City Architect of Sheffield. The site, which is approximately square, lies on high ground to the south and some two miles from the centre of the city and is developed at present as a playing field area. The siting of the school near the East Bank Road ensures an uninterrupted outlook to the south over its own playing fields and a reasonably short approach road. The south aspect of the main teaching rooms allows a wide view over the surrounding country. In planning the school the architects had to make provision for adequate modern workshops, a dining room which could be divided into three classrooms, a changing room centrally placed for the gymnasium and assembly hall, both of which will be used for gymnastics, a library planned en suite with the division room and one large classroom, a science laboratory, also adjoining one of the larger classrooms, and art and craft rooms planned adjacent to a workroom. In order to ensure that the cost will be within the MOE ceiling figure a closely knit plan with minimum circulation space was chosen and all the classrooms, together with the laboratory, library and art and craft rooms will be in a three-storey block served by two staircases. There is no corridor on the first floor as access to



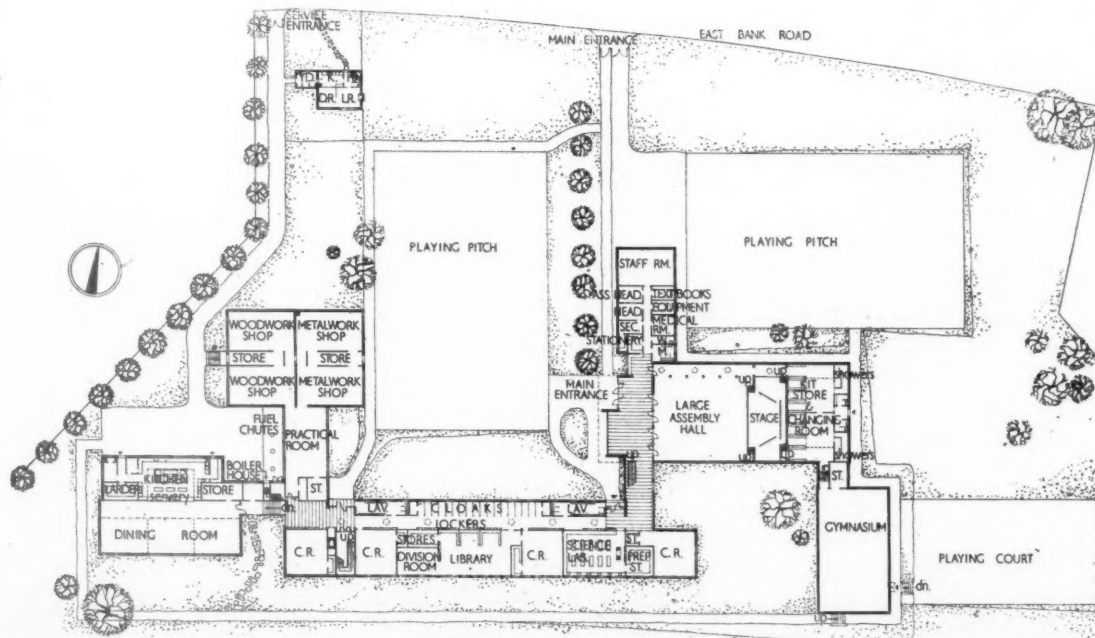


## AT HURLFIELD, SHEFFIELD BY GOLLINS, MELVIN AND PARTNERS

the practical rooms can be gained direct from the staircases. All teaching rooms will have cross ventilation and cross lighting, either by clerestory or top-lights. It will be possible to increase the seating capacity of the large assembly hall at ground floor level by adding the area of the main entrance hall and corridor on the north, and at first floor



Upper floors and basement plans

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

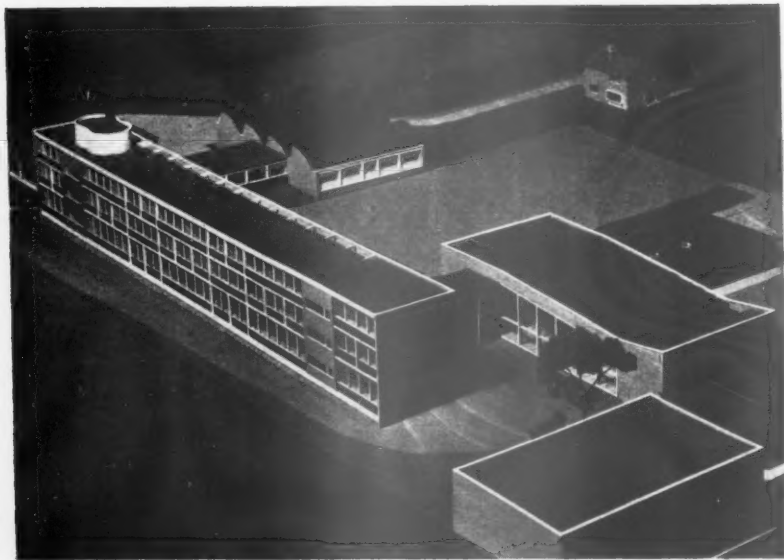
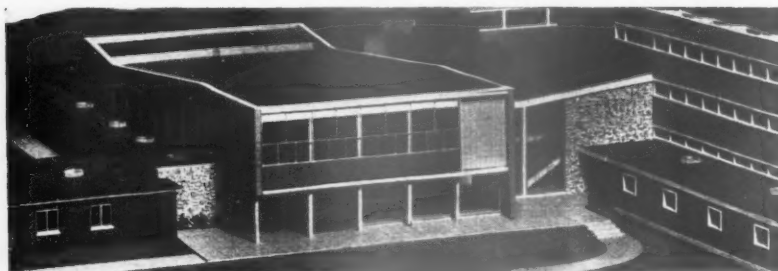
level by using the small hall as a gallery. The wood and metal workshops, which are planned as a light factory structure, share the same service yard as the kitchen and boiler house, as they will also require approach by vehicles. It was required that the school should be designed in a traditional form of construction and the facing material is, therefore, generally brick and the large and small assembly halls, entrance hall and three-storey teaching block will have a steel



## PROPOSED SCHOOL AT SHEFFIELD (continued)



framework of standard sections. The photographs of the model show a view from the south-east (top) and the classroom wing looking north-east (bottom) on page 392, a view looking north-west on page 393, a night view looking north-east, above, a close-up of the assembly hall and main entrance, below, and another view looking north-west, bottom, with the main teaching block on the left.



and an allowance for risk and profit. The resulting figure, when compared with the "absence of consent" value of the land, gives an approximation of what the development charge should be. It has the advantage that it is directed to obtain the very figure that the development charge is intended to represent, which is the residual value accruing to the land after the cost, and profit, arising from the development operations themselves, the building, are eliminated.

## METHOD OF DEVELOPMENT

Naturally, something will depend on the method by which the architect and his client plan to develop the site. It is obvious that permission to build ten houses to an acre of land will attract a higher development charge than would permission for no more than two to the acre. As a rule, the Central Land Board (according to its Practice Notes, para. 65) does not take the size of the projected garden into account when assessing the development charge on the building operations themselves. Where only two houses to the acre are being built, it would be possible to argue that a part of each "curtilage" remained agricultural land and therefore not changed in use.

Development charge can be thought of as a net figure, having a relationship to the balance remaining after the cost of the whole operation plus the original value of the land when undeveloped is deducted from the value of the completed project. While the cost of site operations needed for two houses to the acre might not be very high, the cost of those operations for a five-house project on that land might be almost as much as those required for a ten-house project. As the cost of the works per house rises, so the development charge per house tends to fall, and, in any case, the charge would be borne by each of ten houses, not by each of five. Subject to this consideration, in general the development charge will be related to a product of the number of individual house plots, not to the total acreage involved.

If you are content with a rough guess at the development charge likely to be levied on each plot of land in a normal suburban housing project (say, of 50-ft. frontage and 200-ft. depth) take the average figures from the Central Land Board's reports, strike a mean between 1949 and 1950 (to allow for the probability that there was a greater weighting of industrial development in 1950), which gives a starting figure of £160. Add £10 for a possible improvement in market values for building land generally on the prospect of greater freedom for private house building, and another £5 to cover contingencies and to make some allowance for the depreciation in the value of money. The result is £175, which at least provides a figure for the first pencilled budget.

## PRIMARY SCHOOL

at WELWYN GARDEN CITY, HERTFORDSHIRE

County Architect, C. H. ASLIN

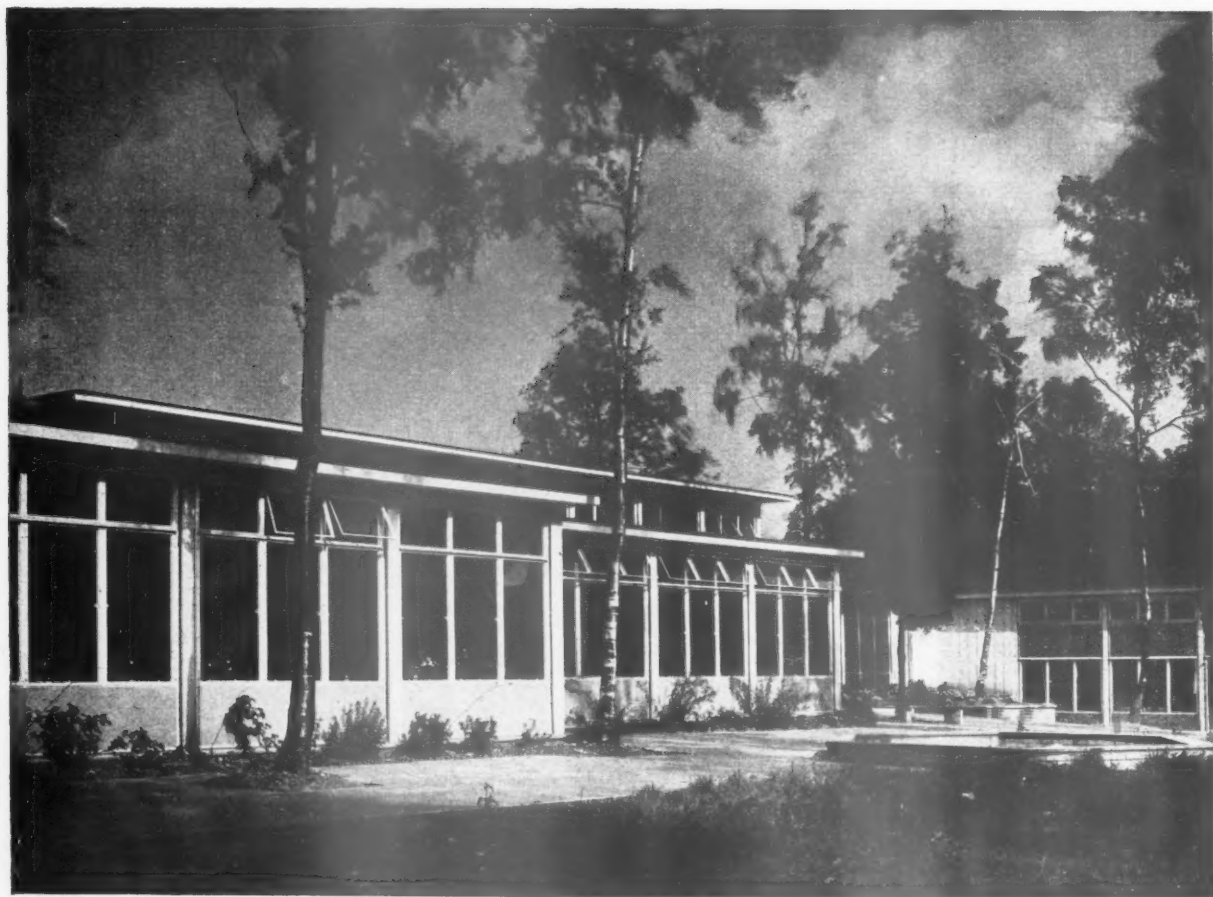
Deputy County Architects, W. E. TATTON BROWN and G. C. FARDELL

Principal Assistant Architect, J. T. REDPATH. Architect-in-charge, A. W. C. BARR

The Templewood junior mixed and infants' school in Pentley Park, Welwyn Garden City has just been awarded the bronze medal of the Essex, Cambridgeshire and Hertfordshire Society of Architects as the best building in these counties to be completed during the period 1949-1951. This one-form entry school (to accommodate 200 juniors and 120 infants), a typical example of work designed in 1949, is to be followed next week by an illustrated article showing the latest developments in the planning and construction of primary schools in Hertfordshire.

*Looking north at the junior teaching wing.*





**SITE.**—The site has a steep fall towards the north. About one-third of it consisted of woods, mainly birch and hornbeam. The school is sited along the contours, with kitchen, dining room and boiler house at a lower level. Infants' classrooms are in the woods, facing south-east. Junior classrooms face south-west but have south-east corner windows. All important rooms are away from the road and

the most has been made of views of the woods. The junior hard play-pitch is placed against existing woods, above eye-level from the school, with distant views to the north over the school. The infants' play areas are in clearings between birch trees. The exact location of the school was determined by two large oaks and a fir which have been retained within a few feet of the building.

## PRIMARY SCHOOL

at WELWYN GARDEN CITY,  
HERTS

County Architect, C. H. ASLIN

*Above, infants' classrooms and assembly hall behind, with dining room on the right. Right, junior classrooms seen from the assembly hall, looking to the north.*

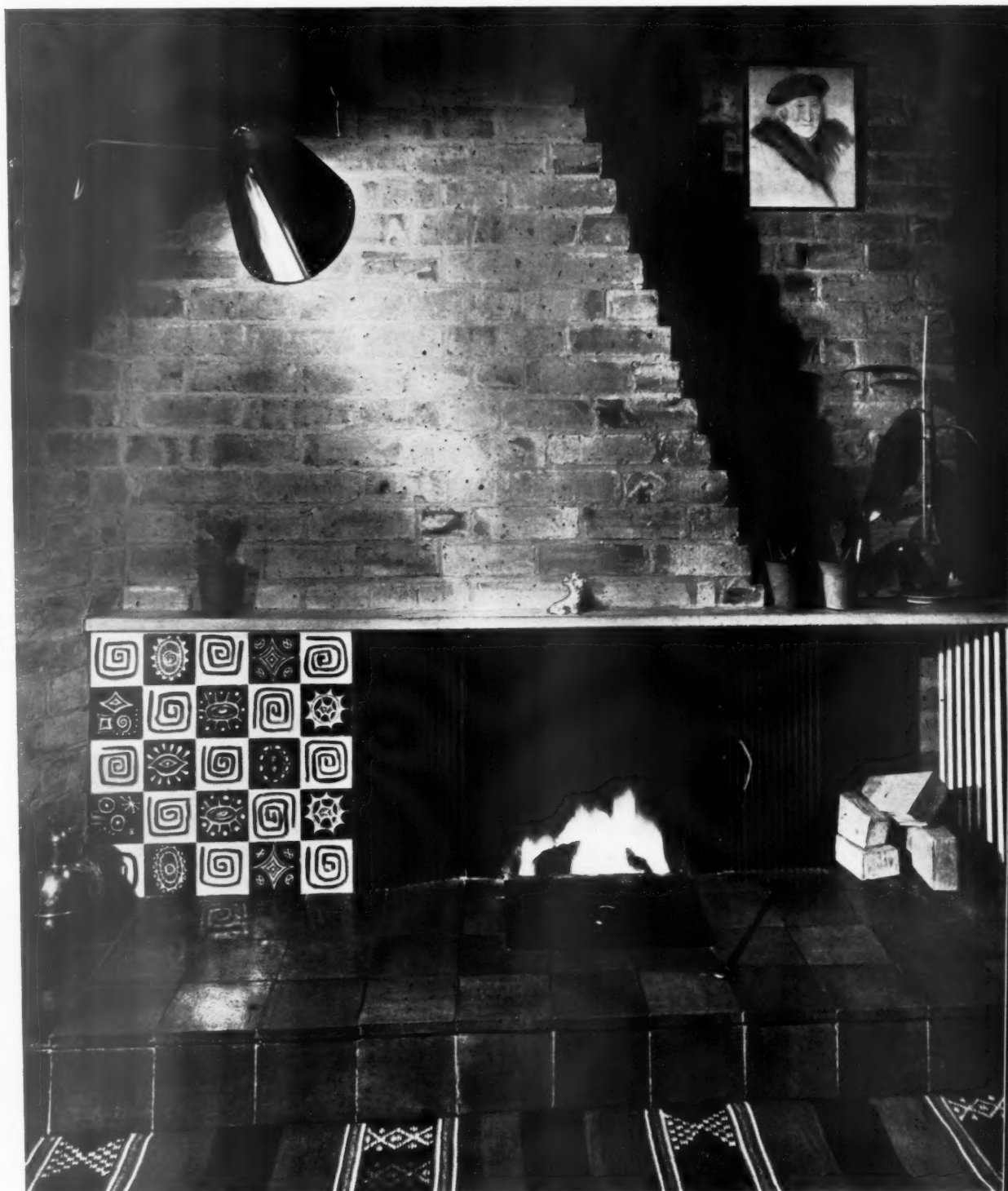


## WORKING DETAIL

HEATING : 4

FIREPLACE : HOUSE AT WELWYN GARDEN CITY

*Architects' Co-operative Partnership, architects. (Decorative tiles designed by Fred Millett)*



*In addition to radiant heat the fire provides heat by convection, the hot air passing into the living room through an air brick under the mantelshelf.*

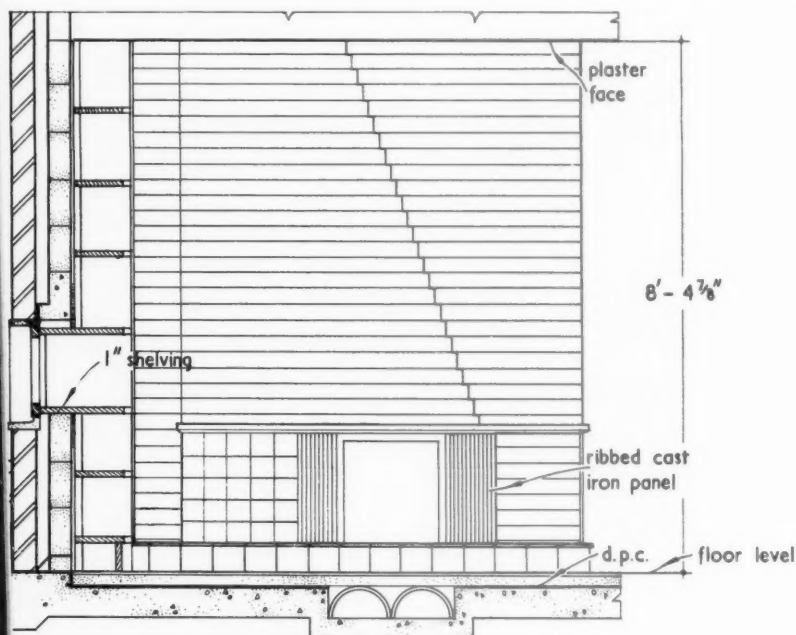


## WORKING DETAIL

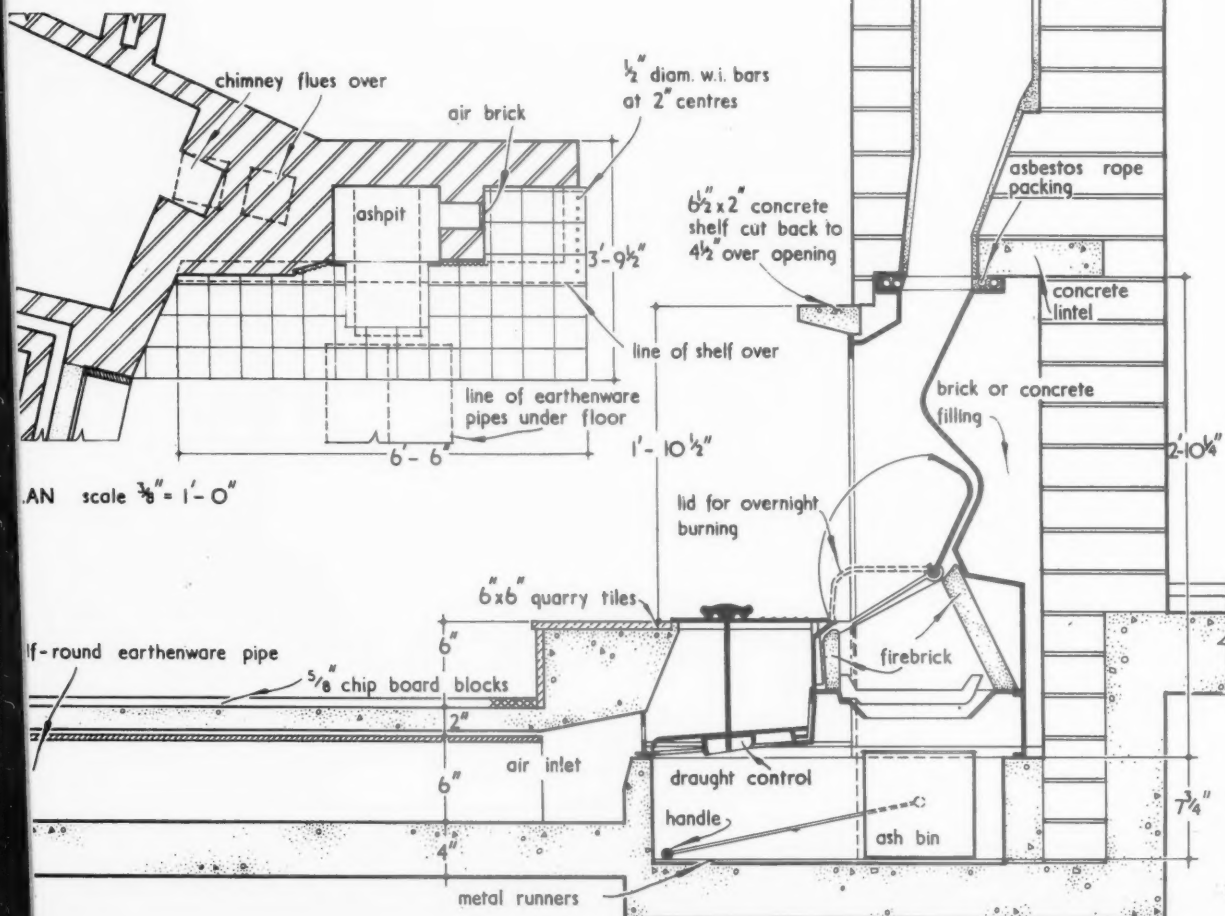
HEATING : 4

FIREPLACE: HOUSE AT WELWYN GARDEN CITY

Architects' Co-operative Partnership, architects. (Decorative tiles designed by Fred Millet)



ELEVATION OF FIREPLACE



AN scale 3/8" = 1' - 0"

TION THROUGH FIREPLACE scale 1" = 1' - 0"

## WORKING DETAIL

## FURNITURE AND FITTINGS : 16

DRAWING TABLES: DEPARTMENT OF CIVIC DESIGN, UNIVERSITY OF LIVERPOOL

*R. D. Russell in collaboration with John Broadbent, designers; Gordon Stephenson, architect, and Norman Kingham, assistant architect, for the University Building*



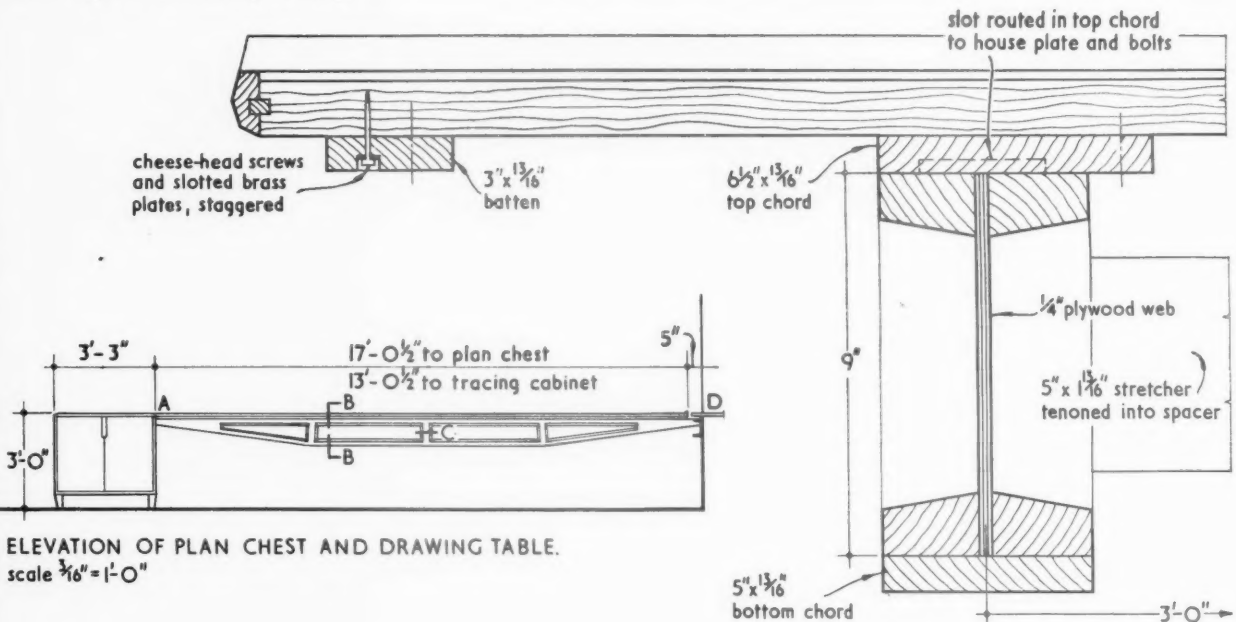
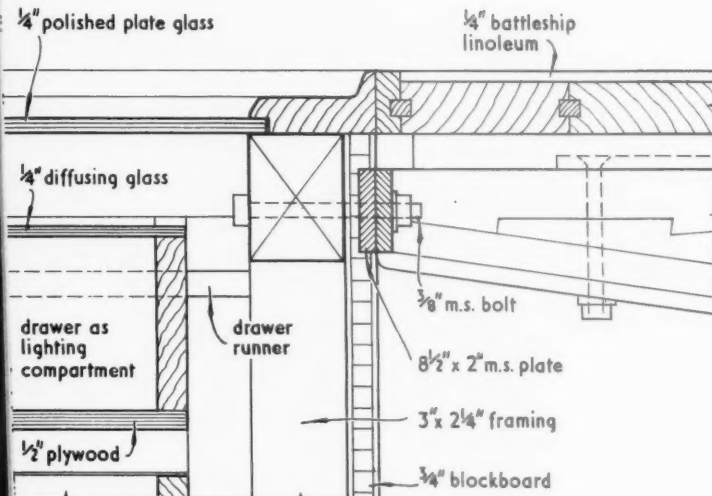
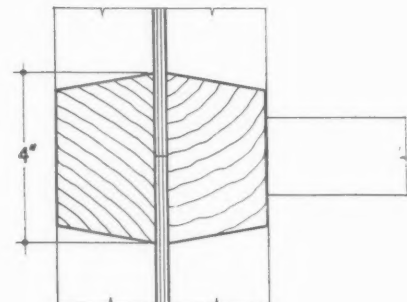
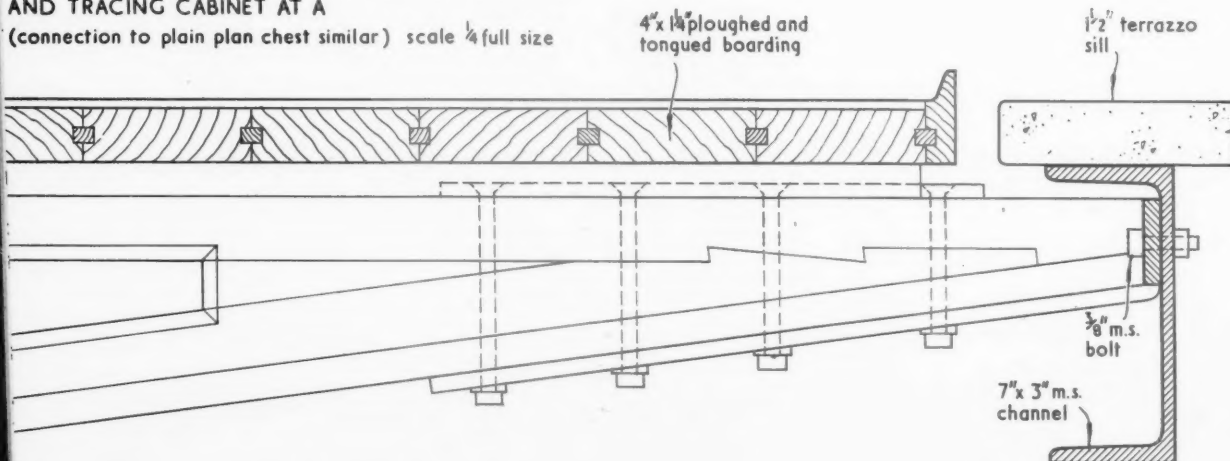
*The long drawing tables, supported at their ends only, have been designed to carry a load of 70 lb./sq. ft.*

## WORKING DETAIL

## FURNITURE AND FITTINGS : 16

DRAWING TABLES: DEPARTMENT OF CIVIC DESIGN, UNIVERSITY OF LIVERPOOL

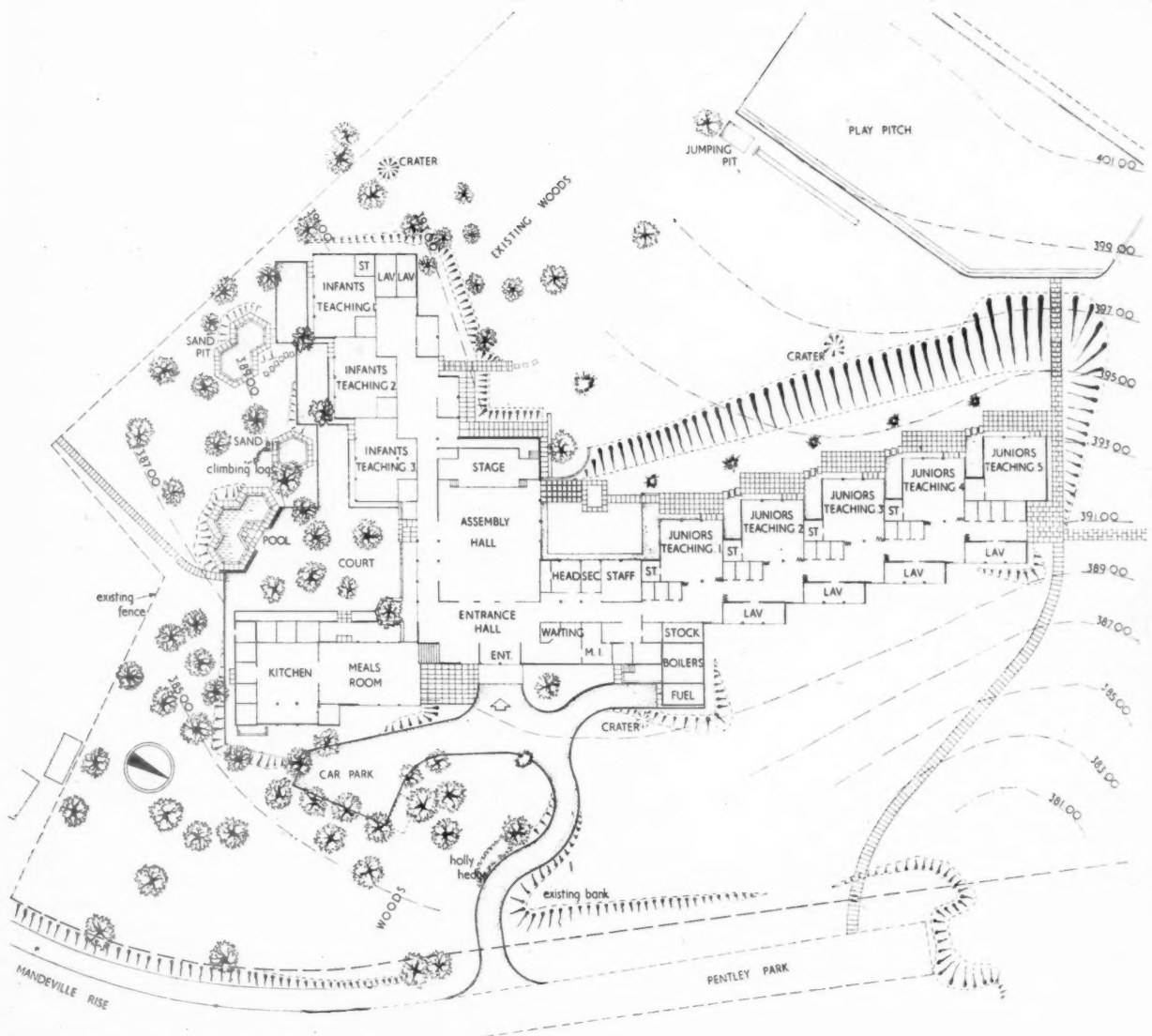
R. D. Russell in collaboration with John Broadbent, designers; Gordon Stephenson, architect, and Norman Kingham, assistant architect, for the University Building

ELEVATION OF PLAN CHEST AND DRAWING TABLE.  
scale 3/16" = 1'-0"CROSS SECTION THRO' DRAWING  
TABLE AT B-B. scale 1/4 full sizeDETAIL OF CONNECTION TO COMBINED PLAN CHEST  
AND TRACING CABINET AT A  
(connection to plain plan chest similar) scale 1/4 full sizePLAN THRO' SPACER AT C  
scale 1/4 full sizeDETAIL OF CONNECTION TO WALL AT D.  
scale 1/4 full size

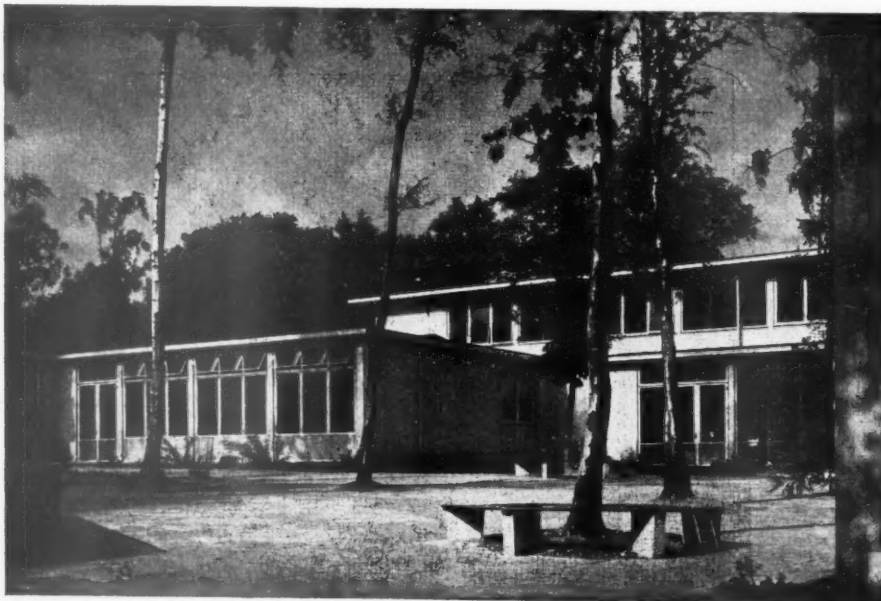




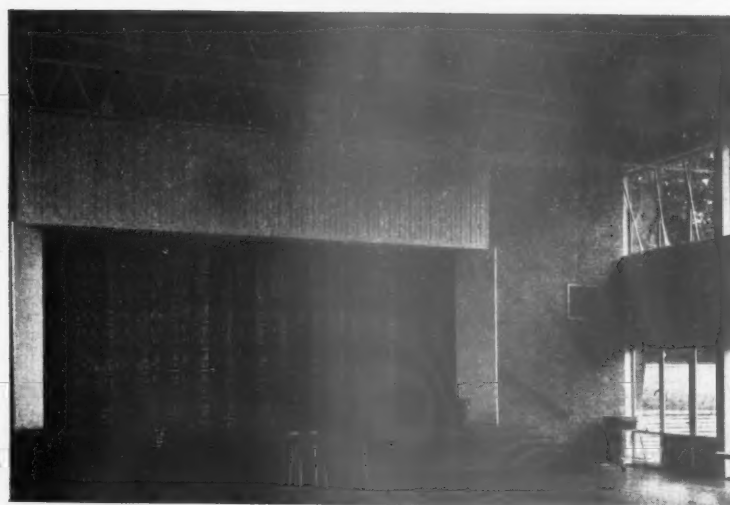




Site and ground floor plan [Scale:  $\frac{1}{4}'' = 1' 0''$ ]



Left, infants' play court and classroom 3 with the assembly hall behind.



## PRIMARY SCHOOL

at WELWYN GARDEN CITY, HERTS  
County Architect, C. H. ASLIN

**PLAN.**—The entrance hall forms a focal link between assembly hall, dining room and waiting space (used as library). This was the first Hertford school to use the corridor for teaching purposes. The corridor serving the junior wing is planned as a series of "extension-spaces" (containing sinks, work benches, etc.) to the classrooms, which are divided from these spaces by folding and sliding partitions. Further sets of sliding partitions subdivide the corridor laterally. The Headmaster says that this idea works well in practice, and that it is not difficult to arrange time-tables so that there is no cross-traffic down the corridor during periods when the "extension-spaces" are in use (in spite of the fact that the hall itself is used for every period every day of the week). Junior classrooms are 12 ft.

high with clerestory windows on three sides and have exposed wood-wool ceilings to reduce sound reverberation. Infant classrooms are only 8 ft. high with top lights in the recessed back area.

**CONSTRUCTION.**—Light galvanized steel frame with only three sizes of columns and four sizes of beams, on 3-ft. 3-in. two-way grid. Pre-cast concrete vertical wall cladding with *in situ* wood-wool wall-linings and partitions pre-cast concrete roof slabs, with vermiculite screed and bituminous felt covering. Thermoplastic tiled floor on screed on 4½-in. site slab.

**FINISHES.**—*In situ* plaster on wood-wool partitions, fibrous plaster casings to stanchions and beams (where not exposed). Ceilings: fibre-board up to 8 ft. 4 in. level, wood-wool in higher rooms. Ceilings distempered, walls painted. Walls of strong primary colours (eggshell glaze) have been used throughout the building, contrasting with the predominant white walls, white ceilings and neutral floors. Columns and beams, grey (gloss); windows, white. Contrary to previous Hertford practice strong colours have also been used in some classrooms (on the sliding partitions, up to door head level) in order to provide the strongest visual link between these rooms and their associated "extension-space," the cross-walls of which are painted in the same colours. (These five classrooms are respectively yellow, red,

*Top left, mural (showing scenes from the life of St. Nicholas) on the north wall of the dining hall. Above, left, the assembly hall stage. Below, cloaks and classroom extension space in the junior wing.*



*Above, junior assembly hall entrance mural beyond*



*Above right, south-west corner window of junior classroom 3, looking towards the assembly hall. Below, view from the entrance hall, showing the assembly hall, mural, staff rooms and junior corridor beyond recessed aquarium.*



green, blue and violet—and a pleasant view along the junior corridor, through these “extension-spaces,” is achieved.) Central area colours: based on the dominant colours in the assembly hall stage curtain—vermillion (used for wood-wool ceiling) and bottle-green (for lower wall panels). The hall has a honey-coloured wood floor of Swedish “built-up” boards. Two large murals in the entrance hall and one in the dining room are by Pat Tew.

Bright colour (synthetic emulsion paint) was used on concrete cladding blocks on the return faces of the elevation facing the road.

**COST.**—Price per cu. ft.: 4s. 3½d. Estimated final cost: £65,000, including abnormal site works. The general contractors were C. Miskin & Sons, Ltd. For sub-contractors, see page 410.



## SHOP

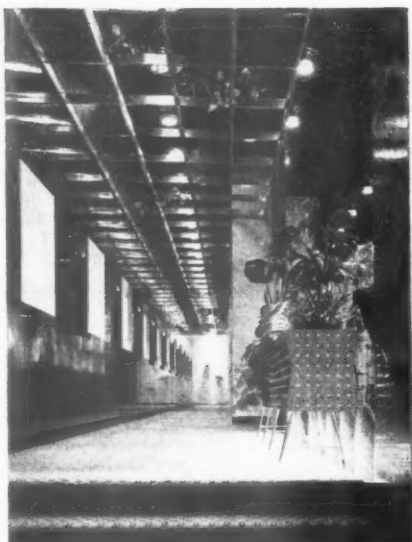
in OLD BOND STREET, LONDON, W.1

designed by ELLIS E. SOMAKE

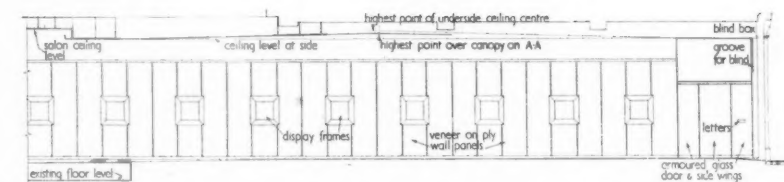
The architect was asked to design a high-grade ladies' shoe salon with an atmosphere of richness and elegance. A study was made of other stores and their frontages in Old Bond Street, and the strictly contemporary design of the shoe salon was intended to relate to their mood without being in any way imitative of their general style.

*The show window and display area seen from Bond Street.*

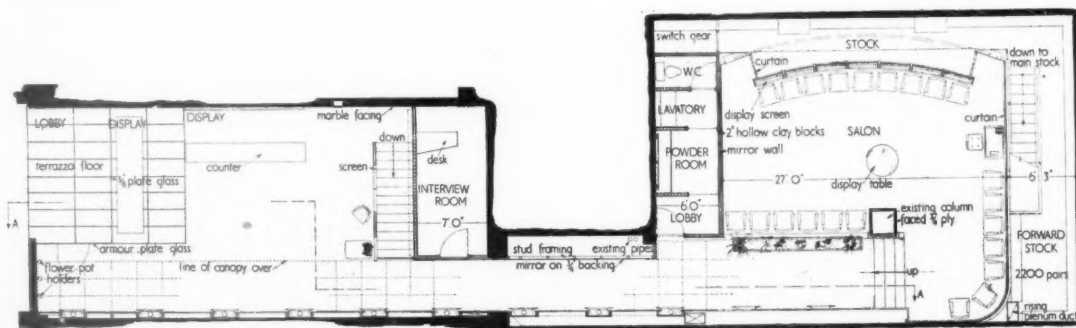




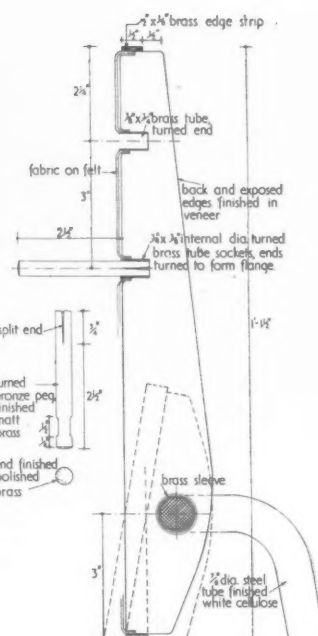
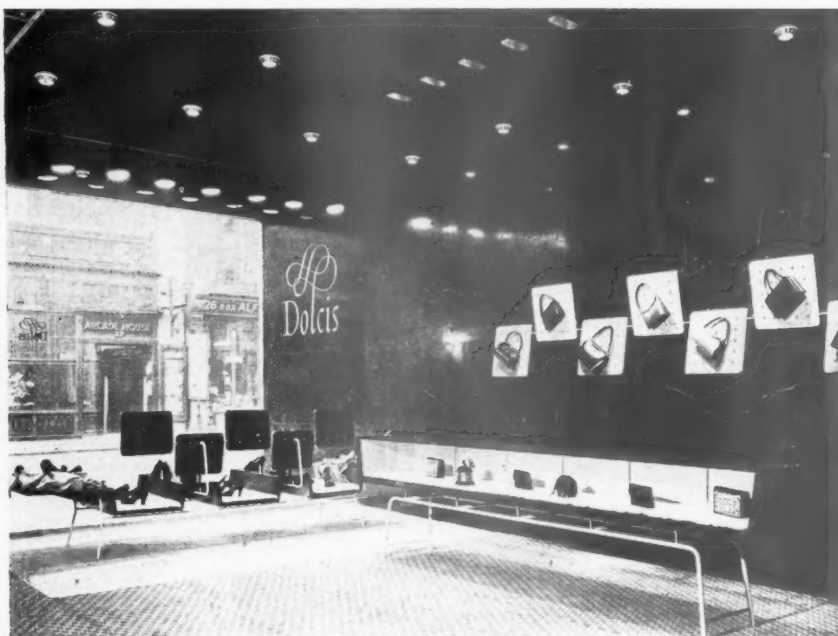
Above, the salon, looking towards the mirror wall. Top left, the connecting link looking towards the display area. Above, left, the salon, with existing column on the left.



Section A-A



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

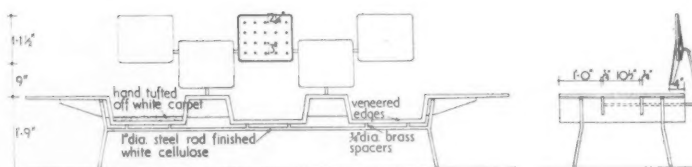


Part section of display unit (Scale: 3" = 1' 0")

## SHOP

in OLD BOND STREET, LONDON, W.1

designed by ELLIS E. SOMAKE



Elevation and cross section of display unit (Scale: 1/4" = 1' 0")

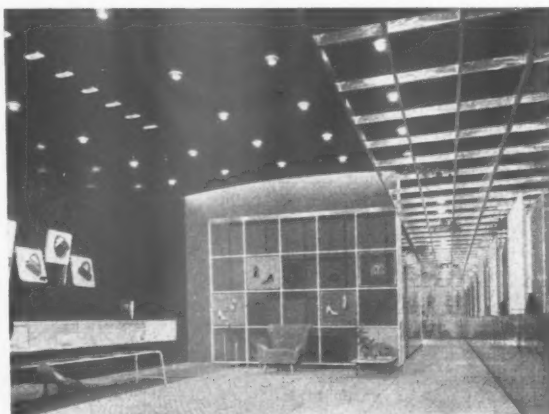
**SITE.**—The property, which is situated close to the Burlington Arcade, has a ground floor divided into two almost equal parts by a staircase and lift, leaving a connecting link 20 ft. long, 5 ft. wide and 13 ft. high. In addition, there is a drop of about 2 ft. in the rear portion, which is used as the main sales area, and the increased height is used to give a vertical emphasis to the design.

**FINISHES.**—Verd antique marble slabs are used as a facing for the vertical fascia on which is incised the company's new insignia designed by Reynolds Stone. The same marble is used for the entire length of the left hand wall of the lobby and display area. The lobby has a floor of travertine terrazzo and a false ceiling which contains an aluminium venetian blind. In order to correct the proportions of the narrow link an open grid is suspended overhead and one wall is completely covered with mirror glass. Mirror glass is also used for one wall of the rear salon and on the wall opposite are hung curtains from ceiling to floor. Chairs, footstools, carpets and curtains have been specially designed and manufactured and also the light fittings, which are of polished and lacquered brass.

**SERVICES.**—The shop is heated and ventilated by means of a system designed on the balanced inlet and extract basis, giving six air changes per hour throughout. The air is warmed by two 12-kW heater batteries and is filtered. Heat is collected from the void above the false-ceilings by a re-circulating duct. The lighting layout is planned to give a subdued level of illumination with emphasis on display areas.

The general contractors were Courtney Pope, Ltd.  
For sub-contractors see page 410.

*Above left, looking towards Bond Street from the display area. Below, the display area and link.*



## TECHNICAL SECTION

Air is the only material which costs nothing. It is, moreover, the best insulator we have. In the article below is described one method (the use of chemicals) of introducing air into concrete. An alternative is the "no fines" method (eight houses of "no fines" concrete are described on pages 388 to 389), for the fine aggregate is replaced not with mortar, but with air; and the cement is used only to stick the large pieces of aggregate together.

One of the advantages of "no fines" concrete is that, although it is porous and must be protected externally by a non-porous skin, it contains no capillary paths. Hence, if the external skin cracks (as renderings often do), water that penetrates does not pass through the wall; it simply trickles down the inside of the skin and finds its way out again.

Now under consideration is a development—the use of prefabricated inner linings as permanent shuttering for one side of the "no fines" concrete—which may make "no fines" the cheapest method of wall construction yet devised.

R. FITZMAURICE

This week's  
special article

### 14 MATERIALS : CONCRETE aerated concrete

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

*Over 80 per cent. of all the concrete now used in the United States is aerated. The use of "plastifiers" to reduce the proportion of mixing water required has resulted in aerated concrete which is strong, as well as weather-resistant and insulating. The following article\* explains why aerated concrete has these properties.*

The chance discovery in America some 20 years ago that air bubbles in concrete increase its resistance to frost resulted in the development of aerated concrete, *i.e.*, normal concrete in which air bubbles, of a diameter not exceeding 0.5 mm. and from 3-5 per cent. by volume, are evenly distributed throughout the mortar.

#### QUALITY AND DENSITY

Until recently, established practice in making durable, frost-resistant concrete

aimed at producing maximum density by means of specially-graded aggregate, lowest possible water-cement ratio and thorough compaction. Quality was equated with density. The production of frost-resistant concrete by the entrainment of a specific quantity of air, with a consequent lowering of its density, appears to contradict accepted principles, but this is not the case if the air is considered as a constituent of the mix, proportioned and distributed in the same way as the aggregate. Ten years' experience with aerated concrete in Sweden and the USA, where it is estimated that 80 per

\* This is a summary of an article by Dr. Alfons Ammann which appeared in *Schweizerische Bauzeitung* (Switzerland), Jan. 5, 1952, pp. 7-11 and Jan. 12, 1952, pp. 21-24, from which the illustrations are reproduced.



TABLE I  
VOLUME OF CAPILLARIES, ASSUMING HYDRATION OF  
20 PER CENT. BY WEIGHT OF THE CEMENT, FOR VARIOUS  
MIXES (CONSTANT WATER CONTENT)

A	B	C	D	E	F	G
2½	30-25	1-20	4-9	12-94	25-4	1-9
3	30-25	0-90	6-5	17-25	23-8	1-3
3½	30-25	0-72	8-2	21-56	22-1	1-0
4½	30-25	0-60	9-8	25-88	20-5	0-8
5½	30-25	0-51	11-4	30-19	18-9	0-6
6	30-25	0-45	13-0	34-50	17-3	0-5
6½	30-25	0-4	14-7	38-81	15-6	0-4
7½	30-25	0-36	16-3	43-12	14-0	0-3

A Cement content in cwt. per cu. yd.  
B Mixing water in galls. per cu. yd.  
C Water/cement ratio.  
D Water chemically combined with cement in galls. per cu. yd.  
E Volume of hardened mortar in galls. per cu. yd.  
F Free, capillary-forming water in galls. per cu. yd.  
G Ratio of capillary volume to hardened mortar volume.

cent. of all concrete now made is aerated, has demonstrated its weather-resisting properties and its workability.

#### THE NATURE OF ORDINARY CONCRETE

Hardened concrete consists of the largely non-porous mass of aggregate, fine and coarse, embedded in cement, in which three types of voids can be distinguished, capillaries, air bubbles and water pockets. The most numerous are the capillaries; invisible to the naked eye, they form a network in which all movement of water within the concrete take place. Air bubbles are always formed in concrete during mixing but they disappear during working. Normal concrete in the plastic state contains from 1-3 per cent. of these air bubbles, usually from 6-10 mm. in diameter, *i.e.*, much larger than those in aerated concrete. Water pockets which tend to form under large flat particles if segregation occurs, have an adverse effect on the frost resistance of the concrete. The systematic entrainment of air changes the structure of the hardened concrete. The water required for the mix is from 40-80 per cent. by weight of the cement, but only 20 per cent. is required for hydration. The rest remains in the concrete, where it forms a fine system of capillaries, which, once the water has evaporated, immediately re-absorbs any water with which it comes into contact. Thus the water-absorbent and repellent properties of concrete depend on this system. It will be seen from Table I that the volume of capillaries thus formed amounts to

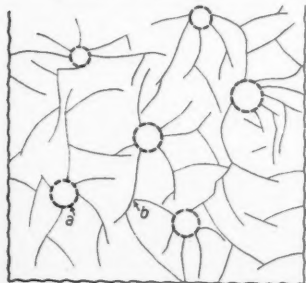


Fig. 1; a, air bubbles; b, capillaries.

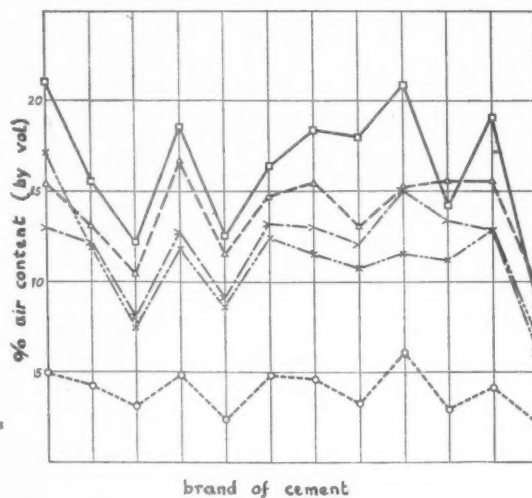
between 14-25 gallons per cu. yd.; in lean mixes (below 3½ cwt. of cement per cu. yd.) the volume of capillaries is 1-3 to 1-9 times greater than in average mixes, which explains why lean mixes are relatively permeable and easily affected by frost. These considerations help to explain Abram's law concerning the relationship between water-cement ratio and strength. The fall in strength with the increase in water-cement ratio is due to the increase in porosity of the hardened concrete; thus increased strength is obtained when plastifiers are used because the volume of capillaries is smaller and the structure denser.

#### AERATED CONCRETE

In aerated concrete the fine system of capillaries is interspersed with air bubbles (see Fig. 1), introduced into the concrete by the formation of an air emulsion in the mortar and occupying about 10-15 per cent. of its volume. Being an ideal lubricant, they take the

Fig. 2. Formation of air bubbles in mortars made with various cements. Lower curve—cement without admixtures; upper four curves—cements with admixtures. Key below applies also to Figs. 3 and 4.

Key  
○ without admixture  
△ agents containing plastifiers  
□ agents not containing plastifiers  
×  
>



#### AIR CONTENT AND AGGREGATE SIZE

Since the air bubbles are only in the mortar, the air content depends on the mortar content. (See Fig. 3.) Experience shows that 3-4 times less air is entrained in concrete than in mortar. As the mortar content of concrete with a small maximum is entrained in concrete than in concrete with a large maximum aggregate size, the air content in the former is correspondingly lower. Table 2 may be used to determine the amount of air required in proportion to the maximum size of aggregate.

#### AIR ENTRAINMENT AND SAND CONTENT

The formation of air bubbles depends largely on the sand content and the proportion of aggregate of 0-3-1 mm. diameter. They cease to be formed if the quantity of sand of less than 0-3 mm. is increased.

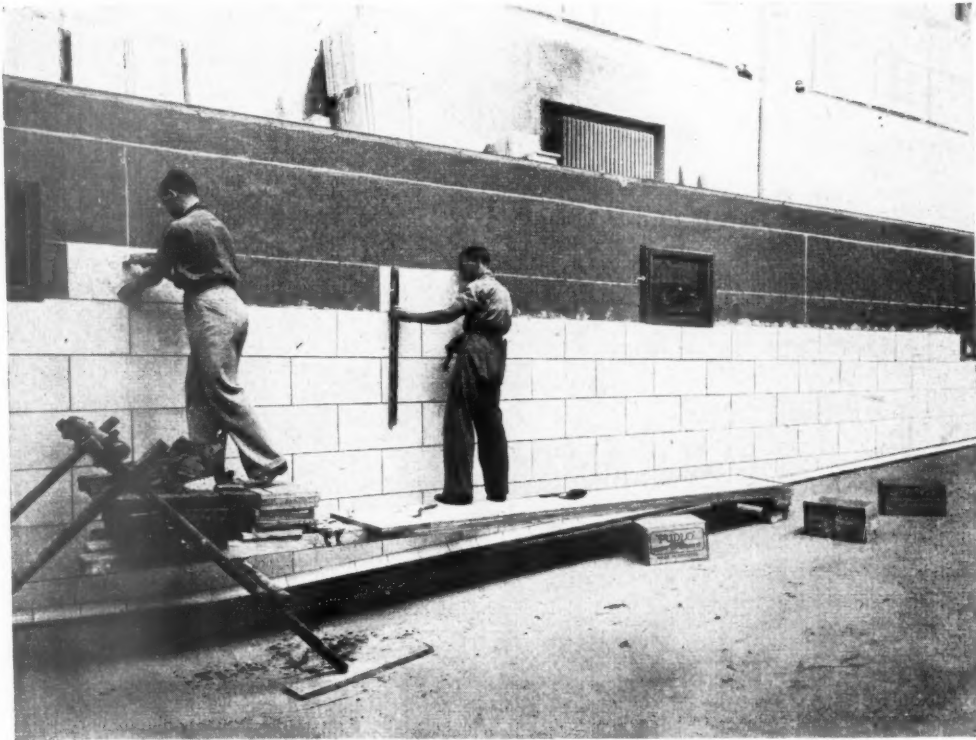
#### AIR ENTRAINMENT AND BRAND OF CEMENT

Fig. 2 shows the results of tests with different cements. The variation in air

#### MAKING AIR-ENTRAINED CONCRETE

Air entrained concrete can be made

## FLAG LANE BATHS, CREWE



Leonard Reeves, Assoc. M.Inst.C.E., F.S.I., Borough Engineer and Surveyor.  
Messrs. E. Taylor & Co. Ltd., Littleborough, General Contractors.

THIS use of 'PUDLO' Brand cement waterproofer is typical of its employment in the construction of many swimming pools—including that in the Cunard White Star Liner "Queen Mary." Mortars and concrete made with ordinary Portland Cement with the addition of 'PUDLO' Brand waterproofer are impenetrable by water even under severe pressure, and its use permits the best results from other materials. In this case, the faience slabs made and fixed by Messrs. Shaw's Glazed Brick Co., Ltd., Darwen, are of a large size which minimises the area of the joints, and the inclusion of 'PUDLO' Brand waterproofer in the cement mortar used for these joints and the bedding of the slabs, ensured a thoroughly impervious and hygienic lining.

# 'PUDLO'

BRAND  
CEMENT WATERPROOFER

KERNER-GREENWOOD & COMPANY, LIMITED  
KING'S LYNN NORFOLK

*Sole Proprietors and Manufacturers*

The word 'PUDLO' is the Registered Trade Brand of Kerner-Greenwood & Co., Ltd., by whom all articles bearing that Brand are manufactured or guaranteed

## This Specialized Age



### No. 7. The Radiologist.

*Helping doctors and surgeons to diagnose and cure a multitude of human ailments is the radiologist to whose specialist knowledge and valuable training many people undoubtedly owe their lives.*

This is the age of specialization. With the advance of modern knowledge, no one man is able to excel in everything and in the field of human endeavour the final product is inevitably the result of co-operation by specialists. So it is with architectural planning. Working under the captaincy of the architect, the team of specialists all play their part and take responsibility for different sections of the project. Over the years, Lockhart Equipment Ltd., have gained a reputation as specialists in the planning and equipping of Industrial Canteens, Hotels and Restaurants. Experienced technicians are at all times available to provide specialist service to the architects, which includes the preparation of layout plans and the submission of appropriate quotations, whether it be for a completely new installation or the reorganisation of existing facilities. Lockhart Equipment Ltd., offer a fully comprehensive service whereby every item of catering equipment from the largest refrigerator down to the smallest piece of crockery, cutlery, furniture, linen, etc., is planned for and supplied so that the whole unit can be handed over complete and ready for operation.

*Everything for the Caterer*

**LOCKHART**  **EQUIPMENT**  
LIMITED

SPECIALIST CATERING EQUIPMENT ENGINEERS AND SUPPLIERS

**LOCKHART EQUIPMENT LTD., 72 Berkeley Avenue, Reading. Tel.: Reading 4847 (4 lines)**

TABLE II

AIR CONTENT IN RELATION TO MAXIMUM SIZE OF AGGREGATE	
Maximum size of aggregate	Percentage of air bubbles
1 $\frac{1}{8}$ in.	4.5
1 $\frac{3}{8}$ in.	4.0
3 in.	3.5
6 in.	2.5

entrainment due to the brand of cement used can amount to 100 per cent. The minimum air entrainment occurred with blastfurnace and other finely-ground cements. Air entrainment also decreases as the temperature of the mix rises and it is influenced by the type of mixer used (it should always be mixed by machine; if possible for 2 minutes) and by the consistency of the mix, those of normal plasticity giving the best results.

#### REDUCING MIXING WATER WITH AIR ENTRAINMENT

In order to minimize the reduction in strength resulting from air entrainment, the water content is reduced with the aid of products which, in addition to entraining air, have the effect of dispersing the fine constituents. They are mostly organic compounds which are absorbed by the cement or aggregate particles and reduce friction between them. Products for entraining air permit a reduction in mixing water of from 5-12 per cent., and with those containing plastifiers a reduction of 12-18 per cent. is possible. (See Fig. 4.) With lean mixes strength is maintained with a reduction in mixing water of from 8-12 per cent.; with concrete of cement content above 3  $\frac{1}{2}$  cwt. per cu. yd., there is an invariable fall in strength because the possible reduction in mixing water is less. This is not surprising in view of the fact that, with a reduction of water content from 5.8

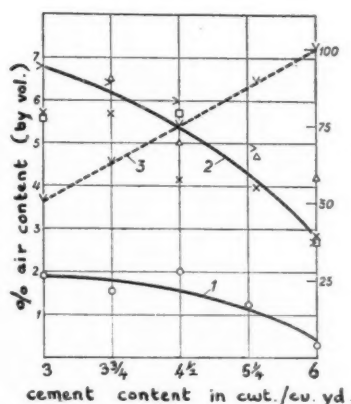


Fig. 3. Air entrainment by four different admixtures in concretes variously proportioned but of similar consistency.

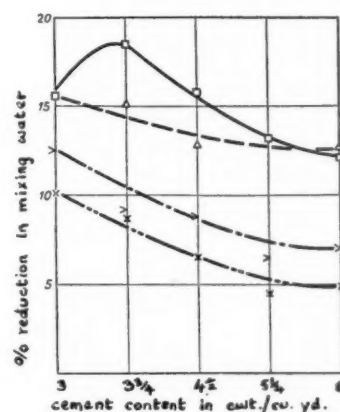


Fig. 4. Percentage reduction possible in mixing water in concretes variously proportioned but of similar consistency.

per cent., 1-2 galls. per cu. yd. are saved and 3  $\frac{1}{2}$ -5 galls. of air added.

The extensive use of aerated concrete in the USA is due to the use of mechanization in working, for which a soft concrete is essential. Standard tests of concrete are used for the assessment of admixtures; compression, bending and bond strength must not fall below 85 per cent. of that of concrete without admixtures; the change in volume must not exceed 110 per cent.; water segregation, 65 per cent., and the relative factor of resistance to freezing and thawing must be at least 80 per cent.

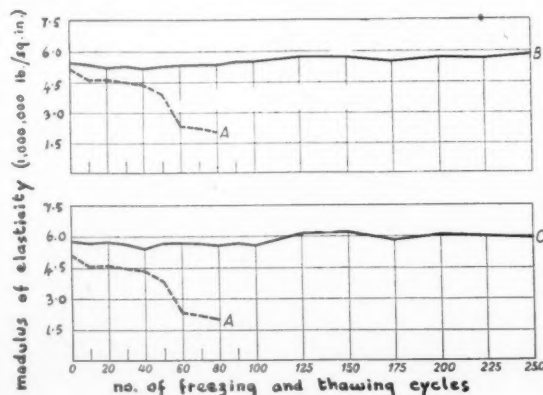
#### WEATHER RESISTANCE OF AIR ENTRAINED CEMENT

The frost and weather resistant properties of hardened aerated concrete are usually determined by its resistance to alternate freezing and thawing in water. Natural influences are not so consistent. Soft or aggressive waters, changes in volume due to freezing and temperature changes can all damage concrete. French tests showed a fall

in compressive strength in concrete cubes exposed to temperatures alternating between 15° C. and -15° C. after 25 cycles. Frost damage usually takes place when the concrete is saturated with water at temperatures below 0° C. Only a certain area is involved as a result of intermittent freezing and thawing and scaling is the result (see Fig. 5). Fig. 6 shows the improvement in frost resistance as a result of air entrainment indicated by tests made at the Swiss Federal Materials Testing Institute.

Aerated concrete has been used in Europe only since 1947 (with the exception of a dam built in Sweden in 1937). It has been used in Switzerland, Portugal, Austria, France and Italy. It is particularly suited for use on large sites where the uniformity of the constituents can be ensured and where suitable supervising personnel is available. It will without doubt be used more extensively in Europe now that it has been improved by the use of plastifiers.

Right, Fig. 5, frost damage on the water side of a dam wall. Below, Fig. 6, frost resistance of three different concretes; A, without admixture; B, with admixture; C, with admixture and reduction in sand content.







We design the structure, fabricate  
the steel in our workshops at Norwich and  
our own men erect it on the  
site. In short, we see the job through from  
start to finish. An example  
is the Cromer Street Flats for the  
St. Pancras Borough Council, in which  
1300 tons of steel were used.

WHEN THE STRUCTURAL STEEL IS BY

**BOULTON  
AND PAUL**

**IT'S A FIRST CLASS JOB**

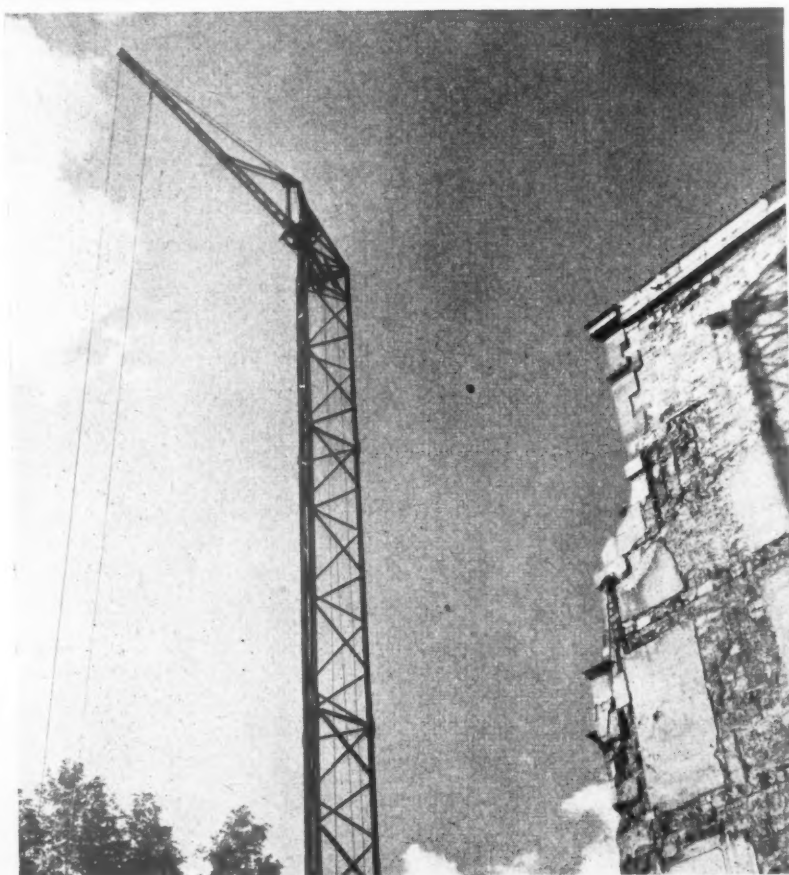
• NORWICH • LONDON • BIRMINGHAM

CRC 18 5P

## TOWER CRANES IN FRANCE AND ENGLAND



On the left is shown a 100-ft. high French tower crane being used in the construction of a block of offices in Paris. As seen in this photograph, it is fitted with a 52-ft. 6-in. jib, at which radius it can lift  $11\frac{3}{4}$  cwt. A similar crane in use in England is shown on page 407. Below, a typical "sapine"—a tall crane with a short jib, used widely in France to replace hoists.



## 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.*

5.46 planning: public utilities  
LONDON'S TRANSPORT

*Engineering Aspects of the Transport Problems of London.* R. B. Hounsfield (The Euston Press. Published privately, 1951.)

Important for the calculated estimates of road and parking needs it contains. A useful contribution to the subject. States fundamental principles upon which the solution of London's street traffic problem could be based. 103 pp. Tables, diagrams and 5 folding plans in separate case.

This book has been published in commemoration of the late R. B. Hounsfield, whose research work into traffic problems at University College, London, is well known.

Apart from estimating the requirements of road transport in the London area, the author outlines the new works that would be necessary to meet these requirements. He makes an analysis of past and present road traffic and parking statistics and an estimate of future demand.

In the author's view, the research proves that the combined traffic problem of all branches of transport in London (moving and parking) has at least one practicable solution, and that the work involved is only a fraction of what was done in a mere 60 years by our Victorian ancestors.

The author is mainly concerned with central London. The most interesting feature of his proposals is a grid scheme of 8 uniform relief highways—4 north/south and 4 east/west. Most of the junctions would be three-decker roundabouts.

There is a great difference between these proposals and those in the London Development Plan.

7.33 practice  
WELDING SYMBOLS

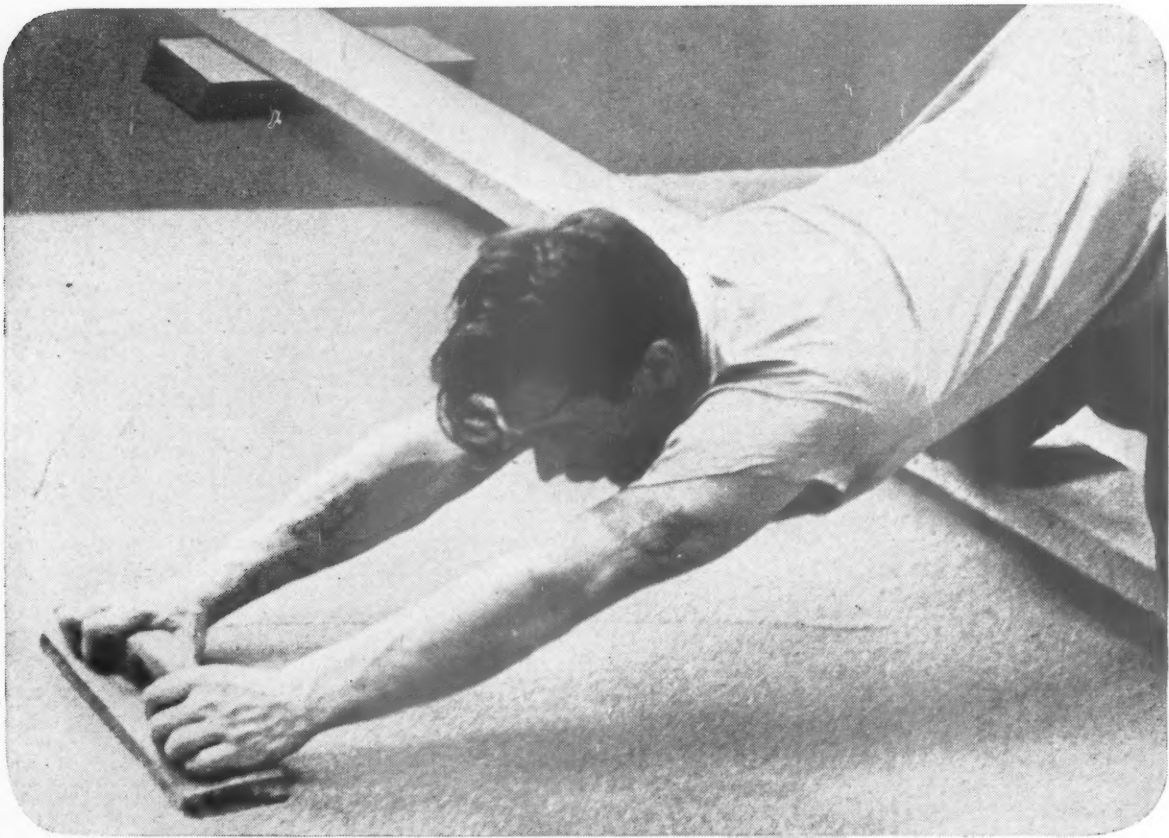
*Scheme of Symbols for Welding.* BS 499: 1952. (British Standards Institution. 6s.)

Useful standardization of symbols. Of value chiefly to engineers but architects should be aware of it and may well be surprised to find the number of different types of welding in use.

9.25 design: general  
DURABILITY

*Exposure, Durability and Maintenance in Modern Design.* P. Hope Bagenal. (The Architectural Association Journal. Feb., 1952.)

Report of lecture. Wide in scope and full of interesting and stimulating detailed thoughts. The result of keen observation of buildings by a man whose outlook contains a good mixture of art and science.



Photograph: Courtesy Highways Construction Ltd.

## *Just FIBREGLASS and elbow grease*

'Fibreglass' Staple Tissue for underlay application is supplied in rolls 36" wide and up to 400' long. It is laid down in exactly the same way as traditional materials and cut in position to conform to irregular shapes.

- It is lighter and easier to handle and store.
- It is cheaper, and therefore helps to reduce your building costs.
- It provides insulation and isolation from the screed and allows adequate time for working up a higher finish.
- It is available in quantity NOW.

*For better and cheaper UNDERLAYS to mastic asphalt floors*

## FIBREGLASS *staple tissue*

TRADE MARK

FIBREGLASS LIMITED, RAVENHEAD, ST. HELENS, LANCs. (ST. HELENS 4224)

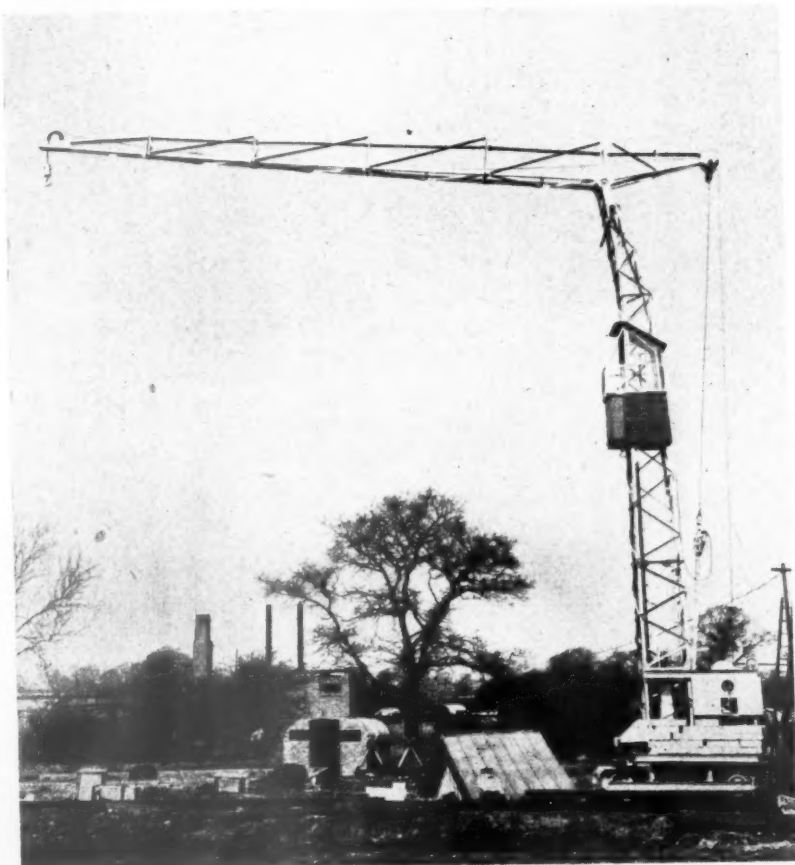
There are 'Fibreglass' materials available for structural, heat and cold insulation. Sound-deadening. Acoustic correction. Membranes for pipe wrapping, flooring, roofing. Battery retainers and air filters. In textile form for electrical insulation and flameproof decorative fabrics.

LONDON OFFICE: 63/65 Piccadilly, W.1. (Regent 2115/6)  
GLASGOW OFFICE: 136 Renfield St. (Douglas 2687)  
NEWCASTLE-ON-TYNE OFFICE: 16 Dean Street  
MANCHESTER OFFICE: 11 Piccadilly. (Blackfriars 8863)  
BIRMINGHAM OFFICE: Piccadilly Arcade, 105 New Street (Midland 0464/5)  
DUBLIN OFFICE: 21 Merrion Square North. (Dublin 66024)

## CRANES IN FRANCE AND ENGLAND (continued)



Left, a rail-mounted, electrically - operated French tower crane in use by Wates, Ltd., on a housing site at Denmark Hill. Height, 65 ft.; reach, 52 ft. 6 in.; capacity, 11 cwt. The cabin rises inside the mast. Below, a light, mobile (but not self - propelled) tower crane used by BRS in their experiments to prove how savings could be effected by the use of cranes of this type for the construction of traditional houses.



## 12.56 materials: metal

**MECHANICAL TESTS**

*Mechanical Tests for Metals.* British Standards Handbook No. 13. (British Standards Institution. 1951. 17s. 6d.)

This handbook quotes in full the British Standards for the tests and continues with relevant extracts from other Standards, where they exist. Tensile, hardness, impact, ductility and creep tests are specified. Thin metals (not exceeding 10 gauge) are covered separately. A section is devoted to conversion factors. The handbook forms a comprehensive testing manual and is of value both for those in the industry and all interested in the strength of materials.

## 13.85 materials: timber

**TROPICAL TIMBERS**

*Tropical Hardwoods for Building.* Nicholas Clifford. (The Builder, Feb. 29, 1952.)

Notes on properties of some available light hardwoods: freijo, idigbo, red meranti, yellow meranti, chumprak, menkulang, nyankom and agba. No information on prices.

## 16.83 materials: miscellaneous

**ALUMINIUM**

*Aluminium and Aluminium Alloys in Building. Part I.* BRS Digest No. 39. (HMSO. Feb., 1952. 3d.)

Types of aluminium and alloys. Standard method of nomenclature by letters and numbers. General properties of wrought and cast products. Corrosion and protection. A useful guide to types and general properties. The next Digest will describe uses.

## 16.84 materials: miscellaneous

**CHIP BOARDS**

*Methods of Test for Wood Chip Boards, Wood Waste Boards and Similar Boards.* BS 1811:1952. (British Standards Institution. 2s.)

Although of comparatively little direct use to architects this is an important standard. It should lead to a specification dealing with standards of performance for this new class of material.

## 17.86 construction: general

**SAFETY REGULATIONS**

*A Complete Guide to the Building (Safety, Health and Welfare) Regulations.* (Royal Society for the Prevention of Accidents. 1951. 15s.)

Easy for reference and well indexed. A valuable guide for builders and useful to architects for occasional reference. Information well grouped in sections under headings, such as scaffolds, excavation, hoists, etc. 104 pp.

## 17.87 construction: general

**ANCIENT BUILDINGS**

*Repair of Timber Structures.* D. G. Martin. (The Builder, February 29, 1952.)

General notes on repair of old timber buildings. Some diagrams. From lecture given to Society for Protection of Ancient Buildings. Useful.



# WILLIAM MALLINSON & SONS LTD

*Timber  
Veneers  
Plywood*

130-150 HACKNEY ROAD  
· LONDON · E.2

TELEPHONE: SHOREDITCH 7654 (10 lines)



solve  
the  
problem  
with  
tiles

For simple and straightforward treatment, or attractive decorative effect, tiles by Pilkington's are most suitable for interior or exterior walls and floors. An interesting example of unusual treatment is shown above.

We also specialize in faience for fireplaces and certain other purposes, and mosaic for floors.

**Pilkington's**  
TILES  
LIMITED

CLIFTON JUNCTION, Nr. MANCHESTER  
London Office: 27b, Old Gloucester Street,  
Holborn, W.C.2.

## THE INDUSTRY

*From the Industry this week, Brian Grant reports on a rapid-drying primer, some equipment exhibited at the Ideal Home Exhibition and a new method of painting widely used in the United States.*

### PRIMING PAINTS

The value of ordinary red lead as an anti-corrosive, rust-inhibiting primer is well known, but where it is intended to protect constructions exposed to sea water with bituminous solutions it is necessary to wait for months on end until the primer coat dries and hardens completely, a delay which rules it out for repair and maintenance work and limits its use on new work. Furthermore, it cannot be used as an undercoat for chlorinated rubber paints because the solvents in the latter act like paint stripper. Evode Ltd. are now producing under the brand-name "Evo-Led" an entirely new type of red-lead primer suitable for application to damp or, even wet surfaces which, they claim, is non-lifting or bleeding after 24-48 hours, even when overpainted with paints containing searching solvents. The primer displaces moisture on any surface, absorbs it, and allows it to evaporate together with the solvents during the drying processes. One gallon of the primer will cover between '35 and 50 square yards. (Evode, Ltd., Stafford.)

### METAL WINDOW DETAILS

Hopes have just issued a monumental window catalogue for drawing office use, containing useful information on design, fixing and glazing, and also specifications and full size sections of bars, couplings and mullions. The catalogue contains over 150 pages, nine inches by fourteen, and gives fixing details for every conceivable type of window, with notes on the maximum sizes produced and drawings to show the appropriate type of

sub-frame, where used, and methods of fixing. The illustration reproduced below shows flyscreens applied to a large composite window of a type suitable for classrooms or hospital wards. Pivoted ventilators cannot be screened and hinged, top-hung ventilators are unsatisfactory, except in very small sizes, as the normal fittings, whether cam openers or peg stays, almost always damage the wire mesh. Hopes recommend a small hinged wicket so that the special flattened bronze handle can be easily reached.

This book makes a most useful piece of drawing office equipment and the draughtsmanship is up to the very high standard which Hopes have always set in publications designed for architects. (Henry Hope & Sons Ltd., Halford Works, Smethwick, Birmingham.)

### IDEAL HOMES

The "Cannon" cooker with the high level grill has already been illustrated in the JOURNAL (March 13, p. 332), but there were one or two other pieces of equipment on show at Olympia which seem worth a mention. The "Radiation Type 3518" cooker is designed for what the manufacturers describe as "the larger family and the more spacious kitchen." The hot plate has four burners with a single simmering or griddle plate. There is a large high-temperature oven, a large grill and a further oven which can be used for low-temperature cooking or plate warming, while below the main oven is a storage drawer. The flue outlets from the two ovens and grill are both built in, and the flue gases escape through the grill at the top of the splash-back, so that the cooker can be mounted flush to the wall and high wall temperatures are avoided. Dimensions are 36½ in. by 25½ in., with an overall height of 44½ in.

The same firm is also showing a gas-operated hot water circulator arranged for use with an insulated storage tank, which is intended for fitting underneath the draining board. Two hot water heating circuits are provided, one maintaining four or five gallons of hot water at the top of the tank and one which allows the circulator to heat the full 20 gallons in the tank when the bath is needed. There is a small changeover valve. This, in fact, provides equivalent service to the electric u.d.b. water heaters which normally have a ½-kW. element in the top and a 2½-kW. element at the bottom. It is intended that, in due course, this assembly shall be produced as a complete unit, combining circulator and storage tank with all the



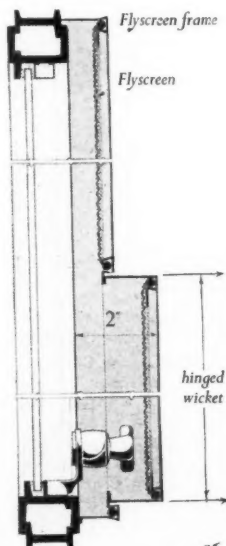
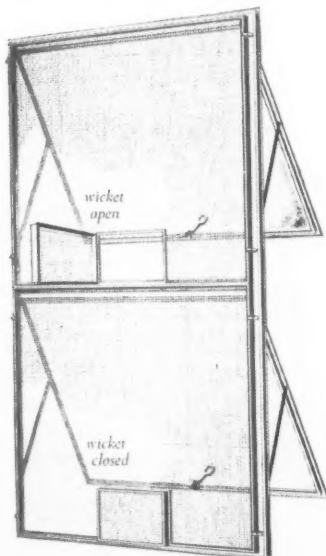
*The new "Radiation Type 3518" gas cooker on show at the Ideal Home Exhibition.*

necessary connections and valves. It is not, however, possible to give any date when this will be available. (Radiation Ltd., Essex Works, Aston, Birmingham, 6.)

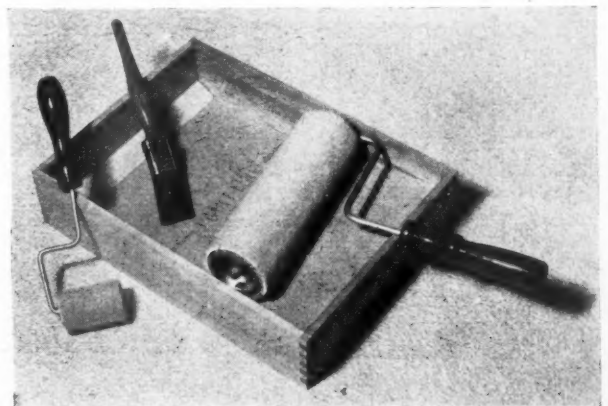
### NEW PAINTING METHOD

Quite an interesting development is the "Rolakoton" painting outfit, which can be used for applying paint with a roller instead of by brush. The standard equipment consists of one large roller 7½ in. wide for use on large surfaces, and a 2-in. wide roller for dealing with narrower strips. (It is still necessary to use an ordinary paint brush for dealing with awkward corners and mouldings.) The paint is poured from the tin into the tray as far as the paint line (see illustration below). The bottom of the tray slopes from back to front and the roller is run across the bottom a few times to pick up the paint supply. Application is quite simple, and satisfactory work can be done without any previous training. For home use, devices of this kind have become almost standard practice in America. The outfit, as illustrated, costs £2 15s. 6d. (Stephenson Bros. Ltd., Listerhills Road, Bradford.)

BRIAN GRANT.



*Left, an illustration from Hope's new window catalogue, showing the recommended method of applying flyscreens to a large composite window. Note the small hinged wicket and special flattened bronze handle. Below, the "Rolakoton" painting outfit, described above.*



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 advertisement 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 .....

A.J. 27.3 52

## Buildings Illustrated

"Templewood" Junior Mixed & Infants School at Pentley Park, Welwyn Garden City, Herts. (Pages 395-399). County architect, C. H. Aslin, F.R.I.B.A.; deputy county architects, W. E. Tatton Brown, A.R.I.B.A., A.M.T.P.I., and G. C. Fardell, M.B.E., A.R.I.B.A.; principal assistant architect, J. T. Redpath, M.B.E., A.R.I.B.A.; architect-in-charge, A. W. C. Barr, A.R.I.B.A. General contractors, C. Miskin & Sons Ltd.; clerk of works, W. H. Meeks. Sub-contractors: dampcourses, roofing felt, Ruberoid Co. Ltd.; concrete roof blocks, Dow-Mac (Products) Ltd.; concrete wall slabs, Orlit Ltd.; bricks, Dunbrik Ltd.; structural steel, casements, window furniture, folding gates, Hills (West Bromwich) Ltd.; floor tiles, J. C. Edwards (Ruabon) Ltd.; partitions, Broad & Co. Ltd.; glass and glazed tiles, Pilkington Bros. Ltd.; patent glazing, Williams & Williams Ltd.; patent flooring, Hollis Bros. Ltd.; R. W. Brooke Ltd.; central heating & ventilation, Weatherfoil Heating Systems Ltd.; electric wiring, Hartley Electromotives Ltd.; plumbing, Econa Modern Products Ltd.; sanitary fittings, Adamsez Ltd.; door furniture, N. F. Ramsey & Co. Ltd.; doors & joinery, Geo. M. Hammer & Co. Ltd.; sunblinds, J. Avery & Co.; fibrous plaster, H. H. Martyn & Co.; textiles, Gerald Holtom; wallpapers, Arthur Sanderson & Sons Ltd.; furniture, The Educational Supply Association Ltd.; shrubs & trees, Digswell Nurseries.

Shop for Dolcis Shoe Co. Ltd. at 22, Old Bond Street, London, W.1. (Pages 400-402.) Architect: Ellis E. Somake, F.R.I.B.A., staff architect to the Dolcis Shoe Co. Ltd. Chairs and footstools designed by Roger

& Robert Nicholson, A./A.R.C.A. General contractors: Courtney Pope Ltd. Sub-contractors: electrical wiring and fittings, Courtney Pope (Electrical) Ltd.; heating and ventilation, Rosser & Russell Ltd.; marble work, J. Whitehead & Sons Ltd.; granite, Shakleton; terrazzo, Marriott & Price Ltd.; fibrous plaster, Tomei & Sons Ltd.; blind, Adam Ltd.; sanitary ware, W. N. Froy & Sons Ltd.; paints, Thomas Parsons & Sons Ltd.; pneumatic cash tubes, Lamson Paragon Supply Co. Ltd.; carpets, G. A. Sawyer Ltd.; hide and display frames, Woolnough Ltd.; display fabrics, Minter (Decorations) Ltd.; chairs and footstools, Russell Bros.; drapes, Miss A. N. R. D. Loosely; planting, West End Flower House.

## Announcements

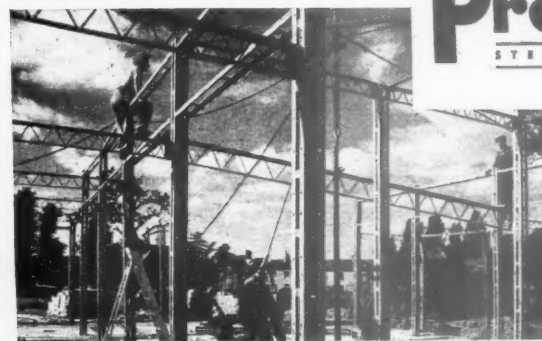
The city architect and planning officer of Coventry would welcome information on building materials and products, and especially new ideas, to be used in conjunction with the large building programme now being undertaken and for the departmental library. Will firms send information and samples to Mr. Donald Gibson in the first instance; interviews will be arranged by appointment.

Mr. Gerald Stanley, F.R.I.B.A., F.R.I.C.S., has moved his office to 65, Cowbridge Road, Cardiff. (Tel: Cardiff 22073.)

F. J. Meekins & Partners, quantity surveyors, have opened a branch office at The Building Centre, Brunswick Terrace, Leeds, 2.

Messrs. Worthington & Protheroe George, of 14, Albion Place, Maidstone, have dissolved partnership by mutual agreement and the practice will be continued by Clifford Worthington, A.R.I.B.A., chartered architect, at St. Anne's, Boxley Road, Maidstone (Tel.: Maidstone 51238), where trade literature will be welcomed.

## ★ HILLS PRESWELD STRUCTURAL COMPONENTS



are suitable for most types of buildings, and in addition, offer considerable economies in material, and man-hour erection time. The flexibility of this system is particularly evident in modern school construction where Presweld Components are extensively used. Based on the 8ft. 3in. square grid, as recommended by the Ministry of Education, and from its inception, the system was conceived as a range of elements—columns, beams, wall panels, etc.—rather than as a building of a definite shape. This idea gives complete freedom to the Designer, while allowing standardisation and factory produced components.

**HILLS**  
**Presweld**  
TRADE MARK  
STEEL FRAMEWORK

schools construction

Hills Presweld Standard Components were used in the erection of Templewood Junior Mixed and Infants School, as reviewed in this issue.

Products of Hills include:—Patent Glazing (Lead clothed, Aluminium and Galvanised Steel Bars), Ventilating Shutters, Lantern Lights, Accordio Blinds, etc.

**HILLS**  
(WEST BROMWICH) LIMITED

ALBION ROAD, WEST BROMWICH & 125 HIGH HOLBORN, LONDON, W.C.1

Branches at Birmingham, Swansea, Bristol, Manchester, Newcastle-on-Tyne, Glasgow and Belfast





## THE PEOPLE'S HOUSE



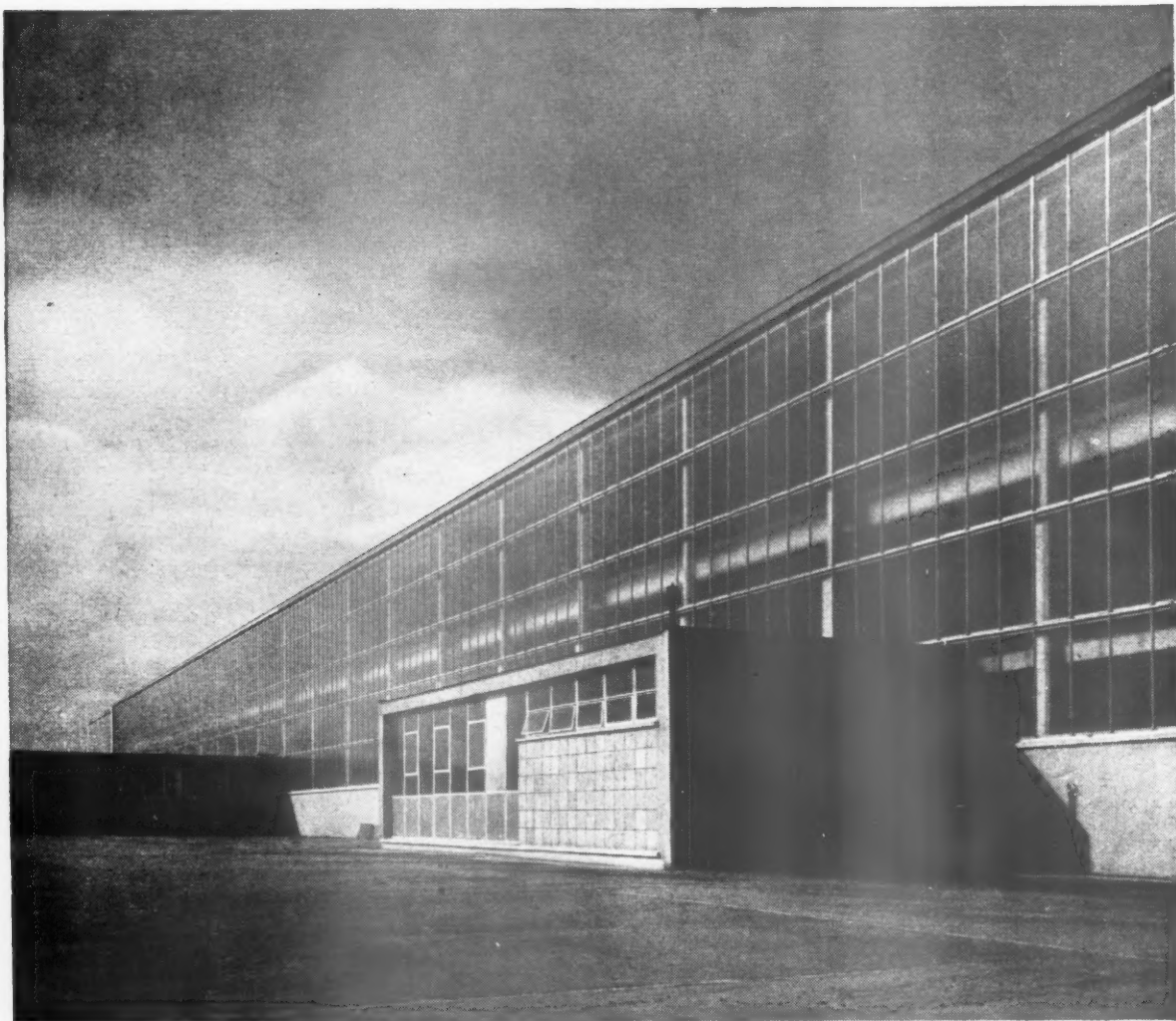
Six houses have been erected by Wimpeys to Government specification and qualify for the Certificate of the National Housebuilders Registered Council. Four of them, conforming exactly to Ministry plans, are built as one block, while the remaining pair are a modification in semi-detached style, designed by Wimpeys. All these houses were built in "No-Fines" concrete in order to shorten building time and to reduce costs. Wimpeys cordially invite Local Housing Authorities to examine these six "People's Houses" which have been built at Newnham Avenue, Eastcote, Middlesex.

# WIMPEY

*The Wimpey technique and knowledge, which has produced such outstanding results in house-building could be turned to good account in the execution of your own housing requirements. We will be pleased to furnish any information you may require.*

GEORGE WIMPEY & COMPANY, LIMITED • HAMMERSMITH GROVE, LONDON, W.6.





## FULL DAYLIGHT FOR FACTORY OPERATIVES

In both the designs featured — the Coras Iompair Eireann factory in Inchicore, Dublin, and the new steel furniture warehouse for Joseph Sankey & Sons in Wellington, Shropshire — the architects faced the problem of providing ceiling to floor daylight without impairing structural strength and graceful design. Each architect specified Aluminex Patent Glazing and the results have proved how completely successful Aluminex is in this kind of construction. Its slim bars and horizontal weathering members give the buildings clean simple lines and reduce light obstructions to an absolute minimum, giving the factory operatives full daylight for working.

### **Aluminex at Inchicore**

The architect, Michael Scott, wished to provide full daylight within this factory, and at the same time to protect concrete cased structural members from the effects of weather. This was achieved by an Aluminex glass wall 254ft. long  $\times$  22ft. high holding  $\frac{1}{4}$  rough cast glass and attached to the outer faces of the stanchions. In addition to the advantages of daylight

and weather protection, this glass wall reveals the simple and impressive structural framework of the building.

### **Continuous Opening Lights with Positive Action**

An interesting aspect of Howard's Crane's 1,000 foot glass wall in Joseph Sankey & Sons' factory at Wellington is the use of opening lights 100 feet long (Aluminex continuous opening lights can be made of indefinite length

but are generally limited to 200 feet both for convenience and by gear limitations). The moving frame is hung on a continuous hinge running the full length of the light that cannot bind or warp (see diagram). The full 100 feet rises like a single pane. The lights are operated from a few remote control points by Teleflex gearing. This threaded cable system exerts a steady even pressure all along the light so that the hundredth foot gets the same pressure as the first foot. The light will stay steadily open at any desired position from 1" to 18" so that ventilation can be quickly and accurately controlled.

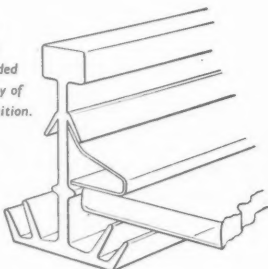
---

Coras Iompair — Eireann, Inchicore, Dublin.  
Architect: MICHAEL SCOTT F.R.I.A.I.  
Engineers: OVE ARUP & PARTNERS.  
Contractors: MESSRS. G. & T. CRAMPTON LTD., Dublin.

# **The Aluminex Patent Glazing System**

A word about the Aluminex Patent Glazing system (see diagram). The glazing bar is an example of good functional design. Its main web consists of a strengthening ridge at the top, with ribs on each side

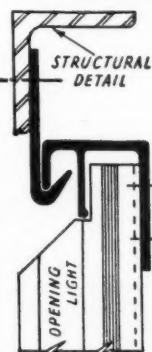
This Aluminex patent glazing bar is of extruded aluminium alloy of special composition. Here is seen one glazing cover strip holding a pane of glass in position on the bar.



to hold a continuous cover strip. Internal condensation is carried outside the building by the integrated channels in the bar.

The continuous aluminium cover strip is scientifically profiled to fit between the rib of the glazing bar and the surface of the glass. It fits tightly but gives sufficiently in response to thermal movements to make a firm and safe glass grip in all conditions.

Economy is a strong factor in the ever increasing popularity of Aluminex.



This drawing shows the design of the continuous hinge used on the Aluminex opening lights. The head weathering makes flashings unnecessary.

Weathering produces a permanent protective patina on the surface of the aluminium alloy. Thus it does not rust or corrode. It needs neither initial painting, or subsequent repainting. Broken glass can

be replaced quickly and without difficulty.

The architect who turns to Aluminex Patent Glazing has at his service a method of architectural cladding capable of versatile applications. It is an accepted system yet remains susceptible to imaginative development. The company extends its fullest co-operation to all architects who wish to discuss new applications of Aluminex.

The Aluminex Division of

**WILLIAMS & WILLIAMS**

Reliance Works · Chester



Joseph Sankey & Sons, Wellington Architect: C. HOWARD CRANE A.I.A., Contractors: WILSON LOVATT & SONS, LTD.

A LIMITED NUMBER OF SLIGHTLY SOILED

# books

OFFERED FOR SALE AT **reduced prices**

to readers of *The Architects' Journal*

A FEW COPIES ONLY of some of the books in our current list were found, at recent stocktaking, to be soiled: apart from the fact that they are consequently not saleable as 'mint' copies these are, however, word- and picture-perfect. We offer them, as long as stocks last, at the following prices, post free.

<b>Heating and Air Conditioning of Buildings</b> , by Oscar Faber and J. R. Kell (45s.)	35s. 0d.	<b>The Castles on the Ground</b> , by J. M. Richards (8s. 6d.)	6s. 0d.
<b>New Ways of Building</b> , edited by Eric de Mare (30s.)	22s. 6d.	<b>Warwick: its preservation and re-development</b> , by Sir Patrick Abercrombie and Richard Nickson (12s. 6d.)	9s. 0d.
<b>Inside the Pub</b> , by Maurice Gorham and H. McG. Dunnnett (18s.)	13s. 6d.	<b>TVA — Adventure in Planning</b> , by Julian Huxley (8s. 6d.)	6s. 0d.
<b>Conurbation</b> , by the West Midland Group (30s.)	22s. 6d.	<b>The Principles of Architectural Composition</b> , by Howard Robertson (10s. 6d.)	7s. 6d.
<b>The Canals of England</b> , by Eric de Mare (18s.)	13s. 6d.	<b>The Planner's Notebook</b> , edited by H. Myles Wright (30s.)	22s. 6d.
<b>Concerning Town Planning</b> , by Le Corbusier (10s. 6d.)	7s. 6d.	<b>Windmills in England: a study of their origin, development and future</b> , by Rex Wailes (12s. 6d.)	9s. 0d.
<b>The Planning and Equipment of Public Houses</b> , by F. W. B. Yorke (21s.)	15s. 0d.	<b>The Modern Flat</b> , by F. R. S. Yorke and Frederick Gibberd (35s.)	26s. 6d.
<b>A History of the English House</b> , by Nathaniel Lloyd (73s. 6d.)	60s. 0d.	<b>The Modern House in England</b> , by F. R. S. Yorke (21s.)	15s. 0d.
<b>Buildings and Prospects</b> , by John Piper (18s.)	13s. 6d.	<b>Parliament House: The Chambers of the House of Commons</b> , by Maurice Hastings (12s. 6d.)	9s. 0d.
<b>English Architecture at a Glance</b> , by Frederick Chatterton (2s. 6d.)	1s. 10d.	<b>English Panorama</b> , by Thomas Sharp (12s. 6d.)	9s. 0d.
<b>Town and Country Planning Textbook</b> , edited by A P R R (42s.)	30s. 0d.	<b>A Miniature History of the English House</b> , by J. M. Richards (4s. 6d.)	3s. 6d.
<b>Small Houses—£500-£2,500 (pre-war prices)</b> , edited by H. Myles Wright (15s.)	11s. 6d.	<b>The Architecture of England</b> , by Frederick Gibberd (7s. 6d.)	5s. 6d.
<b>Estimating Housing Needs</b> , by Alexander Block (10s. 6d.)	7s. 6d.	<b>Newer Sarum: a plan for Salisbury</b> , by Thomas Sharp (10s.)	7s. 6d.
<b>The Countryman at Work</b> , by Thomas Hennell (12s. 6d.)	9s. 0d.	<b>The Home of Man</b> , by Le Corbusier and Francois de Pierrefeu (10s. 6d.)	7s. 6d.
<b>English History at a Glance</b> , by H. A. Vetter (8s. 6d.)	5s. 6d.	<b>Towards a New Architecture</b> , by Le Corbusier (15s.)	11s. 6d.
<b>The City of London: a record of destruction and survival</b> , with a report by Dr. C. H. Holden and Professor W. G. Holford (25s.)	18s. 6d.	<b>The Architecture of Denmark</b> , by seven contributors (12s. 6d.)	9s. 0d.
<b>Gardens in the Modern Landscape</b> , by Christopher Tunnard (18s. 6d.)	14s. 0d.	<b>The Adventure of Building</b> , by Clough Williams-Ellis (10s. 6d.)	7s. 6d.

An illustrated catalogue giving full descriptions of these books will be sent post free. It should, however, be borne in mind that only a few soiled copies of each title are available and that orders will be dealt with in strict rotation. Readers are therefore urged to send their orders at once

THE ARCHITECTURAL PRESS 9-13 Queen Anne's Gate Westminster SW1



# CHEMICO

*Economy*

**GIVES SPOTLESS CLEANLINESS  
...AT AMAZINGLY LOW COST**



An ounce of CHEMICO costs approximately  $\frac{1}{4}$ d. and it is most economical in use, lasting much longer than a powder cleanser. Being a smooth paste—there's no waste and, if required, a few ounces of CHEMICO dissolved in a bucket of hot water makes a highly effective cleansing solution for large areas. Bulk users will find the new 28 lb. Bucket the most **ECONOMICAL** and convenient size in which to buy CHEMICO Cleanser.

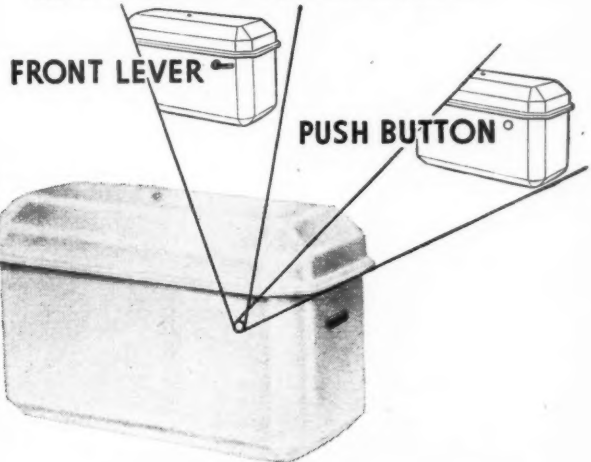
Send for your Free Copy of the attractive Hotel Brochure—an appreciation of Chemico by the world's leading Hotels—available on application to Chemico Works.

THE COUNTY CHEMICAL CO. LTD., CHEMICO WORKS,  
SHIRLEY, BIRMINGHAM

# Welcome

**TO 2 NEW SYPHONIC FORDHAMS**

Two new stars in the Fordham range. The LSF, a low-level syphonic cistern with an attractive chromium plated handle on the front, and the LSPB, the only one of its kind operating a syphon, for those who prefer push-button operation. Both models have all the well-tried Fordham features, so send today for the fully illustrated catalogue sheet to add to your file.



# Fordham

Creators of the first—makers of the latest seamless steel cistern.

FORDHAM PRESSINGS LTD., DUDLEY RD., WOLVERHAMPTON.

Telephone: Wolverhampton 23861.



**INFORMATION SHEETS  
free on request**

# INCREASE HOUSE SPACE by 20%

## LOFT ACCESS STAIRS POPULARLY KNOWN AS LOFT LADDERS by the **FIRST** and **ORIGINAL** inventors

Patentees and Manufacturers

## LOFT LADDERS LTD

Ministerial announcements stress the need for space saving in the new programme of construction. In this connection it is important to remember that the loft can increase the living space of the average house by at least 20 per cent. With a Loft Ladder, access is as safe and easy as walking up the stairs. Information sheets issued on request, show in detail how this space may be made available both in new work and conversion. Write for full particulars and prices of the various types.

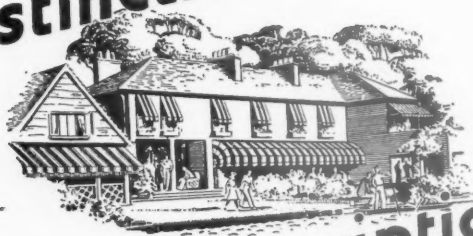
Price from **£14.0.0**

## LOFT LADDERS LTD

The first and original inventors of Loft Ladders and Loft Access Stairs,  
**BROADWAY WORKS, BROMLEY, KENT**  
Tel.: RAVensbourne 2624



# dean's distinctive blinds



## of every description

Sunblinds & Weather Blinds • Awnings  
Inside Blinds & Curtains • Revolving  
& Roller Shutters • Venetian Blinds  
Hospital & Sick Room Shutters.

## for buildings of all types

Established 1894. Three generations of Deans  
offer you co-operation and friendly advice.

**DEAN'S BLINDS (PUTNEY) LTD**

329, PUTNEY BRIDGE RD., PUTNEY S.W.15.

Tel: PUTney 3772

# RENTOKIL

## TIMBER FLUID

### IS OUTSTANDING FOR

# WOODWORM

## CONTROL

Prompt action is necessary  
against this increasingly danger-  
ous pest. Rentokil Timber Fluid exter-  
minates woodworm and protects furniture  
and structural timbers against re-infestation.

For information and expert advice, write or call:  
WOODWORM & DRY ROT CENTRE, (Suite 5), 23,  
Bedford Square, W.C.1.

RENTOKIL LTD., FETCHAM, LEATHERHEAD,  
SURREY. Tel: Leatherhead 4221/2

# Treading on safe ground

Years of Laboratory re-  
search lie behind the  
superb elegance and lifelong  
durability of RITZIDE.  
Laid in any design any-  
where in Great Britain.  
Highly recommended for  
use in Housing Schemes,  
Private Houses, Shops,  
Schools, Factories, etc.

## Specify RITZIDE

### composition flooring

1. Luxurious Appearance.
2. Hygienic.
3. Long Life.
4. Tasteful Design and Colours.
5. Easy to Maintain.
6. Dustless.
7. Fireproof.

# RITZIDE

**LEATHERFLOR LIMITED**

Full particulars and prices gladly sent. Write or phone  
Leatherflor, Limited, Wellington Works, Wellington Road,  
Forest Gate, London, E.7. (Tele. MARYland 3786)—  
Leatherflor, Limited,; Inch Mill, Hume Street, Arbroath,  
Scotland. (Tele. ARBroath 3271)—Leatherflor, Limited—  
3, Oldgate, Morpeth, Newcastle, (Tele. MORpeth 463)

# HALL WIDE SPAN BUILDINGS

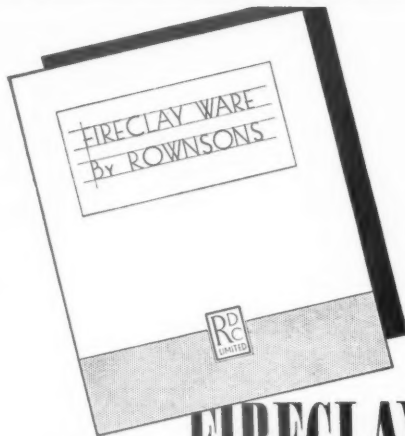
*For* CANTEENS • STAFF RECREATION  
ROOMS • WORKSHOPS *for* LIGHT WORK



Hall's are renowned for their timber buildings not only as manufacturers but as prime designers and pioneers. Your needs receive the personal attention of those responsible for the high Hall standard and any building purchased is backed by the reputation, skill, and integrity of Halls of Paddock Wood. Building for Industry, Education, Sport, Municipal or Constructional needs. Site offices and Contractors' Huts also supplied. NO MATERIAL LICENCES NEEDED.

*Let us quote you for your requirements, write.*

**HALL'S** Dep. AJ. **PADDOCK WOOD  
TONBRIDGE KENT**



*Write  
for  
our*

## FIRECLAY WARE CATALOGUE

- ▶ **BASINS**
- ▶ **BATHS**
- ▶ **TROUGHS**
- ▶ **FOUNTAINS, WCs. Etc.**

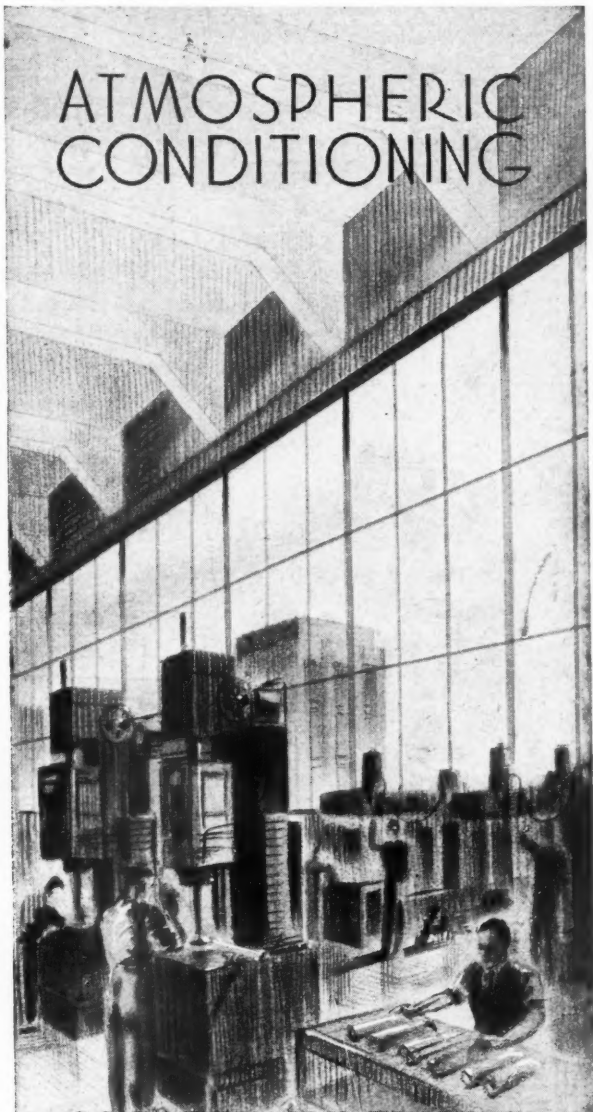
**ROWNSON DREW & CLYDESDALE LTD**

Established 1819

Telephone: Waterloo 6321-6

225 UPPER THAMES STREET, LONDON, E.C.4

## ATMOSPHERIC CONDITIONING



### SCIENTIFICALLY PLANNED FOR MODERN BUILDINGS

Whether industrial or municipal, we plan and install complete systems embodying the latest principles of space heating, ventilating, dust and fume removal, high pressure hot water and steam systems for heating and process work. Also pipe systems for compressed air, gas and oil. Consult us about your particular requirements.

**SAUNDERS & TAYLOR LTD**

IMPERIAL BUILDINGS, 13 OXFORD RD. MANCHESTER, 1



## FLOORING AT ITS BEST

SCHOOLS • OFFICES  
HOSPITALS  
HOTELS • FLATS  
SHOW ROOMS

**E. J. ELGOOD LTD.**  
INSULCRETE WORKS, YEOMAN ST. S. E. 8

**ELCO CORK TILES**  
**NOEL WOOD MOSAIC**  
**GRANOFLEX ACID RESISTING FLOORING**  
**ELCO RUBBER TILES**  
**UNIFLOR ASPHALT TILES**  
OVER 1000 COMPLETED CONTRACTS SINCE 1945

**INDUSTRIAL FLOORING SPECIALISTS**  
TELEPHONE: BERmondsey 1144 (6 lines)

FOR  
ARCHITECTURAL  
PHOTOGRAPHY  
In the North East of England



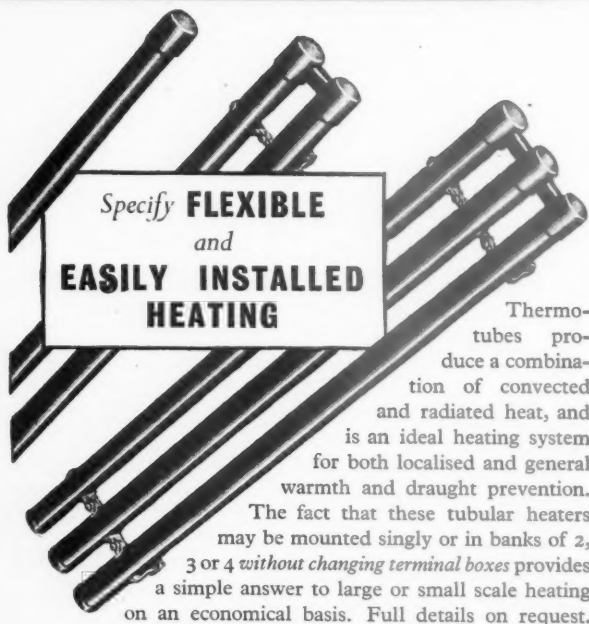
**PHILIPSON STUDIOS**  
20, Oxford St., Newcastle upon Tyne, 1  
Telephone Newcastle 27281

**W & M NEGUS LTD**

**Building Contractors**

*Station Works,  
King James St.,  
Southwark, S.E.1.*

*Telephone:—  
Waterloo 5474  
(3 lines)*



Specify **FLEXIBLE**  
and  
**EASILY INSTALLED**  
**HEATING**

Thermotubes produce a combination of convected and radiated heat, and is an ideal heating system for both localised and general warmth and draught prevention. The fact that these tubular heaters may be mounted singly or in banks of 2, 3 or 4 without changing terminal boxes provides a simple answer to large or small scale heating on an economical basis. Full details on request.

## Thermotube

*electric heaters*

*The Thermovent Technical Advisory Service is always glad to help in the planning of Space Heating equipment for any kind of building.*

**THERMOVENT HEATING:**  
**E. K. COLE LTD. 5 VIGO STREET, LONDON, W.1**

The Builder says—



"It brings to every  
Building construction  
Lasting protection  
From damp's  
destruction!"

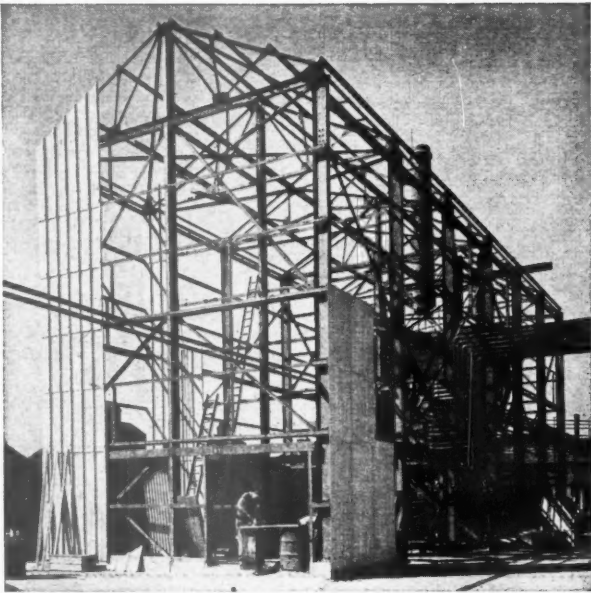
## BRIGGS AQUALITE

**bitumen dampcourse**

Manufactured from a core of untearable hessian coated with pure bitumens. Always retains its perfect damp resisting qualities. Laid in a minute—lasts as long as the wall.

**WILLIAM BRIGGS & SONS LTD., DUNDEE & LONDON**  
Offices and Depots also at  
Aberdeen, Bristol, Edinburgh, Glasgow, Leicester, Liverpool, Norwich





**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

## • • • **TEMPLASTER** • • •

TEMPLASTER Filler is the result of scientific research to discover the perfect material as approved by a panel of Master Builders for making good plaster and woodwork of all kinds.

- IT NEITHER SHRINKS NOR SWELLS IN DRYING.
- IT STAYS IN AND DOES NOT BLOW.
- IT REQUIRES LITTLE OR NO RUBBING DOWN.
- IT POSSESSES STRONG ADHESIVE PROPERTIES.
- IT OFFERS A CHEMICALLY NEUTRAL SURFACE TO PAINTS.
- IT HAS NOT INCREASED IN PRICE

Its preparation is a laboratory controlled process allowing no variation in quality— thus it is both the most efficient and economical and the wisest choice. **SEND FOR SAMPLE.**

TEMPLASTER is made by the makers of **TEMPLER'S famous White Paste Jointings, Fire Cement, Tile Cement, Plumbers' Black** and other quality compounds.

**C. G. TEMPLER & CO., LTD.,**

109 BOLLO BRIDGE ROAD, ACTON, W.3. Phone: Acorn 0422/1653

## *Functional...* IN THE FULLEST SENSE

Seven capacities from 21,000 to 75,000 B.T.U.'s per hour.

Designed in accordance with B.S.S. 758.

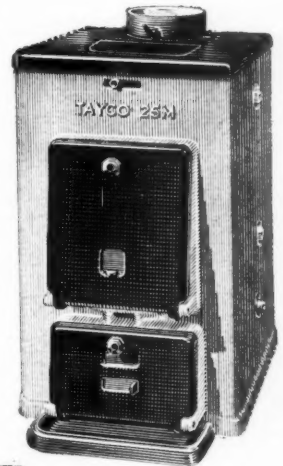
Approved by Fuel Efficiency Dept. of Ministry of Fuel and Power.

Robert Taylor & Co.  
(Ironfounders) Ltd.

Larbert, Stirlingshire

London Office & Showrooms—  
66 Victoria Street, S.W.1

Also at Building Centre—  
26 Store Street, W.C.1.



**Tayco** DOMESTIC  
BOILERS



## **Ventilation**

by **FENTON, BYRN & Co LTD**

### THE MOTORISED ROOF COWL . . .

Designed to fit any roof, it is recommended for Factories or Workshops. Can be used for intake or exhaust. Efficiency is unaffected by wind or rain. Size 12" and 16". Air Delivery 500-2500 cu. ft. per min. Available for A.C. or D.C. Voltages.



SPACE HEATERS • WINDOW FANS • WINDOW VENTILATORS  
WALL FANS • PROPELLER FANS • MOTORISED ROOF COWLS  
DESK AND CEILING FANS • COMPLETE VENTILATING SCHEMES  
AND ANCILLARY EQUIPMENT

*Air-flow*

FENTON, BYRN & CO. LTD. Ventilating Engineers—Fan Manufacturers.  
AIRFLOW WORKS, BERRYLANDS ROAD, SURBITON, SURREY.  
Phone: Elmbridge 6724/5. Grams: Airlation, Surbiton.

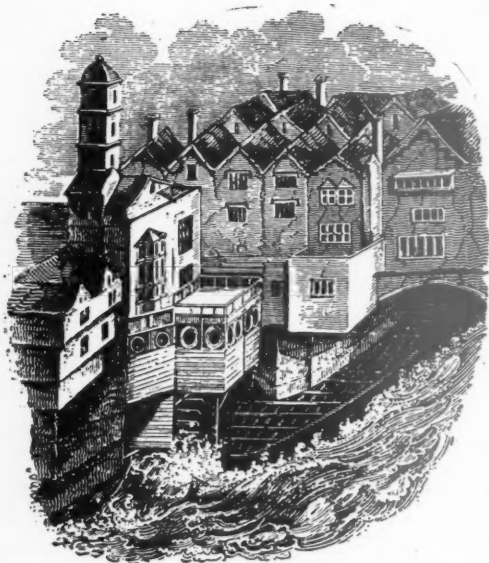


# THE CITY OF LONDON

## a record of Destruction and Survival

with a report on Reconstruction by the planning consultants:

**C. H. Holden and W. G. Holford**



THIS BOOK presents the story of the development of the City of London from Roman Times to the present day.

In it you can see the first known picture of London, made in A.D. 296, and follow the story through the growth of the mediæval precincts, the Great Fire, Wren's plans for the City, and the Victorian improvements. A series of brilliant and previously unpublished photographs provide

the first comprehensive record of the 1940-45 bomb damage when a third of the City was destroyed, when twenty of Wren's City churches were ruined and dramatic new views of St. Paul's were revealed over the wastes of rubble. The proposals for reconstruction prepared for the Corporation of London by the consultants, Dr. C. H. Holden and Professor W. G. Holford, are shown in full detail.

Here also an attempt is made to portray that complicated and diverse character which is peculiar to the City, that strange agglomeration of the monumental and intimate, tall business houses overlooking the intricacy of narrow alleys and quiet churchyards, the river, and the concentration of commercial and trade centres—banking, insurance, furs, shipping, textiles, wine, printing, markets and exchanges, all compressed into a few acres, an area so small that a pedestrian can comfortably encompass it in an hour or two. What he is likely to see after reconstruction is completed and new buildings are woven in amongst the ancient landmarks is visualized in a series of drawings by Gordon Cullen.

Bound in heavy buckram boards, gold blocked. Size 9½ in. by 7½ in.; 341 pages; over 360 photographs, engravings and maps, 40 of which are in colour. Price 25s. net, postage 10d.

**THE ARCHITECTURAL PRESS, 9-13 Queen Anne's Gate, Westminster, S.W.1**

CLAS  
Adver  
Manag  
13. Que  
should  
morning  
paper.  
Replie  
care of  
given a

Publi  
The  
advertis  
Office o  
Employ  
aged  
includi  
excepte  
of Vac

ARC  
MEN  
Works  
severa  
workin  
maner  
are m  
provin  
annua  
qualit  
statist  
(with  
Empl

BOR  
P  
APP  
Ap  
appo  
(a)  
A.P.  
(b)  
A.P.  
Ap  
gene  
thro  
give  
nec  
to l  
A  
men  
esta  
be  
bec  
T  
and  
offe  
T  
of  
Co  
val  
of  
193  
7  
pa  
wi  
sic  
an  
to  
be  
ni  
no  
sh  
th  
of  
T

## 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.

### AIR MINISTRY WORKS DEPT.

**ARCHITECTURAL DESIGNER/DRAUGHTSMEN** required in Designs Branch by Air Ministry Works Department. Applicants should have had several years' experience in the preparation of working drawings, details and layouts for permanent and semi-permanent buildings. Vacancies are mainly in London, but there are some in the provinces. Salaries are on ranges up to £675 per annum, with starting pay dependent upon age, qualifications and experience. Applications, stating age, qualifications and previous appointments (with dates), should be sent to the nearest local Employment Exchange. 5162

### COUNTY BOROUGH OF BARNSLEY. BOROUGH ENGINEER AND SURVEYOR AND PLANNING OFFICER'S DEPARTMENT.

**APPOINTMENT OF ARCHITECTURAL STAFF.** Applications are invited for the following appointments:—

(a) **GENERAL ASSISTANT ARCHITECT.** A.P.T. Grade V (£570-£620).  
(b) **JUNIOR ARCHITECTURAL ASSISTANT.** A.P.T. Grade II (£470-£515).

Applicants for post (a) should have good general experience in design and the carrying through of Building Contracts. Preference will be given to candidates who are A.R.I.B.A. If necessary, housing accommodation may be offered to the successful candidate.

Applicants for post (b) should be good draughtsmen and have experience in the layout of housing estates and the design of houses. Preference will be given to candidates who are in the course of becoming qualified.

The Council have a large programme of Housing and Public Buildings in hand, and the positions offer wide scope to persons with initiative.

The appointments will be subject to the Scheme of Conditions for A.P.T.C. Services, to the General Conditions of Service within the Corporation as varied from time to time, and to the provisions of the Local Government Superannuation Act, 1937.

The successful candidates will be required to pass a medical examination and the appointments will be subject to one month's notice on either side.

Applications, stating age, present and previous appointments, experience and qualifications, etc., together with the names of two referees, should be addressed to the Borough Engineer and Planning Officer, Town Hall, Barnsley, to reach him not later than 12th April, 1952.

Canvassing will disqualify, and applicants should disclose whether or not to their knowledge they are related to any member or senior officer of the Council.

(Sgd.) A. E. GILFILLAN,

Town Clerk.

Town Hall, Barnsley.  
March, 1952. 6553

### ORKNEY COUNTY COUNCIL.

#### COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of **ARCHITECTURAL ASSISTANT** in the County Architect and Planning Officer's Office. Applicants should be fully qualified Architects holding the Certificate A.R.I.B.A., or equivalent qualification, and have had experience in an Architect's Office. The salary attached to the post, which is subject to the Local Government Superannuation (Scotland) Act, 1937, will be between £570 and £660 per annum, i.e., Grades V and Va, according to the qualifications and experience of the successful applicant.

Applications, together with copies of three recent testimonials, should be lodged with the undersigned on or before 5th April, 1952.

DOUGLAS M. WOOD,

County Clerk.

County Offices, Kirkwall.  
12th March, 1952. 6562

### BOROUGH OF CHATHAM.

#### APPOINTMENT OF CHIEF ASSISTANT ARCHITECT.

Applications are invited for the appointment of **Chief Assistant Architect**, within Grade VII (£685-£760).

Housing accommodation will be made available if required.

Conditions of appointment and form of application may be obtained from Mr. H. D. Peake, M.Sc.(Eng.), Borough Engineer and Surveyor, Town Hall, Chatham, to whom completed application forms should be returned not later than Friday, 4th April, 1952. 6561

### METROPOLITAN WATER BOARD. APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

The Metropolitan Water Board invite applications from Associate members of the Royal Institute of British Architects who have had experience in the design, preparation of plans and working drawings, specifications and quantities for the erection of houses and offices, for appointment to the permanent staff as a Senior Assistant Architect in the Surveyor's Department; salary scale £840-£950-£1,040 per annum.

The selected candidate will be required to pass a medical examination by the Board's Chief Medical Officer, and to undertake in writing to join the Board's Superannuation and Provident Fund.

The appointment will be held during the pleasure of the Board, and will be subject to the Board's regulations and conditions of service which may from time to time be in force and appropriate.

A form of application may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope, quoting reference (A).

Canvassing directly or indirectly will be held to be a disqualification.

W. S. CHEVALIER,

Clerk of the Board.

Offices of the Board,  
New River Head,  
Rosebery Avenue, E.C.1. 6563

### GLENROTHES DEVELOPMENT CORPORATION.

Applications are invited from suitably qualified persons under 45 years of age, for the appointment of **ASSISTANT ARCHITECT**. Salary £490-£620, with placing according to qualifications and experience. Applicants should be Corporate members of R.I.B.A. and have general architectural experience. The Corporation will give every assistance in securing housing accommodation. The post will be superannuable under the Local Government (Superannuation) (Scotland) Act, 1937, and the successful candidate will be required to pass a medical examination. Applications with details of age, qualifications and experience, together with names of three referees must reach the Secretary, Glenrothes Development Corporation, Woodside, Glenrothes, by Markinch, Fife, not later than 9th April, 1952. 6564(a)

### ESTON URBAN DISTRICT COUNCIL. APPOINTMENT OF ARCHITECTURAL ASSISTANT—GRADE III, IV or V.

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with Grade A.P.T. III, IV or V, of the National Scales, namely £500 to £545, £530 to £575, or £570 to £620 according to qualifications and experience.

Applicants should have had good general training, with experience in housing work, and preference will be given to candidates who have passed the Intermediate Examination of the Royal Institute of British Architects.

The conditions of service are those formulated by the National Joint Council, and the appointment is subject to the passing of a medical examination and the provisions of the Local Government Superannuation Act, 1937. Housing accommodation will be made available to the successful candidate if required.

Applications, giving full details of training, qualifications, experience and copies of two recent testimonials, should be sent to me by the first post on Wednesday, 2nd April, 1952.

N. C. HARRISON.

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

Engineer and Surveyor's Department,  
Normanby Road, South Bank,  
Middlesbrough.  
14th March, 1952. 6564(b)

### ROYAL BURGH OF KIRKCALDY.

Applications are invited for appointment of **ENGINEERING ASSISTANT** in the Burgh Engineer's Department. Salary will be A.P.T. Grade III or IV (£490 to £555), with placing according to qualifications and experience. The appointment will be subject to the Corporation's Conditions of Service and Superannuation Scheme, and the successful applicant will be required to pass a medical examination. Applicants should preferably have some experience in Civil and Municipal Engineering and have at least part qualification in appropriate professional institution.

Full details of experience, qualifications, etc., accompanied by copies of testimonials, should be sent to the Burgh Engineer, Osborne House, East Fergus Place, Kirkcaldy, on or before 7th April, 1952. 6566

### BOROUGH OF STRATFORD-UPON-AVON.

#### APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the above appointment at a salary in accordance with A.P.T. Grade Va (£600-£660 per annum) of the National Scale of Salaries.

Applicants should be Registered Architects or hold equivalent qualifications and preference will be given to those experienced in the design of housing schemes, and the maintenance and adaptation of Local Authority buildings.

The Council will be prepared to provide housing accommodation for the successful applicant, if married.

Conditions of the appointment and forms of application may be obtained from the undersigned to whom completed forms should be returned not later than Thursday, 10th April, 1952.

P. C. SMAR, A.M.I.C.E.,

Borough Engineer.  
Municipal Offices,  
Stratford-upon-Avon. 6568

### COUNTY BOROUGH OF GREAT YARMOUTH. APPOINTMENT OF GENERAL ASSISTANT ARCHITECT.

Applications are invited for the appointment of a permanent General Assistant Architect at a salary within Grades A.P.T. II and IV (£470-£530) according to experience and ability.

Preference will be given to applicants who have passed the Intermediate Examination of the R.I.B.A. The appointment will be terminable by one month's notice on either side and subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

The Council are unable to offer housing accommodation. Applications, stating age, qualifications and experience together with the names of three persons to whom reference may be made, should be enclosed in an envelope endorsed "General Assistant Architect" and must be received by me not later than Friday, 4th April, 1952. Candidates must disclose in writing whether they are related to any member or officer of the Council. Canvassing directly or indirectly will disqualify.

FARRA CONWAY,

Town Clerk.

Town Hall, Great Yarmouth.  
12th March, 1952. 6565

### CITY OF LEICESTER EDUCATION COMMITTEE.

#### LEICESTER COLLEGE OF ART.

Principal: Kenneth Holmes, O.B.E., A.R.C.A. Applications are invited for the post of **HEAD** of the Building Department. Candidates should hold professional qualifications in either Architecture, Building or Allied Professions, have had experience in industry, and preferably some teaching.

The Department is Grade II in accordance with the Burnham Further Education Report, salary £1,000-£1,250-£1,150 per annum.

Applications giving full particulars of training and experience should be sent to the Registrar, College of Art, The Newarke, Leicester, not later than 24th April, 1952.

ELFED THOMAS,

Director of Education.

6574

### MIDDLESEX COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

**PLANNING ASSISTANT (A.P.T. IV, £560 rising to £605 p.a. if 25 years or over)**, with Town Planning experience. T.P.I. Inter. desirable but other appropriate examinations considered. Established, pensionable, subject to medical assessment and prescribed conditions. Applications, stating age, experience, qualifications, etc., to the undersigned with copies of two recent testimonials by 4th April (quoting K.591, AJ). Canvassing disqualifies.

C. W. RADCLIFFE,

Clerk of the County Council.

Middlesex Guildhall,  
Westminster, S.W.1. 6578

### BOROUGH OF CHELMSFORD.

#### ARCHITECTURAL ASSISTANT (GRADE A.P.T. III).

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with A.P.T. Grade III.

Applicants should be suitably qualified and should have had experience in the office of a Local Authority, particularly in relation to housing. The appointment will be subject to the National Scheme of Conditions of Service and the provisions of the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side. The selected applicant will be required to pass a medical examination.

Applications, stating age, qualifications, experience, present and previous appointments (with salaries), together with the names and addresses of two referees, are to be delivered to the Borough Engineer, Surveyor and Architect, Municipal Offices, Chelmsford, not later than 14th April, 1952. Canvassing will disqualify and applicants must state whether to their knowledge they are related to any member of or the holder of any office under the Council.

B. A. FRANCIS,

Town Clerk.

Municipal Offices, Chelmsford.  
19th March, 1952. 6584

### METROPOLITAN BOROUGH OF WANDSWORTH.

#### ARCHITECTURAL ASSISTANTS.

Applications are invited for the under-mentioned established male appointments in the Borough Engineer, Surveyor and Architect's Department:—

(a) **SENIOR ARCHITECTURAL ASSISTANT.** Salary according to qualifications and experience, within A.P.T. Grades VII-VIII (£715-£840).  
(b) **ARCHITECTURAL ASSISTANT.** Salary A.P.T. Grades Va-VI (£630-£740).

Applicants should be Associates of the R.I.B.A., and in the case of (a) must have had considerable experience in the design and planning of multi-storey blocks of flats and framed structures, and in the case of (b) should have had experience in the design and planning of small housing estates incorporating load bearing brickwork. All applicants should have had experience in the supervision of works under construction.

Application forms, obtainable from the Borough Engineer, Surveyor and Architect at the under-mentioned address, must be returned to me, sealed in an envelope endorsed "Architectural Assistant," by 2nd April, 1952.

R. H. JERMAN,

Town Clerk.

Municipal Buildings, Wandsworth, S.W.18. 6587

**BOROUGH OF DOVER.**

**SENIOR ARCHITECTURAL ASSISTANT.**

Applications are invited for this appointment in the Borough Engineer's Department. Salary, A.P.T., Grade V, of the National Scales (£570-£620 per annum).

Applicants should hold a recognised architectural qualification, and have had practical experience with a Local Authority on housing work.

Applications, stating age, experience and qualifications, together with the names and addresses of three persons to whom reference may be made, must be delivered to the Borough Engineer, Brook House, Dover, not later than the 10th April, 1952.

JAMES A. JOHNSON.

Town Clerk.

New Bridge House, Dover.

19th March, 1952.

6586

**BOROUGH OF WATFORD.**

**APPOINTMENT OF ASSISTANT ARCHITECT.**

Applications are invited for the above appointment, at a salary within Grade A.P.T., VI, with commencing salary according to qualifications and experience.

Application forms may be obtained from the undersigned, to whom they must be returned by 15th April, 1952.

Consideration will be given to the provision of housing accommodation if required.

F. C. SAGE.

Borough Engineer, Surrey and Architect, Town Hall, Watford.

March, 1952.

6585

**HARLOW DEVELOPMENT CORPORATION.**

Applications are invited for the appointment of a JUNIOR ASSISTANT ARCHITECT, Grade V(b), salary £500 by £25 to £600 in the Architect Planner's Department (F. Gibberd, F.R.I.B.A., M.T.P.I.) to work under the direction of the Executive Architect (Victor Hammett, B.Sc., A.R.I.B.A., A.M.T.P.I., A.R.I.C.S.). Candidates must have had experience in the preparation of working drawings for large-scale housing contracts and possess a minimum qualification of Inter. Examination of the R.I.B.A.

The appointment will be made under the terms of the Corporation's Conditions of Service which are similar to those of the Professional and Technical Grades of Local Authorities Staffs and will in particular involve a contribution to an approved superannuation fund. Housing accommodation may be made available in due course to the successful candidate.

Applications giving full details of experience and qualifications together with the names of two referees should be addressed to the undersigned to reach him not later than 17th April, 1952.

W. ERIC ADAMS ESQ., C.B.E.

General Manager.

"Terlings," Gilston,

Harlow, Essex.

6593

**COUNTY COUNCIL OF RENFREW.**

Applications are invited for the following appointments in the County Engineer's Department:—

(a) SENIOR ARCHITECTURAL ASSISTANT. Salary scale A.P.T. V/VI (£570-£710 p.a.).

(b) INTERMEDIATE ARCHITECTURAL ASSISTANT. Salary scale A.P.T. I/II/III (£430-£535 p.a.).

Applicants should have wide experience of Local Authority Housing and Public Buildings. Preference will be given to members of the R.I.B.A. and the R.I.A.S.

The appointments are subject to the provisions of the Local Government Superannuation (Scotland) Act, 1937. Applications stating age, qualifications and experience, together with copies of two recent testimonials, should be lodged within ten days with the County Clerk, County Buildings, Paisley.

6601

**LONDON COUNTY COUNCIL.**

Vacancies for ASSISTANTS (salaries up to £696) for preparation of specifications and estimates for painting and repairs to Voluntary Schools. A.R.I.C.S. essential. Application forms from Architect, County Hall, S.E.1, quoting AR/EK/VS/2. (305)

6606

**LONDON COUNTY COUNCIL.**

ARCHITECTS required for new Housing programme. Starting salaries according to experience up to £837 10s. A.R.I.B.A. essential. Application forms from Architect, County Hall, S.E.1, quoting AR/EK/2. (304)

6605

**Architectural 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.

**EAST AFRICA.—ARCHITECTURAL ASSISTANTS** of Intermediate and Final R.I.B.A. standard required for interesting work. Free housing. Salary according to experience and ability. Airmail full particulars to H. G. Radford, A.R.I.B.A., & Partners, P.O. Box 1500, Kampala, Uganda.

6473

**ASSISTANT** wanted for Architect's Branch Office at Andover, Hants. Must have had three or four years' training. Box 6556.

**SENIOR ASSISTANT** required for Architects' Department at Hammersmith office, to carry out designs and working drawings for traditional and non-traditional contracts. A reasonable period will be allowed for successful applicant to acquire background knowledge of non-traditional methods. Commencing salary ranging from £550-£650, according to experience. Applications, giving brief particulars of experience, should be addressed to the Staff Architect, George Wimpey & Co., Ltd., 27, Hammersmith Grove, London, W.5.

6569

**ARCHITECTURAL ASSISTANT** required for Watford office. Salary £500 to £600 per annum. Five-day week. Write, giving full details of qualifications and experience. Box 6571.

6575

**ARCHITECT'S ASSISTANT**, with at least 4 years' experience, preferably industrial. Write Clifford Tee & Gale.

6576

**EXPERIENCED ARCHITECTURAL ASSISTANTS** and JUNIOR ASSISTANTS required. Industrial and Church work. Apply by letter, stating experience, salary required, etc., to Wood, Goldstraw & Yorath, 42, Cheapside, Hanley, Stoke-on-Trent.

6579

**ARCHITECTURAL ASSISTANT (SENIOR)** required for Plymouth office. General experience, including Shops, Domestic and Industrial. Reply, giving details of experience, age, salary, and when available. Box 6588.

6588

**PROMINENT** London Contractors, designers of non-traditional house construction, have vacancy for SENIOR ASSISTANT ARCHITECT. A post for a young office trained A.R.I.B.A. interested in constructional problems. Salary £650 per annum, or according to ability. Write Box AC70894, Samson Clark, 57/61, Mortimer Street, W.1.

6587

**ARCHITECTURAL ASSISTANT** interested in store and office design, etc., also prefabrication, required. Gaby Schreiber & Associates, Sloane 6127/8.

6600

**EXPERIENCED SENIOR** required in Architect's Department in City. Qualified office trained man of about 35/40 preferred. Must be used to good class work and taking charge from sketch plan to final account for both new and maintenance works. Secure future for suitable applicant. State complete details of past work also age and salary required. Box 6599.

6599

**SENIOR ARCHITECTURAL ASSISTANT** required immediately. Good salary and prospects; 5-day week. Write to Messrs. J. M. Sheppard & Partners, 38, Bedford Place, W.C.1, giving particulars of age, qualifications, experience and salary required.

6597

**THE LONDON HOSPITAL**, Whitechapel, E.1.

Applications are invited for the appointment of a JUNIOR ARCHITECTURAL ASSISTANT. Salary £415-£515-£595 p.a. plus London Weighting. The post is superannuable under the N.H.S. Superannuation Regulations, 1947/49. Applications, giving age, present salary and brief statement of experience should be sent to the Surveyor.

6594

**QUALIFIED ARCHITECT** required for leading Nairobi office. Salary £720 p.a. with free passage out on a two-year initial contract. Send brief personal and professional details to Overseas Technical Service, 5, Welldon Crescent, Harrow, quoting reference OSS.17/3.

6603

**EMIGRANTS** to Southern Rhodesia of Intermediate R.I.B.A. standard who would be interested in an appointment for an initial contract period of six months at a salary of up to £600 p.a. with a firm of Chartered Architects should consult Overseas Technical Service, 5, Welldon Crescent, Harrow, quoting reference OSS.47/2.

6602

**NAIROBI.—ARCHITECTURAL ASSISTANT**, qualified or Final R.I.B.A. standard with several years' experience. Salary £750-£1000-£950 on three-year contract; passages paid each way. Send brief personal and professional details to Overseas Technical Service, 5, Welldon Crescent, Harrow, quoting reference OSS.15/2.

6604

**Architectural Appointments Wanted**

**QUALIFIED ARCHITECT (A.R.I.B.A.)**, with considerable experience of many types of architectural projects, has held positions of responsibility, seeks Senior position with firm in or near London offering interesting and responsible work. Salary required, £800 per annum. Box 6511.

**CHARTERED ARCHITECT**, with experience of many types of architectural works involving complete responsibility and initiative, seeks part-time position of three or four days per week with firm in or near London. Salary by arrangement. Box 6512.

**WOMAN ARCHITECT, A.R.I.B.A., A.A. Dipl.**, 18 months' office experience, a scale plans and working drawings, secretarial training, seeks work in London area or provinces. Box 415.

**LADY ASSISTANT, A.R.I.B.A.**, 3 years' office experience, desires full- or part-time position in London area. Box 417.

**ENERGETIC** young man (26), with creative ability, seeks progressive post in Contemporary Architecture or Industrial Design. 3 years' office experience. Model-builder. Box 6572.

**B. ARCH., A.R.I.B.A.**, with 3 years' post-graduate office experience, requires temporary post from July to September in Oxford area (alternatively London). Any type of work considered. Box 6573.

**SENIOR ARCHITECTURAL ASSISTANT.**—Situation as Assistant to Company Architect or in small progressive London office. Comprehensive experience. Box 418.

**TEMPORARY** or part-time work required by **STUDENT R.I.B.A.**, with 5 years' office experience. North or Central London area preferred. Box 6590.

**CHARTERED ARCHITECT, A.R.I.B.A. (34)**, office trained, seeks responsible position in Yorkshire, with prospects. Comprehensive experience. Salary by arrangement. Box 6591.

**KEEN ARCHITECTURAL ASSISTANT** (woman, 22), Student R.I.B.A., 4 years' full-time training, some office experience, seeks progressive post. London or N. Surrey. Box 420.

**A. R.I.B.A.**, age 33, requires appointment. 9 years' office experience in domestic, agricultural and industrial practices, full negotiations, designs, supervision, etc. London or West Surrey preferred. Box 419.

**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.

**OLD-ESTABLISHED** Reinforced Concrete Designers require qualified **STRUCTURAL ENGINEER** as technical representative and assistant to Managing Director, preferably having contacts with Architects. State age, experience, and salary required. Box 6589.

**REQUIRED**, by a West Country Company, a qualified man to be responsible for maintenance of 400 properties. Experienced in builder's costings and capable of preparing plans for alterations. Middle aged man preferred. Box 6570.

**DRAUGHTSMAN** capable of measuring and preparing drawings of domestic and agricultural buildings, tracing and general drawing office work, age, 25/30. Write full experience and salary required to T. M. K. Knight, Frank & Rutley, Building Survey Department, 20, Hanover Square, W.1.

6598

**Partnership**

6 lines or under, 12s. 6d.; each additional line, 2s.

**QUALIFIED ARCHITECT**, with experience of surveying and all branches of architectural practice and procedure, having held positions of responsibility, seeks Partnership or position leading thereto, in London or surrounding districts. Small number of own clients and capital available. Box 6509.

**Services Offered**

4 lines or under, 7s. 6d.; each additional line, 2s.

**CHARTERED ARCHITECT**, with small but growing practice in London, offers his services in connection with work on all types of Architectural projects and surveys for house purchase and dilapidation settlements. All commissions will be given special and speedy attention. Box 6510.

**DRAUGHTSMANSHIP.** Designing and Artistry for all trades and professions. C. Leslie New, Architectural Designer, 46, Westfield Road, Birmingham, 15. 'Phone: EDG. 3723.

6514

**QUALIFIED ENGINEERS** are able to undertake Reinforced Concrete and Steel Designing. Box 6516.

**FELLOW R.I.B.A.** prepared to give whole or part-time services during May, June and July. Box 6485.

**CHARTERED ARCHITECTS AND SURVEYORS**, well equipped in all respects, offer own services or those of staff for projects in South of England. Remuneration on partnership, time or job basis. Box 6577.

**SURVEYING** and Levelling of Building Sites and Measured Drawings undertaken by experienced Surveyor at moderate charges. Box 6583.

**ADDITIONAL** free-lance work is sought by former SENIOR ASSISTANT (University Graduate in Architecture, 15 years' first-class London experience). Own or principal's office. London, Bucks, Oxford. Box 6581.

**For Sale or Wanted**

4 lines or under, 7s. 6d.; each additional line, 2s.

**WANTED.**—Complete sets of copies of "The Architectural Review," 1946 to 1951 inclusive. Box 6576.



**FINMAR** Coffee Table. Curled birch top; magazine under-shelf. Model 71 in Finmar Catalogue. Price 5 gns., carriage paid. R. McKee, 32, McLaren Road, Edinburgh, 9. 6592

**DOUBLE** Elephant Drawing Board with fully adjustable steel stand; Double Elephant Tee-square, specially designed adjustable portable 4 ft. fluorescent fitting to clamp to board; Tubular Steel Draughtsman's Stool. Also Standard Remington Typewriter, six volumes of "The Modern Plumber and Sanitary Engineer," and Uno Stencil Set. Box 6596.

### Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

**A. J. BINNS, LTD.**, Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works, 96/107, St. Paul's Road, N.I. Canonbury 2061.

**WINKFIELD MANOR** NURSERIES, ASCOT, lay out Rock and Formal Gardens and Labourless "Allweather" Tennis Courts. Eight Chelsea Gold Medals since 1947. Contractors to the Festival of Britain. Winkfield Row 393.

1716

### HOTELS

**DOUGLAS (I.O.M.)—HOTEL METROPOLE.** Tel. 2381. Fully licensed. Resident orchestra. Hallroom. Room service. Manx farm produce. 'Phones all rooms. Ideal Holiday. Moderate tariff. Brochure apply I. Barker. 6502

**ARTISTS HOUSE EXHIBITION.** From Abstract Art to New Realism. Sculpture. Murals by Peri. Manette Street (Charing Cross Road) 11-6 daily including Saturdays until 4th April. 6452

**THREE** Rooms to let for professional use in Bloomsbury Square area. Total area approximately 640 sq. ft. Rental £350 per annum, inclusive of rates, central heating and cleaning. Apply Box 6580.

**OFFICE ACCOMMODATION—Dorset Square.** Baker Street, N.W.1.—Architects moving to larger offices wish to let existing office suite, approx. 400 sq. ft. Studio lighting in main room. £265 p.a. inc. View by appointment. PAD. 2041/2. 6595

### Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

**R. I.B.A. and T.P.I. EXAMS—Stuart Stanley** (Tutor Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./B.A., F./A.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.

**THE GLASGOW SCHOOL OF ARCHITECTURE.** DEPARTMENT OF TOWN PLANNING. POST GRADUATE COURSE FOR THE DIPLOMA IN TOWN PLANNING.

The Diploma may be taken either as a full-time Day Course of one session (5 terms) or as a part-time Course of two sessions. The part-time Course involves a minimum attendance of two afternoons and three evenings per week. Both courses have been approved by the Town Planning Institute.

Only candidates who have qualified for the Degree or Diploma in Architecture or who have passed the Final Examination of the recognised professional body in (a) Architecture, (b) Engineering or (c) Surveying are eligible for admission.

A limited number of candidates, qualified as above, or who have passed the Intermediate Examination of the Town Planning Institute, may be admitted to lectures only in preparation for the external Final Examination of the Town Planning Institute.

Fees:—Full-time Day Course: £42, payable £10 10s. for summer term, £31 10s. for remainder of course.

Part-time Course: £21 per session.

Lectures only: Each subject £1 10s. per term.

The Courses will commence in the College on Monday, 7th April, 1952, at 5.30 p.m., when prospective candidates should present themselves for enrolment. Further particulars may be had from The Secretary (T.P.I.), The Royal Technical College, Glasgow. 6548

### RIBA INTER, FINAL & SPECIAL FINAL

Postal Courses starting now in all or any subject including Design and Professional Practice.

#### THE ELLIS SCHOOL

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.  
103B, OLD BROMPTON RD., LONDON, S.W.7  
Phone: KEN 4477/8/9 and at Worcester

### QUANTITY SURVEYING

Postal Courses for R.I.C.S., I.A.S.A., and I.Q.S. Exams. in all or any subject starting now. Tuition by well qualified tutors under the direction of the Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A. Descriptive booklet on request.

#### THE ELLIS SCHOOL

103B, OLD BROMPTON RD., LONDON, S.W.7  
Phone: KEN 4477/8/9 and at Worcester

## PROFESSIONAL ADVANCEMENT

through **ICS** STUDY COURSES

● I.C.S. Home Study Courses help the professional man to further his career.

● I.C.S. Students have won brilliant successes in the following Examinations:—

R. I. B. A.	R. Inst. Ch. Surveyors
Inst. Civil Eng.	Inst. Mech. Eng.
Inst. Mun. Eng.	Inst. Clerk of Works
Inst. Struct. Eng.	Inst. Ind. Admin.

All candidates are coached until successful.

First-class non-examination instruction is also available in Architecture, Accountancy, Auditing, Mun. Eng., Bldg. Contracting & Specifications, Qty. Surveying, Civil Eng., Draughtsmanship, Struct. Eng., Sanitary Eng., etc. Fees are moderate and include *all* books required. Write today for FREE booklet describing our Courses in any of the subjects mentioned above.

Generous discount to H.M. Forces.

### INTERNATIONAL CORRESPONDENCE SCHOOLS

Dept. 5A., 71, Kingsway, London, W.C.2

### The World's Greatest Bookshop

## FOYLES

### SPECIALISTS IN TRACING OUT-OF-PRINT BOOKS

New, secondhand & rare Books on every subject

Subscriptions taken for British, American and continental magazines

119-125 CHARING CROSS RD., LONDON, W.C.2  
Gerrard 5660 (16 lines) ★ Open 9-6 (inc. Sats.)

## MODELS

ESTAB.

1883.

John B. THORP

BY

FOR 98 GRAY'S INN ROAD, W.C.2  
TOWN PLANNING PUBLIC BUILDINGS TELEPHONE:  
ESTATES AND INTERIORS HOLBORN 1011

### FIBROUS PLASTERWORK OF EVERY DESCRIPTION

#### ALLIED GUILDS

King Edward Square  
SUTTON COLDFIELD. Tel: Sut 3809

## FIRE! WHERE'S YOUR NU-SWIFT?

The World's Fastest Fire Extinguishers — for every Fire Risk

Pressure-operated by sealed CO<sub>2</sub> Charges

NU-SWIFT LTD. • ELLAND • YORKS

In Every Ship of the Royal Navy

## KINROD STEEL ROLLING GRILLES

Sole Manufacturers:  
**ARTHUR L. GIBSON & CO LTD**  
Branch Offices: Birmingham, 15, Tennant Road; Manchester, 20, Dancy Street; Glasgow, 1, Low Road; London, 1, Abchurch Lane.

**CIRCUIT BREAKERS** to control electric currents of up to 3,000 amps. or for **STARTERS** for electric motors of up to 1,000 H.P.

*Specify*  
**Ellison**

GEORGE ELLISON LIMITED, 4, PERRY BARR, BIRMINGHAM. 228

### MINIMISE FIRE RISK WITH

## DURASTEEL

### STRUCTURAL FIRE PROTECTION

For Partitions, False Ceilings, Lift Shaft, Cladding, Fire Check Doors, etc., specify DURASTEEL 3DF2 Composite Steel-&-Asbestos Sheeting. Send for data and test details to manufacturers:—

DURASTEEL LTD., OLDFIELD LANE, GREENFORD MIDDX.  
Tel. WAXlow 1051 (P.B.X)

## LIFTS

### by MORRIS

Herbert Morris Ltd

Loughborough

Engineering branches in London, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Newcastle, Cardiff, Bristol, Dundee, Liverpool, Nottingham, Bury St. Edmunds, Belfast

**EXPAMET**  
EXPANDED METAL

THE EXPANDED METAL COMPANY LTD.  
Burwood House, Caxton St., S.W.1. Whitehall 1736  
Stranton Works, West Hartlepool. Hartlepool 2194

56A



# Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Adamite Co., Ltd., The .....	xxiii	Hammond & Champness, Ltd. ....	xix	Phoenix Rubber Co., Ltd. ....	
Adamsez, Ltd. ....	xxiii	Harvey, G. A., & Co. (London), Ltd. ...	xxx	Pikington Bros., Ltd. ....	xliv
Allied Guilds .....	xii	Hills (West Bromwich), Ltd. ....	i	Plywood & Timber Products Agencies, Ltd. ....	xviii
Anderson Construction Co., Ltd. ....	liv, lx	Hobbs, Hart & Co., Ltd. ....	lxv	Pritchett & Gold & E.P.S. Co., Ltd. ....	vi
Architectural Press, The .....		Hollis Brothers, Ltd. ....		Prodorite, Ltd. ....	
Armstrong Cork Co., Ltd. ....		Holoplast, Ltd. ....		Radiation Group Sales, Ltd. ....	xlvi
Associated Lead Manufacturers, Ltd. ...	xxxv	Hollway, W. F., & Brother, Ltd. ....	xxviii	Redpath Brown & Co., Ltd. ....	xlvi
Austins of East Ham, Ltd. ....	x	Hope, Henry, & Sons, Ltd. ....	xliv	Rentokil, Ltd. ....	lvi
Boulton & Paul, Ltd. ....	xlvi	Hotpoint Electric Appliance Co., Ltd. ...	xl	Richardson & Starling, Ltd. ....	
Briggs, Wm., & Sons, Ltd. ....	lviii	Istock Brick & Tile Co., Ltd. ....	vii	Rownsdon, Drew & Clydesdale, Ltd. ....	lvii
British Insulated Cables, Ltd. ....	xiv	Imperial Chemical Industries, Ltd. ....	lxiii	Rubert Co., Ltd., The .....	
British Thomson-Houston Co., Ltd. ....		International Correspondence Schools ...	xiii	Rubery Owen & Co., Ltd. ....	xxxv
Broad & Co., Ltd. ....	xxxvi	Jenson & Nicholson, Ltd. ....		Sadd, John, & Sons, Ltd. ....	xxii
Carter & Co., Ltd. ....		Johnston Bros. (Contractors), Ltd. ....		Sankey, J. H., & Son, Ltd. ....	
Cellactite & British Uralite, Ltd. ....	xvii	Kenyon, Wm., & Sons, Ltd. ....	xiv	Sankey-Sheldon, Ltd. ....	
Cellon, Ltd. ....	xx	Kerner-Greenwood & Co., Ltd. ....	lxiv	Sanders, Wm., & Co. (Wednesbury), Ltd. ...	
Cement Marketing Co., Ltd. ....	v	King, Geo. W., Ltd. ....	lxiii	Savo Thermosets, Ltd. ....	lvii
Cole, E. K., Ltd. ....	liii	King, J. A., & Co., Ltd. ....		Saunders & Taylor, Ltd. ....	xviii
Colt Ventilation, Ltd. ....	xxxiv	Kirkwood Grilles .....		S.B. & N., Ltd. ....	
Colt, W. H. (London), Ltd. ....		Kwikform, Ltd. ....	lxvi	Secomastic, Ltd. ....	
Concrete, Ltd. ....		Laing, John, & Son, Ltd. ....	lxv	Semtex, Ltd. ....	
County Chemical Co., The .....	lv	Leatherfor, Ltd. ....	xxiv	Simplex Electric Co., Ltd. ....	
Croggon & Co., Ltd. ....	lxix	Lever, James, & Sons, Ltd. ....	lxvi	Smith's English Clocks, Ltd. ....	xl
Deans Blinds (Putney), Ltd. ....	lxvi	Lion Foundry Co., Ltd. ....	lxv	Soignum, Ltd. ....	
Durasteel, Ltd. ....	lxiii	Liutex Asbestos Flooring Co., Ltd., The ..	lxv	Steel Radiators, Ltd. ....	
Eagle Pencil Co., Ltd. ....	xl	Lockhart Equipment, Ltd. ....	xxiv	Stelcon (Industrial Floors), Ltd. ....	
Econa Modern Products, Ltd. ....	xxix	Loft Ladders, Ltd. ....	lxv	Sulzer Bros. (London), Ltd. ....	
Elgood, E. J., Ltd. ....	lviii	Luxfer, Ltd. ....	lxv	Sundala Board Co., Ltd. ....	ix
Ellis, John, & Sons, Ltd. ....	xxxiii	McKechnie Bros., Ltd. ....	lxiii	Surrey Concrete, Ltd. ....	
Ellis School of Architecture, The .....	lxiii	Magnet Timber, Ltd. ....	lxv	Tarmac, Ltd. ....	lix
Ellison, George, Ltd. ....	lxiii	Mallinson, W., & Sons, Ltd. ....	xxxvii	Taylor, R. & Co. (Ironfounders), Ltd. ....	lix
Evode, Ltd. ....	xvi	Marbolith Flooring Co., Ltd. ....	xxxvii	Templer, C. G. ....	
Ewart & Son, Ltd. ....	xv	Marley Tile Co., Ltd., The .....	xxxvii	Thermalite, Ltd. ....	lxviii
Excel Asphalt Co., Ltd. ....	lxv	Martyn, Bruce, Ltd. ....	lxv	Thorp, John B. ....	
Expanded Metal Co., Ltd., The .....	lxiii	Mavitta Drafting Machines, Ltd. ....	lxv	T.I. Aluminium, Ltd. ....	xxviii
Fenton Byrn & Co., Ltd. ....	lxv	Medway Buildings & Supplies, Ltd. ...	lxv	Tretol, Ltd. ....	
Fibreglass, Ltd. ....	lxviii	Metropolitan-Vickers Electrical Co., Ltd. ...	lxv	Turner, Chas., & Son, Ltd. ....	xli
Findlay, Alex., & Co., Ltd. ....	ii	Mills Scaffold Co., Ltd. ....	lxv	Turners Asbestos Cement Co., Ltd. ....	
Fleetwood Paints Ltd. ....	xxxviii	Morris, Herbert, Ltd. ....	lxviii	Venetian Vogue, Ltd. ....	xxxviii
Fordham Pressings, Ltd. ....	lv	National Federation of Clay Industries..	lxviii	Venus Pencil Co., Ltd., The .....	xxxviii
Fothergill & Harvey, Ltd. ....	xxi	Negus, W. & M., Ltd. ....	lxviii	Versil, Ltd. ....	
Foye, W. & G., Ltd. ....	lxiii	Neuchatel Asphalt Co., Ltd., The .....	lxviii	Vigers Bros., Ltd. ....	xxxvi
Gas Council, The .....		North British Rubber Co., Ltd. ....	xxxvi	Walker, Crosswell & Co., Ltd. ....	xxxix
Gibson, Arthur L., & Co., Ltd. ....	lxiii	Nu-Swift, Ltd. ....	lxviii	Ward, Thos. W., Ltd. ....	xxvii
Greenwoods & Airvac Ventilating Co., Ltd. ....		Orlit, Ltd. ....	lxviii	Waterite, Ltd. ....	
Gyproc Products, Ltd. ....		Paragon Glazing Co., Ltd. ....	lxviii	Williams, John, & Sons (Cardiff), Ltd. ....	lii, liii
Hall, J. & E., Ltd. ....	iv	Peglers, Ltd. ....	lxviii	Williams & Williams, Ltd. ....	
Hall, John, & Sons (Bristol and London), Ltd. ....	viii	Pennycook Patent Glazing & Engineering Co., Ltd. ....	xxx	Wimpey, George, & Co., Ltd. ....	ii
Hall, Robt. H., & Co. (Kent), Ltd. ....	lvii	Permanite, Ltd. ....	lxviii		
		Phillipson & Son, Ltd. ....	lxviii		
		Phillips Electrical, Ltd. ....	lxviii		

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales, see lx, lxi, lxii, lxiii.

## GLASCRETE

This view of the interior of the Avon Pumping Station at Ringwood illustrates the excellent lighting value obtained by the use of GLASCRETE Double Glazed Construction.

Design and construction by the late Philip G. G. Moon, M.Inst.C.E., F.C.S., and the Engineering Staff of the Bournemouth Gas & Water Co.



Telephone: CENTRAL 5866 (5 lines)

### Reinforced Concrete and Glass



... "by the way" GLASCRETE needs no painting."



**N**  
*The*

LAMIN  
FINISH  
ROOF  
MASTI  
EXCEL

Telegram

If you intend to specify  
Sash Windows, avoid future  
Cord troubles by ordering . . .



Sash Cords do not  
break — they rot.  
Stop the Rot—fit  
"EVERLASTO"

**"EVERLASTO"**

BRITAIN'S SUPER SASH CORD

- ★ Weatherproofed by special process AT NO EXTRA COST
- ★ Non Stretch
- ★ Rot Proof
- ★ Long Life
- ★ Durable
- ★ Low Cost



Registered  
Trade Mark  
No. 519412

Specified by  
Housing Directors,  
Architects, and  
Builders

Weatherproof and Rot Proof

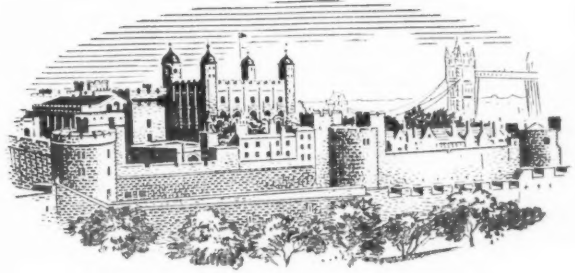
**SASH CORD**



Also Ideal for Colour  
Poles, Aerial Poles, Inside  
Clothes Alrer Rails, etc.

Made in all lengths  
Write for details

**JAMES LEVER & SONS LTD**  
Everlasto Cordage Works · Delph St. Bolton



FOR SECURITY REASONS

*The Tower of London  
is one of many famous  
buildings fitted with*

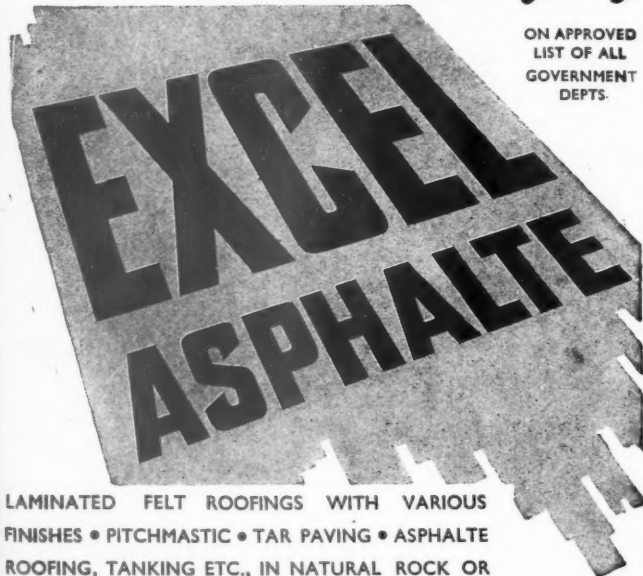
**HOBBS & CO'S  
Security Equipment**

LOCKS · WALL SAFES · SAFES & STRONG ROOMS

Details gladly sent on request.

HOBBS HART & Co. Ltd., 76 Cheapside, London, E.C.2. Tel: City 1709

*The ASPHALTE with a Service  
that Excels in every way*



ON APPROVED  
LIST OF ALL  
GOVERNMENT  
DEPTS.

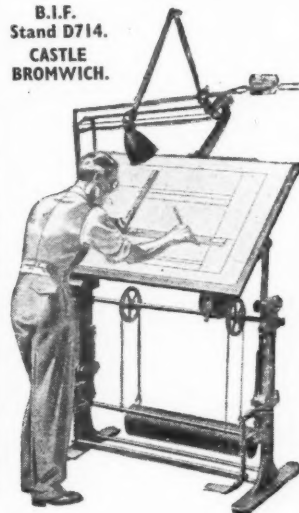
LAMINATED FELT ROOFINGS WITH VARIOUS  
FINISHES • PITCHMASTIC • TAR PAVING • ASPHALTE  
ROOFING, TANKING ETC., IN NATURAL ROCK OR  
MASTIC ASPHALTE • COLOURED ASPHALTE PAVING OR FLOORING  
**EXCEL ASPHALTE CO LTD** Broadway Chambers, Hammersmith, W.6

Telegrams: "CESLYM", LONDON.

Telephone: RIVerside 6052 (4 lines)

*The perfect  
drawing board*

B.I.F.  
Stand D714.  
CASTLE  
BROMWICH.



The MAVITTA  
Drafting Machine  
stamps your drawing  
office as  
EFFICIENT. Made  
of steel tube with  
adjustable ball-  
bearings. The main  
angles are located  
automatically, in-  
termediate angles  
by lock. Scales  
have inlaid cellu-  
loid edges and are  
divided to order  
on two edges.

THE  
MAVITTA DRAFTING  
MACHINES LTD.

Highlands Road, Shirley,  
near Birmingham, Eng.  
Telephone: Solihull 2231/2

**MAVITTA  
DRAFTING MACHINES**

Write for details of the new Major Machine for  
use on boards size 84" x 44" and upwards.



B R I D G E   T H E   G A P   W I T H

# MILLS

## S C A F F O L D



See us at the  
**BUILDING  
TRADES  
EXHIBITION**

March 25th to  
April 5th.

**MILLS SCAFFOLD CO. LTD.**, Head Office & Depot, **TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6** • RIVerside 5026/9

Steel and Aluminium Scaffolding for sale or hire contracts. Every requirement met also for ancillary equipment, including: Shuttering Steel Props • Trench Struts • Splitheads • Hoists • Concrete Mixers • Cradles • Builders' Hand Carts • Barrows • Trestles, etc.

### SIMPLY PHONE YOUR NEAREST DEPOT

BELFAST • BIRMINGHAM • BOURNEMOUTH • BRADFORD  
BRIGHTON • BRISTOL • CANTERBURY • CARDIFF  
COVENTRY • CROYDON • DUBLIN • GLASGOW • HULL • ILFORD • LIVERPOOL  
LOWESTOFT • MANCHESTER • NEWCASTLE • NORWICH • PLYMOUTH  
PORTSMOUTH • READING • SOUTHAMPTON • SWANSEA • YARMOUTH



