## THE ARCHITERCTS' JOUR'S AL



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

Architects' Commonplace Book Astragal's Notes and Topics

Societies and Institutions

#### TECHNICAL SECTION

Information Sheets
Information Centre
Current Technique
Questions and Answers
Prices

The Industry

PHYSICAL PLANNING SUPPLEMENT

CURRENT BUILDINGS
HOUSING STATISTICS

Architectural Appointments Wanted and Vacant

No. 2773] [Vol. 107 THE ARCHITECTURAL PRESS 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. Phone: Whitehall 0611

Price 9d.

Registered as a Newspaper

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

| mentioned                         | the word LONDON is implicit in the address,  |                                |  |  |  |  |  |  |
|-----------------------------------|--|--------------------------------|--|--|--|--|--|--|
| AA<br>AAI                         | Architectural Association, 34/6, Bedford Square, W.C.1. Association of Art Institutions. Secy.: W. Marlborough Whitehead Castle Hill Avenue, Berkhampstead, Herts.   | Museum 0974<br>, "Dyneley,"    |  |  |  |  |  |  |
| ABS<br>ABT<br>ACGB<br>ADA<br>APRR | Architects' Benevolent Society. 66, Portland Place, W.1. Association of Building Technicians. 5, Ashley Place, S.W.1. Aris Council of Great Britain. 4, St. James' Square, S.W.1. Aluminium Development Association. 33, Grosvenor Street, W.1. Association for Planning and Regional Reconstruction. 34, Gordon   |                                |  |  |  |  |  |  |
| ArchSA                            | Square, W.C.1.  Architectural Students' Association. School of Architecture, Manch   |                                |  |  |  |  |  |  |
| ARCUK<br>ASB                      | Municipal School of Art, All Saints, Manchester, 15. Architects' Registration Council. 68, Portland Place, W.1. Architectural Science Board of the Royal Institute of British Architectura |                                |  |  |  |  |  |  |
| AScW                              | Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.  |                                |  |  |  |  |  |  |
| BAE                               | Board of Architectural Education. 66, Portland Place, W.1.   | Grosvenor 4761<br>Welbeck 5721 |  |  |  |  |  |  |
| BATC                              | Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1. Reliance 7611, Ext. 1706  |                                |  |  |  |  |  |  |
| BC<br>BCC                         | Building Centre. 9, Conduit Street, W.1.  British Colour Council. 28, Sackville Street, W.1.   | Mayfair 8641/6<br>Regent 3613  |  |  |  |  |  |  |
| BCCF                              | British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13   |                                |  |  |  |  |  |  |
| BCIRA                             | British Cast Iron Research Association. Alvechurch, Birmingham.  | Redditch 716                   |  |  |  |  |  |  |
| BDA                               | British Door Association. 25, Victoria Street, S.W.1,  | Abbey 5422-3                   |  |  |  |  |  |  |
| BEDA                              | British Electrical Development Association. 2, Savoy Hill, W.C.2.  |                                |  |  |  |  |  |  |
| BGC                               | British Gas Council. 1, Grosvenor Place, S.W.1.  | Sloane 4554                    |  |  |  |  |  |  |
| BGF                               | British Gas Federation. 1, Grosvenor Place, S.W.1.   | Sloane 8266                    |  |  |  |  |  |  |
| BIA                               | British Ironfounders' Association. 145, Vincent Street, Glasgow, C.  | .2,                            |  |  |  |  |  |  |
| BIAE                              | Glasg British Institute of Adult Education. 29, Tavistock Square, W.C.1.   | ow Central 2891<br>Euston 5385 |  |  |  |  |  |  |
| BID                               | Building Industries Distributors. 52, High Holborn, W.C.1.   | Chancery 7772                  |  |  |  |  |  |  |
| BINC                              | Building Industries National Council. 11, Weymouth Street, W.1.  | Langham 2785                   |  |  |  |  |  |  |
| BOT                               | Board of Trade. Millbank, S.W.1.   | Whitehall 5140                 |  |  |  |  |  |  |
| BRS                               | Building Research Station. Bucknalls Lane, Watford   | Garston 2246                   |  |  |  |  |  |  |
| BSA                               | British Steelwork Association. Eggington House, Buckingham Gat   |                                |  |  |  |  |  |  |
| BSA                               |  | /ictoria 7301-2-3              |  |  |  |  |  |  |
| BSI                               | Building Societies Association. 14, Park Street, W.1.  British Standards Institution. 28, Victoria Street, S.W.1.  | Mayfair 0515<br>Abbey 3333     |  |  |  |  |  |  |
| CAS                               | County Architects Society. C/o A. Guy Chant, F.R.I.B.A.  | Abbey 3333                     |  |  |  |  |  |  |
| CCA                               | Salop County Council, 5, Belmont, Shrewsbury. Scenent and Concrete Association. 52, Grosvenor Gardens, S.W.1.  |                                |  |  |  |  |  |  |
| CDA                               | Copper Development Association. Kendals Hall, Radlett Herts.   | Radlett 5616                   |  |  |  |  |  |  |
| CIAD                              | Central Institute of Art and Design. 41, 42, Dover Street, W.1.  |                                |  |  |  |  |  |  |
| CIAM                              | Congrès Internationaux d'Architecture Moderne. Doldertal, 7. Zui   | Regent 3074                    |  |  |  |  |  |  |
| CID                               | Council of Industrial Design. Tilbury House, Petty France, S.W.1.  | Whitehall 6322                 |  |  |  |  |  |  |
| CPC                               | Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.   |                                |  |  |  |  |  |  |
|                                   |  | Kensington 8161                |  |  |  |  |  |  |
| CPRE                              | Council for the Preservation of Rural England. 4, Hobart Place, S.   |                                |  |  |  |  |  |  |
| CUJC                              | Coal Utilization Joint Council. 54, Victoria Street, S.W.1.  Design and Industries Association. 9, Conduit Street, W.1.  | Victoria 9851                  |  |  |  |  |  |  |
| DOT                               | Design and industries Association. 9, Conduit Street, W.1.  Department of Overseas Trade. 35, Old Queen Street, S.W.1.   | Mayfair 5432<br>Victoria 9040  |  |  |  |  |  |  |
| EC                                |  | Temple Bar 7565                |  |  |  |  |  |  |
| EJMA                              | English Joinery Manufacturers Association (Incorporated). Sackvi   |                                |  |  |  |  |  |  |
| EDNS                              | 40, Piccadilly, W.   | 1. Regent 4448                 |  |  |  |  |  |  |

**EPNS** English Place-Name Society. 7, Selwyn Gardens, Cambridge. FAS Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1. Sloane 2837 FASSC Federation of Association of Specialists and Sub Contractors. 21, Tothill Street, S.W.1. Whitehall 9606
Federation of British Industries. 21, Tothill Street, S.W.1. Whitehall 6711 FBI FC Forestry Commission. 25, Savile Row, W.1. **FCMI** Federation of Coated Macadam Industries. 37, Chester Square, S.W.1. Sloane 1002 **FDMA** Flush Door Manufacturers Association. Stapleford Road, Trowell, Nottingham. Ilkeston 623/4/5 FLD Friends of the Lake District. Pennington House, Nr. Ulverston, Lancs.

FMB Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.
Chancery 7583
FRHB Federation of Registered House Builders. 82, New Cavendish Street, W.1.

FRHB Federation of Registered House Builders. 82, New Cavendish Street, W.1.

Langham 4041
FS (Eng.) Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.

GG Georgian Group. 27, Grosvenor Place, S.W.1. Sloane 2844
HC Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. Whitehall 2881

THE ARCHITECTS' JOURNAL for April I, 1948

NATURAL POWER AT YOUR SERVICE.

LARGE PE VENTILATION OF FACTORIES, LARGE PREMISES, THE OFFICE OR HOME, AIRVAC EXTRACTORS AND INDUCERS FULFIL YOUR MOST EXACTING NEEDS AND PROVIDE THE PERFECT NATURAL VENTILATING SYSTEM.

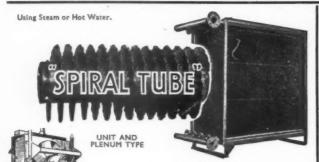
AS FOR CHIMNEY COWLS-THE AIRVAC IS ON TOP OF ITS JOB!

SPECIALISTS IN THE DESIGN AND MANUFACTURE OF STATIC VENTILATORS AND VENTILATING FAN UNITS



COMPANY LIMITED GREENWOOD'S AND AIRVAC VENTILATING

BEACON HOUSE . KINGSWAY . LONDON, W.C.2. "AIRVAC," LONDON CHANCERY 8135-6-7



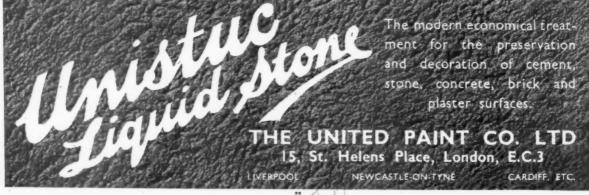
AIR HEATERS

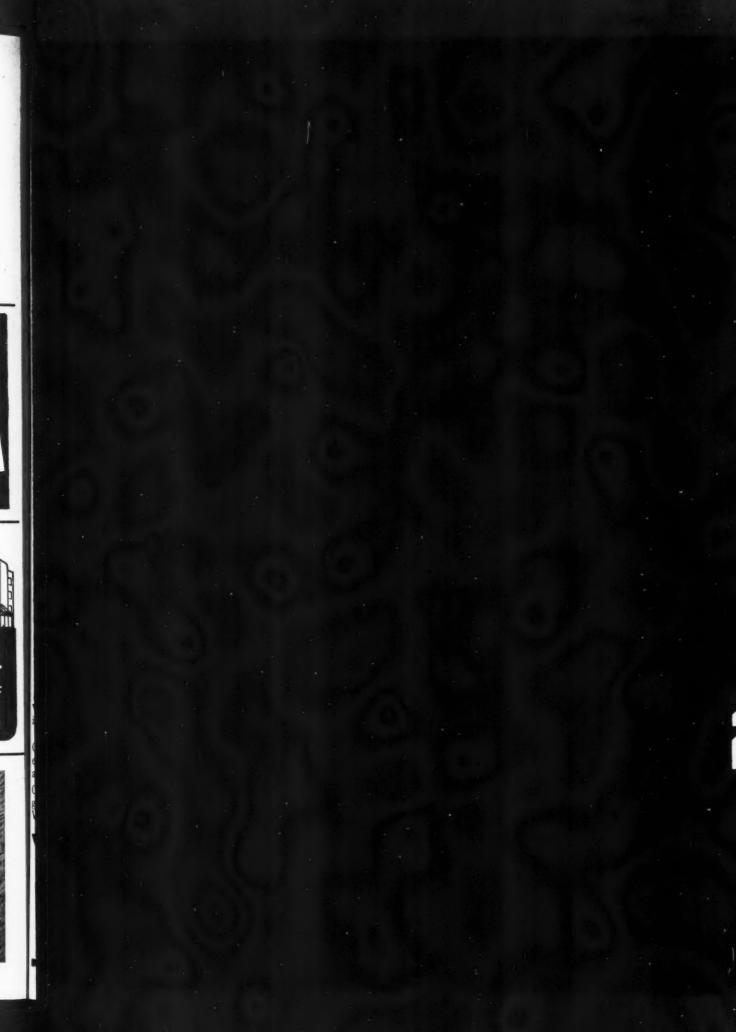
THE SPIRAL TUBE & COMPONENT CO., LTD.
Osmaston Park Road, Derby.
London Office: Honeypot Lane, Stanmore, Middlesex.











in Eco Lo
We if r
College and Cop graw Wr



## ATTRACTIVE PERMANENT TROUBLE-FREE





• Gale proof. • Permanent and Rot proof.

Vermin proof.
Beauty in colour and

appearance.
• Perfect insulation.

• One tenth the weight of tiles. Saves 40% roof timber.

1" Cedar equals 11 in, concrete in resistance to heat or cold. Economical in cost and fixing. Long trouble-free life.

DWELLING

We quote for supply and fixing if required.

Colt Shingles are now being specified more widely than ever for their beauty, long life, high insulation value and weatherproof qualities.

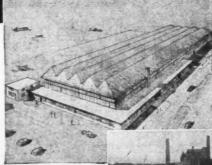
RESIDENCE

Copies of our Shingle Handbook containing 110 photographs and full technical information on request. Write to:

Colt Shingles proved themselves during the war to be superior to other roof covering in their remarkable resistance to blast, more than justifying our claims for the permanent security of a Colt Shingled roof. Our Technical Department is at the service of all Architects.



COUNCIL HOUSE



AIRPORT

#### W·H·COLT (LONDON) LTD

SURBITON . SURREY

Telephone: ELMBRIDGE 6511 (4 lines)

COLT SHINGLES ARE SELECTED FROM



## FENNING

Craftsmen in

MARBLE

GRANITE &

**TERRAZZO** 

FULHAM 6142-3

PALACE WHARF, RAINVILLE ROAD, HAMMERSMITH, LONDON, W.6

## G. JACKSON & SONS LTD.

FIBROUS PLASTER

INTERIOR WOODWORK

COMPOSITION & CARTON-PIERRE

MODELLING & CARVING

PAINTING & HERALDRY

SCAGLIOLA

By the old Italian process of BELLMAN, IVEY, CARTER & CO.

RATHBONE WORKS, RAINVILLE RD., HAMMERSMITH, W.6

Phone: FULHAM 6616-7-8

Telegrams: "SYMARECTA" HAMMER LONDON



WM. EDGAR & SON LTD.

BLENHEIM WORKS
HAMMERSMITH LONDON W.6
TELEPHONE: RIVERSIDE 3486

See our exhibit at THE BUILDING CENTRE, 9, Condult Street, W.I

## KITCHEN UNITS straight from stock

#### Delivery?

We can give you prompt delivery from stock of Standard Kitchen Units. Choice of 20 different patterns allows for innumerable combinations for large or small kitchens.

## Quality?

These kitchen units conform to British Standard Specification, which, interpreted with Austin precision, guarantees you a thoroughly reliable job.

#### • Price?

Surprisingly low, considering the standard of workmanship, but then our factories are organised and equipped for really efficient large-scale production of good joinery.

THE

## AUSTIN-HALL GROUP OF COMPANIES

AUSTINS OF EAST HAM LTD.

LONDON E.6

Joinery Moulding Staircase manufacturers

GRAngewood 3444



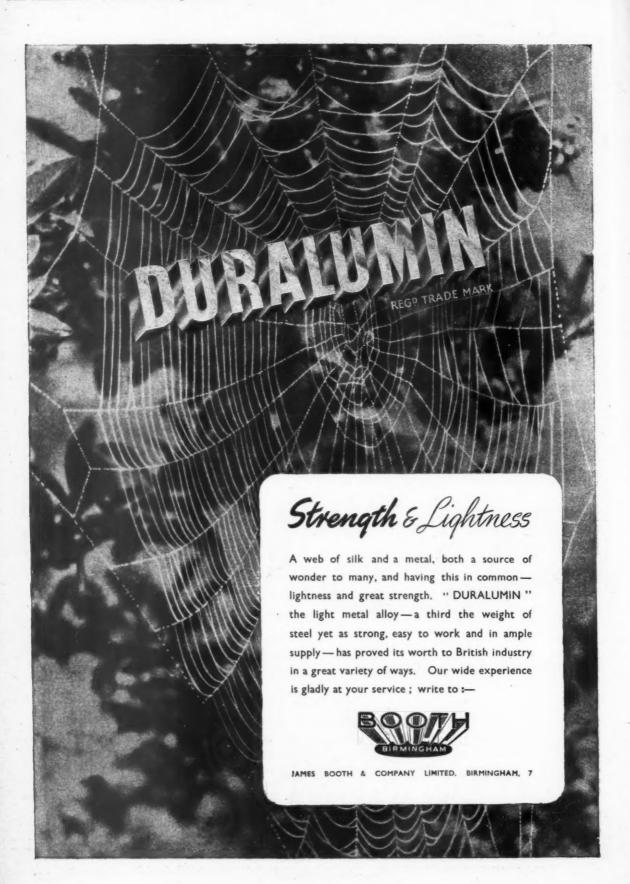
The British weather does not encourage the outdoor civilisation beloved in more equable Continental climes. But that need cause no concern. Brightside can ensure, through air conditioning, comfortable man-made climate in every kind of establishment, public, private or industrial.

#### BRIGHTSIDE Conditioned COMFORT

HEATING . PIPING . AIR CONDITIONING

THE BAIGHTSIDE FOUNDRY & ENGINEERING COMPANY LTD

Head Office: SHEFFIELD; and BIRMINGHAM, BRISTOL, LIVERPOOL, L ONDON, MANCHESTER, NEWCASTLE, PORTSMOUTH, EDINBURGH, GLASGOW, BELFAST



# Sankey's GENUINE MOLER blocks and bricks again available

Sankey's MOLER Blocks and Bricks, made famous before the war, are again being manufactured from genuine MOLER earth, in a variety of sizes for immediate delivery.

The chief characteristics of Sankey's MOLER blocks are the very high degree of insulating efficiency against heat and cold, and of absorption of sound—ensuring quietness and equable temperature within buildings at all seasons of the year.

In addition, tests have proved that Sankey's MOLER blocks save up to 20 tons of dead weight on every 500 yards of partitioning; and that

they provide more efficient fire resistance, and are of greater mechanical strength.

Write today for full technical details.

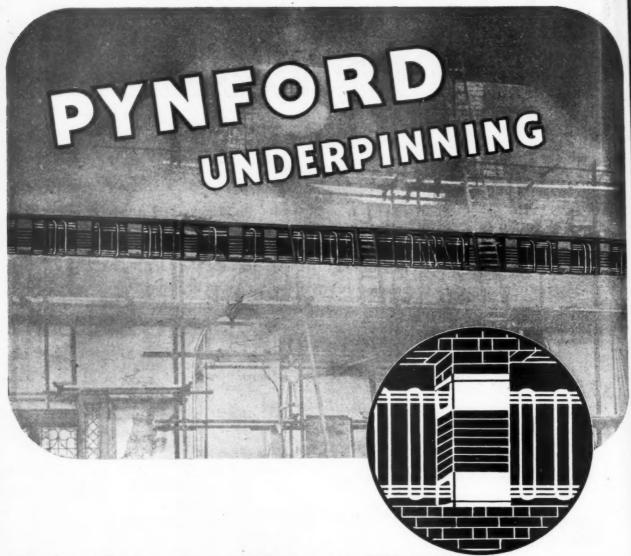
SANKEY'S

PARTITION BLOCKS and INSULATING BRICKS



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

TELEPHONE: HOLborn 6949 (14 LINES) TELEGRAMS: BRICKWORK, ESTRAND, LONDON



#### THE NEW PYNFORD METHOD

PYNFORD STOOLING may be used to underpin at any level.

PYNFORD BEAMS are in use to replace brick arches which have deteriorated or become ineffective due to settlement or spreading of the supports or abutments.

PYNFORD STOOLING will readily adapt itself to an exclusively wide range of beam sizes.

PYNFORD BEAMS are being used to anchor tie bars.

PYNFORD BEAMS will strengthen walls laterally at any level.

PYNFORD BEAMS are being used to support structures while works are in progress underneath.

## PYNFORD LIMITED

SPECIALISTS IN UNDERPINNING

74, LANCASTER ROAD, STROUD GREEN, N.4 .

Tel.: ARChway 2372

SCOT gas water heaters are enlisted in the Nation's service in an allout effort to make fuel supplies go round. Read what the British Gas Council says in its report to the Chancellor of the Exchequer:—

"In the interests of fuel economy, hot water should be provided by the most efficient means available, namely, the water heater which has been developed expressly for the purpose and none other."

Ascot heaters save fuel because they give hot water when and where it is needed.

#### A MILLION ASCOT

Gas Water Heaters are helping in the battle to save fuel





The MERCHANT TRADING

OMPANY Limited,

DOORS PLYWOOD FIBRE BUILDING BOARDS LAMINATED PLASTIC SHEETS

Please send your orders and enquiries through your usual Merchant Supplier



Ask for Metco Service



Columbia House, 69 Aldwych, London, W.C.2

Telephone: HOLborn 3291 (5 Lines)

· Telegrams: THEMETRACO, ESTRAND, LONDON.









ILLUSTRATION
SHOWS A LIGHT
STRUCTURE
MANUFACTURED
AND ERECTED
IN THE LONDON
AREA BY OUR
DEPTFORD WORKS

STRUCTURAL STEELWORK

WE DESIGN, MANUFACTURE AND ERECT ALL CLASSES OF STRUCTURAL STEELWORK, INCLUDING—

BUILDINGS
DERRICKS
TANK STRUCTURES
PLATFORMS
GANTRIES

TOWERS AND TRESTLES
GANGWAYS
LIGHT BRIDGES
FIRE-ESCAPE STAIRS
HAY BARNS
ETC., ETC.

BOLTED, RIVETED OR WELDED

## FRED! BRABY & CO LTD

LONDON

GLASGOW LIVERPOOL BRISTOL EXPORT OFFICE FITZROY WORKS, 352-364, EUSTON ROAD, N.W.I. IDA & VICTORIA WORKS, DEPTFORD, S.E.8. ECLIPSE WORKS, PETERSHILL RD., GLASGOW, N. HAVELOCK WORKS, AINTREE, LIVERPOOL, 10. ASHTON GATE WORKS, BRISTOL, 3. 110, CANNON STREET, LONDON, E.C.4.

ALSO AT BELFAST & PLYMOUTH

TEL: TEL: TEL: EUSTON 3456 TIDEWAY 1234 SPRINGBURN 5151

TEL: AINTREE 1721
TEL: BRISTOL 64041

TEL: MANSION HOUSE 6034



## SUNDEALA

A name universally acknowledged as denoting the supreme achievement in scientifically waterproofed —

#### **BUILDING BOARDS**

British made throughout

SUNDEALA BOARD CO. LTD. ALDWYCH HOUSE, LONDON, W.C.I

Tel: CHAncery 8159.

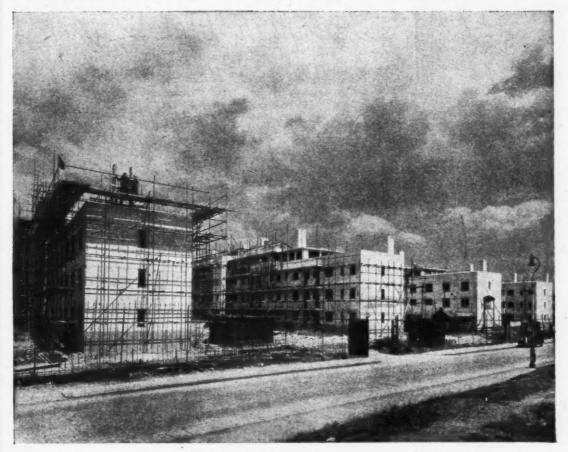
Works: Sunbury-on-Thames, Middx.

Members of Building Board Manufacturers Association.





#### WALLS OF WEITE CONCRETE



L.C.C. HOUSING SCHEME, BETHNAL GREEN, LONDON

Under direction of Director of Housing & Valuer:— Cyril H. Walker, O.B.E., M.C., F.S.I., M.I.M.I. & Cy.E., L.R.I.B.A.

Contractors: Holland & Hannen and Cubitts, Ltd.

The external walls of these reinforced concrete flats are faced, above plinth level, with a special white concrete placed in position, utilising a sliding steel shutter.

## SNOWCRETE WHITE PORTLAND CEMENT



THE CEMENT MARKETING COMPANY LIMITED

192 ASHLEY GARDENS, LONDON, S.W.I . TELEPHONE VICTORIA 6677

G. & T. EARLE LTD. CEMENT MANUFACTURERS, HULL. TELEPHONE: HULL 16121

THE SOUTH WALES PORTLAND CEMENT & LIME CO. LTD.

PENARTH. TELEPHONE: PENARTH 300.



## Efficient Space Heating? Adequate Hot Water? Low Fuel Costs?

SIESTA gives them All!

#### 2A FREE STANDING STOVE

Provides space heating for a room up to 2,000 cu. ft, and also sufficient hot water for average household requirements. Width 201, Height 261, Depth 111.



fuel costs of Siesta Stoves combine to make them the most economical form of space heating and hot water supply. All stoves burn coke, anthracite, coal or commercial fuels. The full range of models is shown here and we shall be pleased to supply any further information which may be required regarding installations.

The high efficiency and low



## 3c FREE STANDING STOVE

Provides space heating and hot water for the larger house. It is fitted with doors which disappear into the body of the stove when opened. Width 23°, Height 30°, Depth 134°.

#### 2B INSET STOVE

Has been designed for Government Housing Schemes and is available for domestic hot water and simple 'background' heating installations. Width 184°, Height 25°, Depth 94°. (Behind Front).

#### -COLOURS AND FINISH-

All stoves are finished in finest quality vitreous enamel, available in Brown, Green, Stone Mottle or Black.



## SIESTA

you are always right



#### 3D INSET STOVE

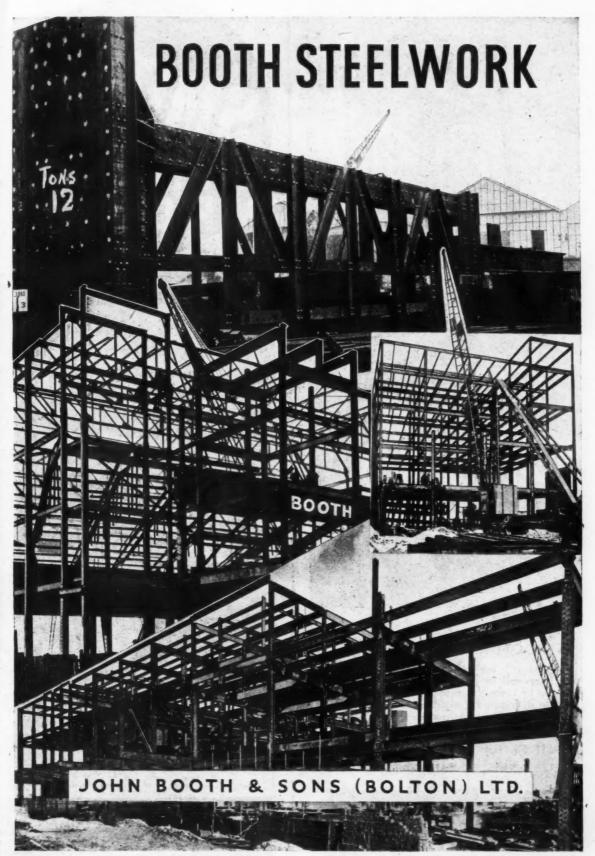
Is suitable for space heating, hot water and 'back-ground' heating schemes. It also has doors which disappear into the body of the stove when opened. Width 20%", Height 28%', Depth 13" (Behind Front).



OVER 200,000 "SIESTA" STOVES IN USE

Distribution will be made as fairly as possible

PARK FOUNDRY BELPER DERBY



DETROIT PUBLIC LIBRARY

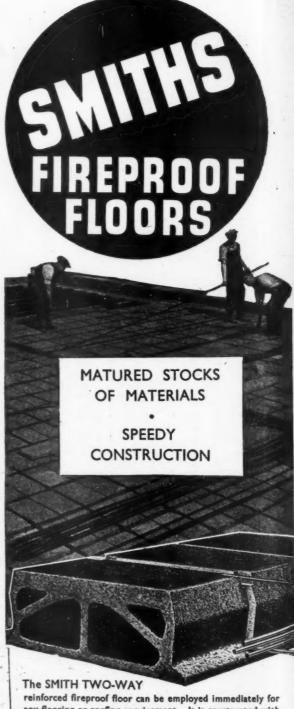


#### STRUCTURAL STEELWORK

No skeleton in our cupboard and no doubt about the framework of your building when the steel is erected by Thomas Blackburn's. Our long experience in all branches of structural steelwork is your safeguard—and is at your service always.

RAILINGS, GATES, METAL WINDOWS WELDED VESSELS, RAINWATER GOODS

THOMAS BLACKBURN & SONS



reinforced fireproof floor can be employed immediately for any flooring or roofing requirement. It is constructed with standardised pre-cast hollow concrete blocks.

The employment of patent telescopic centers permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

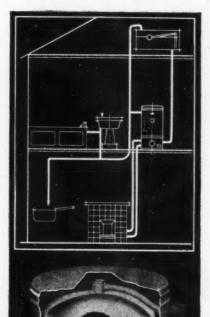
SMITH'S FIREPROOF FLOORS LTD. (Dept. A)
Imber Court, East Molesey, Surrey. Telephane: Emberbrook 3300 (4 lines)

SMITHS 2-WAY REINFORCED FIREPROOF FLOORS employing Unique Telescopic Centering

## INTRODUCING

an entirely self-contained COAL-ELECTRIC

#### DOMESTIC WATER HEATING SYSTEM



saves

COAL IN SUMMER...
ELECTRICITY IN WINTER

Presenting the Sadia type C.E.L.—specially developed after intensive research to meet the demand for an efficient, **fuel-saving** Coal-Electric Water Heater. No longer need coal be wasted in summer-time to provide hot water for baths. No longer need Electricity be wasted in winter to provide hot water that can be heated by coal. All the year round there is an adequate store of really hot water—thermostatically controlled and cork insulated against heat loss.

#### 90% of New Houses Need SADIA C.E.L.

Recent statistics reveal that most new houses will have solid fuel back boilers for providing hot water. The Sadia C.E.L. has been designed to bring the efficiency of a back boiler system up to the maximum. Of 30 gallons capacity, the Sadia C.E.L. will provide all the hot water requirements of a medium size household — with virtually no waste of either coal or electricity. The C.E.L. is simple to install — fits in place of the old hot water tank — is cheap to run and requires little or no attention throughout its very long life.

#### New Calorifier Stops Furring-Up

For hard water districts the Sadia is fitted with a new type of Calorifier. Perfected after a long period of research and experiment, this special device prevents scale formation inside the solid fuel boiler. Coal is not wasted through the heat-insulating effect of scale deposits—periodical de-furring is unnecessary.

THE SADIA C.E.L. COAL-ELECTRIC WATER-HEATER

WRITE TODAY for full details of the new Sadia C.E.L. system of Coal-Electric Water Heating. SADIA HOT WATER BY

AIDAS ELECTRIC LTD.,

SADIA WORKS, ROWDELL ROAD, NORTHOLT, MIDDLESEX SCOTTISH AGENTS: W. BROWN & CO. (Engineers) LTD., 89 DOUGLAS STREET, GLASGOW, C.2



Mint was pretty dim. That year the existing crude lighting arrangements gave way to the brilliant new electric lamps—lighted by P & G and E.P.S. batteries—and things began to look brighter. This was one of the first of many important public buildings lit by these famous batteries from that year onwards. A modern installation is that in Trades House at Glasgow. Here P & G and E.P.S. cells stand ready for any emer-

gency should normal mains lighting fail.

Plans for any building intended to accommodate a large number of people should include an emergency lighting system as standard equipment. Risk of pilfering, panic or even disaster consequent upon mains failure is thereby avoided. P & G and E.P.S. cells embody 60 years' manufacturing experience. The system can be made 100% automatic. We shall be glad to advise on any project.

#### PRITCHETT & GOLD and E.P.S. CO. LTD.

Formerly The Electrical Power Storage Go Ltd-the first Battery makers



#### on the fuel saved by insulating one factory

Every uninsulated building wastes fuel — and will go on doing so, until unnecessary heat losses are overcome by lining the roof and walls with Celotex cane-fibre insulation. The fuel saving which then results is dramatic. In a steel-framed factory with 100,000 sq. ft. of corrugated asbestos roof, it may be as much as 600 tons of coal a year — enough to supply the needs of 200 homes. In buildings of every kind the installation of Celotex quickly pays for itself in terms of lower fuel bills and a smaller capital charge for the heating plant. The table, based on Fuel Efficiency Bulletin No. 12, gives a general picture of the fuel savings which result when steel framed roofs are insulated with Celotex. Our technical department will gladly calculate specific data for your individual needs.

| CONSTRUCTION  |                                    | Uninsulated |      | Under-Purlin<br>insulation |      | Over-Puriln insulation |      |      |      |
|---|------------------------------------|-------------|------|----------------------------|------|------------------------|------|------|------|
| <b>Corrugated Asbestos Cement</b>                       |                                    | 1/4"        |      | 1/4"                       | -    | 1/4"                   | 1/4" | -    | -    |
| Corrugated iron   |                                    | -           | 226  | -                          | 226  | -                      |      | 220  | 226  |
| Celotex Insulating Board                                |                                    |             | -    | -                          | -    | 1/2"                   | 1*   | 1/2" | 10   |
| Air Space/Purlins                                       |                                    | -           | -    | 4"                         | 4"   | -                      | -    | -    | -    |
| Celotex Insulating Board                                |                                    | -           | -    | 1/2"                       | 1/2" | -                      | -    | -    | -    |
| Thermal Transmittance 'U'                               |                                    | 1,40        | 1.50 | 0.31                       | 0.32 | 0.35                   | 0.23 | 0.36 | 0.24 |
| heat loss per<br>1000 sq. ft.                           | Fuel Consumption tons p.a.         | 7.7         | 8.3  | 1.7                        | 1.8  | 1.9                    | 1.3  | 2.0  | 1.3  |
|   | Gost of Heating<br>Plant. Gost £'s | 88          | 94   | 19                         | 20   | 22                     | 14   | 22.5 | 15   |
| Saving in Plant and Fuel due<br>to Gelotex Insulation % |                                    |             |      | 78                         | 79   | 75                     | 84   | 76   | 84   |

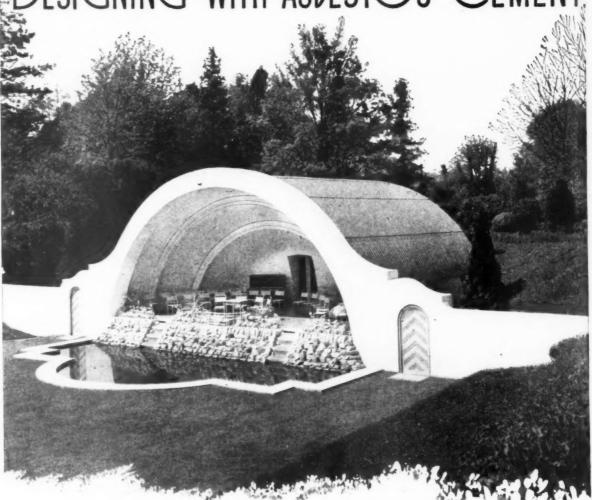
invest in

**CELOTEX** 

insulation

CELOTEX LIMITED, NORTH CIRCULAR ROAD, STONEBRIDGE PARK, LONDON, N.W.10. (ELGAR 5717)

## DESIGNING WITH ASBESTOS · CEMENT



THE BANDSTAND ILLUSTRATED HERE WAS ERECTED IN THE SWINDON TOWN GARDENS (ARCHITECT: J. B. L. THOMPSON, M.C., M. Inst. C.E.) IT IS COVERED WITH THE WELL-KNOWN "EVERITE" "BIGSIX" CORRUGATED SHEETS CURVED TO THE REQUIRED RADIUS. INSIDE THE BANDSTAND, THE STAGE LINING IS "POILITE" ASBESTOS-CEMENT FLAT BUILDING SHEETS WITH SPECIALLY MOULDED ASBESTOS-CEMENT TROUGHS TO CARRY THE STRIP LIGHTING. IN ADDITION TO PROVIDING WEATHER PROTECTION, THE BUILDING, AS DESIGNED WITH ASBESTOS-CEMENT LINING, POSSESSES SOUND REFLECTIVE PROPERTIES OF UNUSUAL MERIT ALLIED WITH A PARTICULARLY PLEASING APPEARANCE.

Write for New Brochure Designing with Asbestos-Cement"

TURNERS ASBESTOS CEMENT CO LTD







Telegrams: ABOE Piccy London

DUKE'S COURT, 32 DUKE STREET, ST. JAMES'S, LONDON, S.W.1, ENGLAND

Telephone: WHItehall 6177

PF/1

## **GYPKLITH**APPLICATIONS

Repairs to Sound City Film Studios Architects for repairs: Montagu Evans & Son

The increasing use of GYPKLITH by British film studios is due to past experience of the value of wood wool slabs for acoustic and sound insulation.

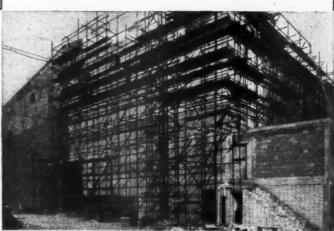
The satisfactory results obtained in the original construction by the use of wood wool slabs determined the use of GYPKLITH for the repairs to these film studios illustrated.

The top and bottom photographs show an exterior and interior view of Studio No. 3 for the walls of which GYPKLITH was used on timber framing with air space each side between steel-framed reinforced concrete exterior walls and an absorbent asbestos material on wire mesh. The middle photograph is of Studio No. 2. In both buildings the roofs consist of two layers of 2-inch GYPKLITH supported on steel purlins, finished with roofing ·felt and asphalt, and lined underneath with slag wool quilting.



Makers also of GYPROC Plaster Board,
GYPROC 2 - inch Solid Partitions,
GYPSTELE Partitions and Ceilings,
PLAXSTELE and ACOUSTELE Ceilings.

GYPROC Plaster Board,
Head Office: Westfield, Upper S
Glasgow Office: Gyproc Wharf,
Lendon Office: Morris





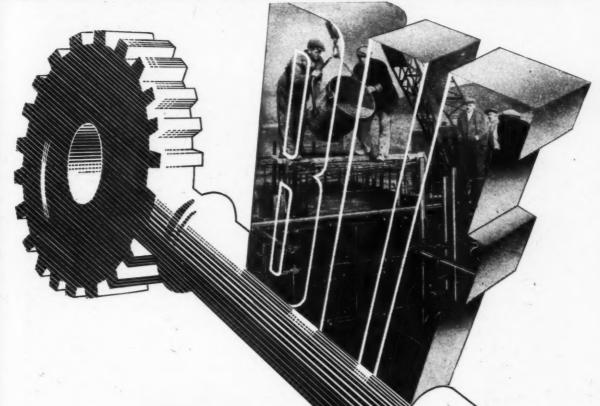


#### GYPROG PRODUCTS LIMITED

Head Office: Westfield, Upper Singlewell Road, Gravesend, Kent. Gravesend 4251-4. 'Grams: Gyproc, Gravesend, Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.1. Telephone: Govan 614. Telegrams: Gyproc, Glasgow. London Office: Morris House, Jermyn Street, London, S.W.1. Telephone: WHItehall 9821/5.

G.K.

## THE KEY TO YOUR BUILDING PROBLEMS



You are cordially invited to attend the daily demonstrations of

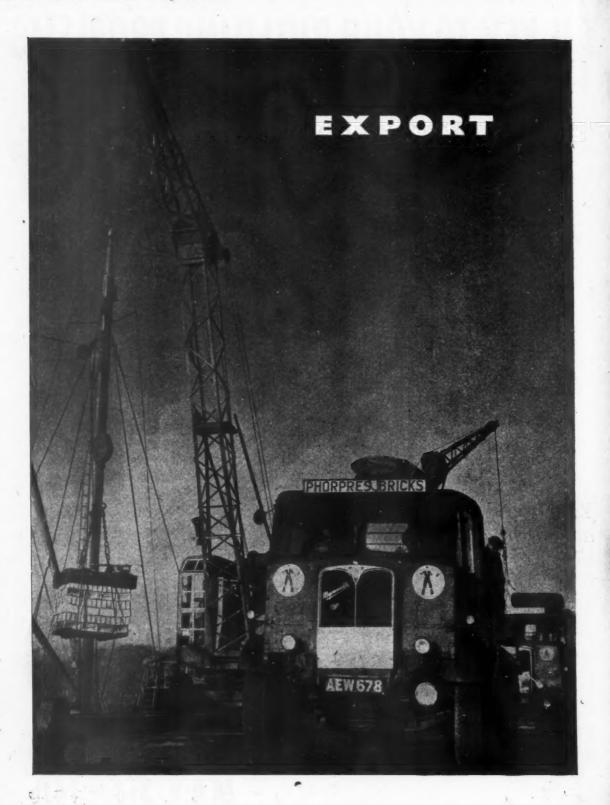
## **KWIKFORM**

PATENTED WALL SHUTTERING SUSPENDED FORMWORK UNIT FRAME SAFETY SCAFFOLDING RISING TRESTLES SHORES AND STRUTS BUILDERS TOOLS.

Stand No. B 611

MAY 3rd - 14th

KWKFORM LTD LONDON, 66, VICTORIA ST. S.W.I. GRAMS: KWIKFORM, SOWEST, LONDON GRAMS: KWIKFORM, SOWEST, LONDON (SALES OFFICE) 67, WHITMORE RD. 10, GRAMS: KWIKFORM, BHAM





LONDON BRICK COMPANY LIMITED

Head Office: Africa House, Kingsway, London, W.C.2. Telephone: Holborn 8282

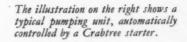
Midland District Office: Prudential Bidgs., St. Philip's Place, Birmingham 3. Tel.: Colmore 4141

South Western District Office: 11, Orchard Street, Bristol 1. Tel.: Bristol 23004/5

Northern District Office: Gascoigne Street, Boar Lane, Leeds 1. Tel.: Leeds 20771

E

Tho Lone of L this have sign One these grou men pow to 2 these auto start



## Electric Tube Railways

Thousands of people are daily conveyed about London and its suburbs by the electrified trains of London Transport services. The keynote of this service is passenger safety, and no efforts have been spared to make the control and signalling systems both accident- and fool-proof. One of the greatest dangers which can threaten these arrangements—particularly on the underground sections—is water-seepage, but this menace is effectively overcome by a number of powerful pumping stations having pumps of up to 2,500 gallons per minute capacity. Many of these pumps, as our illustration shows, are automatically controlled by Crabtree starters.

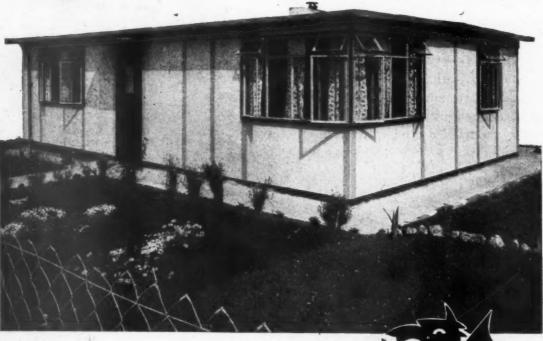


Kent News Pictures

## CRABTREE

A name synonymous with Progress in Accessories and Switchgear

# ONWINDOWS



Metal Windows for the post-war

Housing Campaign



## JOHN WILLIAMS & SONS (Cardiff) LTD.

East Moors Road · Cardiff

TELEPHONE CARDIFF 2501

London: Bank Chambers, Finsbury Park, N.4.

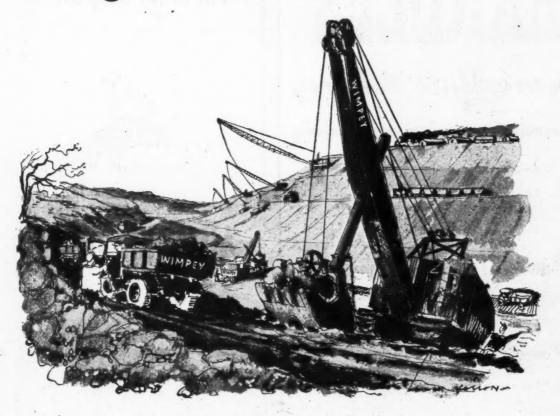
· TELEGRAMS

"METAL" CARDIFF

Telephone: Archway 2294 Telegrams: Dissolving, London

#### WIMPEYS AT WORK

## Eight tons a minute



This is a typical Wimpey excavator. One of the latest types, moving speedily about the site under its own power, moving easily from job to job, often working day and night and averaging a hundred hours a week—it can excavate eight tons a minute.

WE USE a large number of these excavators, not only for shifting soil but for excavating in hard earth and rock for the thousands of tons of coal which we uncover every week by opencast methods. Like all Wimpey plant, our excavators are serviced daily, and overhauled at intervals at one of the national network of Wimpey service stations.

Wimpey's immense pool of mobile modern plant helps to explain Wimpey's efficiency, economy and speed. All Wimpey's huge central resources—plant, transport, key manpower, laboratory work—are 'on tap' for any Wimpey job, large or small, anywhere in Britain. All these resources are at the command of Wimpey's seven British regional offices: at Birmingham, Cardiff, Manchester, Newcastle, Nottingham, Edinburgh and Glasgow. Wimpeys also have large foreign depots at Cairo, Baghdad and Singapore.

#### WIMPEY

 Contractors since 1880—and now busy in the export market as well as at home

GEORGE WIMPEY AND COMPANY LIMITED, TILEHOUSE LANE, DENHAM, MIDDLESEX M.2

# HANDLES

immediate delivery



TYPE IOAA TYPE IOAA 4" centres.

CHROMIUM ANODISED ALUMINIUM Fixed by two 2BA Screws 0

TYPE IOCA 6" centres. CHROMIUM ANODISED ALUMINIUM Fixed by two 2BA Screws



TYPE 7A 4" centres. CHROMIUM Fixed by four 4BA Screws



TYPE 7E 8" centres. CHROMIUM Fixed by four 4BA Screws



TYPE ISA 4" centres. CHROMIUM Fixed by two 4BA Screws



TYPE 15C 6" centres. CHROMIUM Fixed by two 4BA Screws



TYPE 12 6" OVERALL Fixed by two 4BA Screws. Aluminium Anodised Silver or Colour.



TYPE II 83" OVERALL Fixed by four 48A Screws. Aluminium Anodised Silver or Colour

Here is a superb range of handles, styled in the modern manner, and ideally suited to numberless applications. These handles are easy to fit, fabricated in finest quality materials, and available for immediate delivery.

IMHOF'S

HANDLES FOR EVERY PURPOSE

ALFRED IMHOF LTD.
112-116 NEW OXFORD STREET, LONDON, W.C.I.

Mus. 5944

## **Emblem of Quality**



## ARMOUR BRAND

for Protection Durability and Finish

## Griffiths Bros. & Co

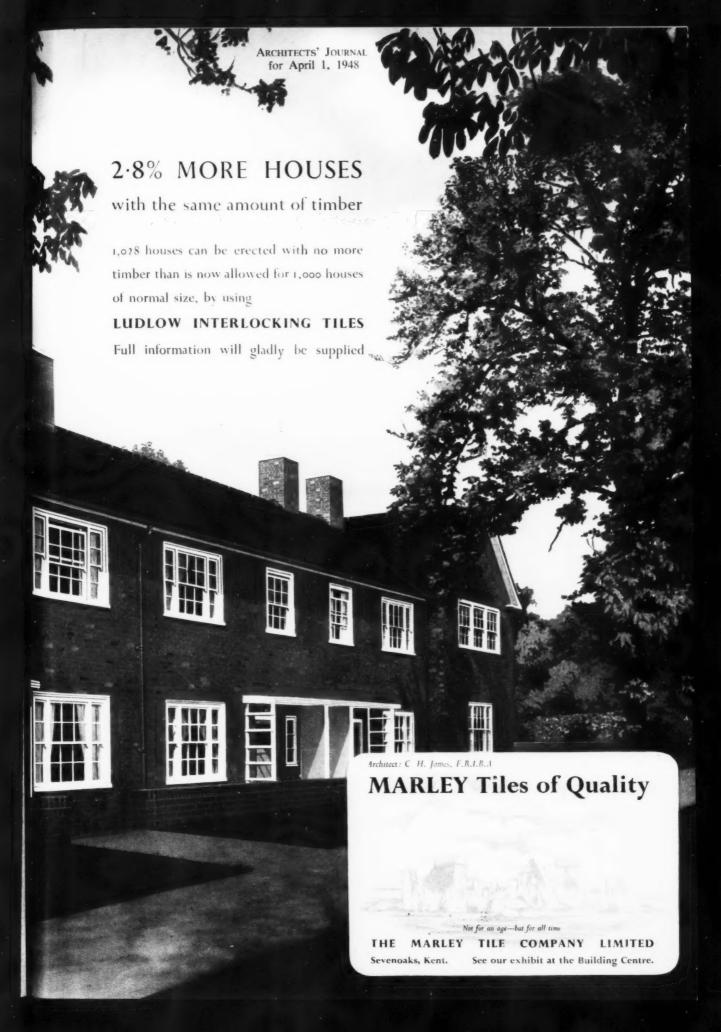
London Limited

PAINT, ENAMEL & VARNISH SPECIALISTS
MACKS ROAD, BERMONDSEY, SE16

TEL. BERMONDSEY 1151









# FERODO Stairtreads

FERODO Stairtreads are of single and double channel types of various widths to suit all sizes of steps. The bright aluminium fronts clearly mark the edge of every stair. The strip of FERODO material fitted at the front of the tread affords a firm foothold. Absorbing wear without wearing, FERODO Stairtreads greatly enhance the appearance of the Store Stairway, giving confidence to countless hurrying feet and ensuring safety. Members of the Profession are invited to write for fully illustrated and descriptive catalogue No. 732K

FERODO LIMITED

CHAPEL - EN - LE - FRITH

FIERIODO





In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their names will then



on the watting-tist. Their names with their be added to the subscription list as soon as possible. Subscription rates: by post in the U.K. or abroad, £1 155. Od. per annum. Single copies 9d.; post free 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra.

## DIARY FOR APRIL MAY AND JUNE

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials as given in the glossary of abbreviations on the front cover.

A BERDEEN. Enterprise Travels Exhibition. At the Art Galleries, Aberdeen. (Sponsor, Scottish Committee of CID.) APRIL 3-10

BIRMINGHAM. Demonstration of Builders' Plant and Power Hand Tools. On the housing scheme at the junction of Sandy Lane and Coventry Road, adjoining Bordesley Railway Station, Birmingham. (Sponsors, Midland Regional Joint Production Committee for the Building Industry in conjunction with MOW.) 11 a.m. to 5 p.m.

CARDIFF. Design Week. (Sponsor, APRIL 12-17

EDINBURGH) Timber Brains Trust.
At the Merchants Hall, Hanover Street, Edinburgh. (Sponsor, T.D.A.)
APRIL 14

GLASGOW. Philip O. Recce. Timber.
At the Building Centre, Sauchiehall
Street, Glasgow. (Sponsor, Glasgow Institute of Architects.) 5.30 p.m. APRIL 18
HOVE. RSI Hove Sessional Meeting.
F. Dransfield. Sanitary Survey—A
Century's Survey of Housing and Environmental Circumstances. Afternoon visit to
the King Alfred Baths. (Sponsor, RSI.)
APRIL 10

L ONDON. Exhibition: The Industrial Revolution in Art, 1760-1851. Arranged by Dr. F, D. Klingender in collaboration with the Newcomen Society. At Heal's Mansard Gallery, 196, Tottenham Court Road, W.I.

UNTIL APRIL 13

Westminster Regained Exhibition. At the Tate Gallery, Millbank. (Sponsor, The Architectural Review.)

Village Planning Exhibition. Exhibition of designs submitted to the Central Land Owners' Association Village Planning Competition. At the RICS, 12, Great George Street, S.W.1. (Sponsor, Central Landowners' Association.)

APRIL 2-16

Industrial Design Refresher Courses—Solid Fuel Burning Appliances. April 5. 10 a.m. Open Meeting. 11 a.m. F. Duerden. The Distributor's Problems in Maintaining a Standard of Design. 2.30 p.m. Women's Advisory Committee for Solid Fuel Appliances. 5.30 p.m. Prof. Basil Ward. Equipment for Buildings. April 6. 10 a.m. Derek Bridgewater. An Architect's Approach to Solid Fuel Appliance Design. 2.30 p.m. Christopher Nicholson. Principles of Design. 5.30 p.m. Frank Dobson. Three Dimensional Form. April 7. 10 a.m. Jesse Collins. The Designer's Use of Colours. 1.30 p.m. DSIR Fuel Research Station, Greenwich.

April 8. Morning: Victoria and Albert Museum and Library. 2 p.m. Mary Delane. Designing for the Home. 5.30 p.m. John Pinkard. Solid Fuel Appliances and their Surroundings. April 9. Morning: British Museum. 2.30 p.m. James Laver. Style in our Time. 5.30 p.m. Mrs. Darcy Braddell. Interpreting the Consumer to the Manufacturer. April 10. Morning: Discussion Group. 12.30 p.m. Lunch. The lectures will take place at 45, Cadogan Gardens, Sloane Square, S.W.3. (Sponsors, CIAD and CID.)

The Hon. Geoffrey J. Bourke. The Agricultural Land Commission. In the Theatre of the ICE, Great George Street, Westminster, S.W.1. (Sponsor, RICS.) 5.30 p.m.

APRIL 5

RIBA Presentation of the Royal Gold Medal. At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. April 6 J. Seymour Lindsay. Craftsmanship: Metalwork. At the RSA, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 2.30 p.m.

W. A. Thorpe. Codes of Work in Glass History. At the RSA, John Adam Street, W.C.2. (Sponsor, RSA.) 2.30 p.m.

LMBA Central Area No. 1. Sixty-Sixth Area General Meeting. At Derry and Toms Restaurant, Kensington High Street, W.8. (Sponsor, LMBA.) Luncheon, 12.45 for 1 p.m. Meeting begins 2 p.m. APRIL 7

P. O. Reece. The Stress Grading of Timber. At the Park Lane Hotel. (Sponsor, Building Industries Luncheon Club. 12.30 for 1 p.m.

Thomas Ritchie. The Sanitation of Buildings. Bossom Gift Lecture. At the Architectural Theatre, University College, Gower Street, W.C.1. (Sponsor, the Chadwick Trust.) 2.30 p.m. APRIL 15

M ANCHESTER. Arch. S.A. Annual Congress. The theme of the Congress is Prefabrication and the Architect. (Sponsor, Arch. S.A., under the auspices of Manchester University School of Architecture and the Municipal School of Art.)

UNTIL APRIL 5

Building Trades Exhibition. In the City Hall, Deansgate, Manchester. (Sponsor, Provincial Exhibitions, Ltd.) 11 a.m. to 9 p.m. APRIL 6-17

NORTHAMPTON. RSI Northampton Sessional Meeting. In the Guildhall, Northampton. (Sponsor, RSI.) APRIL 1

WOLVERHAMPTON. Centenary Industrial Exhibition. (Sponsor, Borough of Wolverhampton.) APRIL 17-24

## NEWS

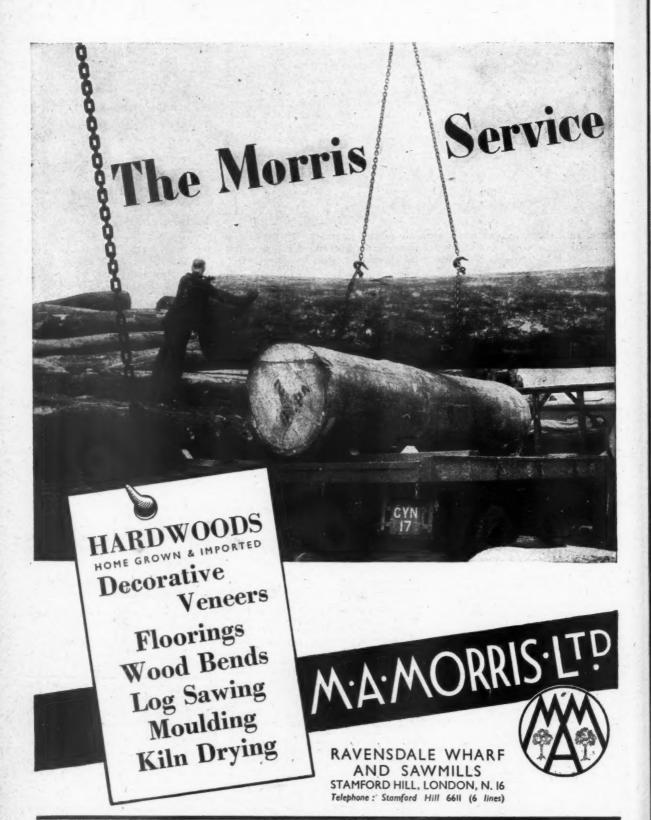
| Thursday,<br>No. 2773   | Apri   | l 1,<br>VOL        |          |
|---|--|--------------------|----------|
| News  |  |                    | 297      |
| Photo Album: Float  | ing Cafe                                       | ė                  | 298      |
| This Week's Leading   | Article  |                    | 299      |
| Astragal's Notes and  | Topics   |                    | 300      |
| Letters from Readers  |  |                    | 301      |
| In Parliament   |  |                    | 301      |
| The Cuts in Building<br>Bowen   | . Ву   | Ian                | 302      |
| Information Sheets:   |  |                    |          |
| 26. J5 ·Fixits· Fixing Clips: Developed for Lightweight Sl: 33.C10 Laying an ing Lead Servic Distribution Pip | Types<br>Fixing<br>abbing<br>ad Fix-<br>ce and |                    | face 302 |
| County Secondary Beverley. Design Giraud, East Rid Architect House at Chorl Designed by David                 | ing Con  | K.<br>unty<br>ood. | 303      |
| Basil Smyth   | ··   | anu                | 306      |
| Societies and Institut  | tions  |                    | 309      |
| Church at Morden<br>by Edward D. Mil  | Desig  | ned                | 311      |
| Technical Section:<br>Information Centr   | е  |                    | 313      |
|   |  |                    |          |

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

means spare a second for this, it will probably be worth it.

\*\* means important news, for reasons which may or may not be obvious.

WINESCO has suggested an exchange scheme of British and foreign local government officers. The National Housing and Town Planning Council, acting on UNESCO's invitation, enquired into the possibilities of the scheme. Leading local authorities were approached, but the project did not receive much favour at the time. It appears that there are many practical difficulties, and besides the leeway which has to be made up in work that had to be abandoned during the war, there is a shortage of the class of officer suitable for such a scheme. This shortage is particularly acute in housing and planning departments. The maiority of replies accordingly indicate that little success would result from the submission of a detailed scheme, as key officers cannot be spared.



T A b

D

m

an in of

to

ble

Th

\*TTIM

to

Su

#### AN ARCHITECT'S Commonplace Book From

TECHNICAL EDUCATION. [From An Essay Towards a Description of Bath, by John Wood, Architect.] The Apartments over this Hospital made part of the first House that was undertaken by me; but that Structure was plan'd by another Hand, who, through Carelessness or Incapacity, took such a false Survey of the Land, that there is scarce a Right Angle to the whole Building. The Dimensions of the Out Lines of my Brother Architect's Plan are preserved in the Work, as well as the Situation of most of the Partition Walls; for the chief Part of the Building was set out before my arrival at Bath, in the Year 1727; but the Area of the Ground built on, so far exceeds the Ground of that Plan, on Account of the erroneous Angles, that the Difference, when exactly measured, amounted to 338 Square Feet and a half; which being about the eighteenth Part of what was stipulated in my Contract with the Duke, intitled me to a further Demand on his Grace, of the eighteenth Part of the whole Consideration Money of that Agreement. This unaccountable Instance shows us how necessary it is for an Architect to be well grounded in the Theory and Practice of Geometry; And I remember, in a Conference with the late Earl of Oxford, in the Presence of my Lord Dupplin, I mentioned this very thing to account for the false Plans that have been published of Stonehenge; not one of which gives us any real Idea of the Form or Size of that Work; a Copy of the Survey of which, with all the Dimensions, as they were taken upon the Spot, I have had engraved and printed, to make good this Assertion, as I promised in the first Edition of this Essay.

THE POPE has approved and blessed the plans for the extension of NORTHAMPTON CATHEDRAL which were presented to him at the Vatican by the Bishop of Northampton. The plans have been prepared by Mr. A. Herbert, F.R.I.B.A., of Leicester. The design provides for a tower, the demolition of the old section at the west end, and the extension of the upper part of the Cathedral. This will involve the reorientation of the church so that the sanctuary will be at the east end, and will bring the building closer to the road. It is estimated that the cost of the extension will be between £40,000 and £50,000.

of building development in areas liable to flooding; planting and preservation of trees; prescription of building lines along the river frontage (plus a height limitation); special caravan sites screened by trees; control of the siting of gravel pits and of reinstatement of the land involved. Areas from which the ultimate clearance of building develop-ment is envisaged fall into two broad cate-

Areas where no proper access exists, no services have been provided, and the buildings are constructed of short-lived materials and are unattractive in appearance;

Areas where certain services have been provided and the buildings are of a mixed type, but from which, because of their location and appearance, they should be removed in the interests of good planning.

The recommendations are general in character since it is felt that any such clearances will extend over a long period. Among areas suggested for ultimate clearance are:areas suggested for ultimate clearance are:—
The frontage north of Sunbury Lane,
Wheatleys Ait, Beasleys Ait, the River Ash
estate, a site opposite Coway Sale—all
within the Walton and Weybridge area.
In the Chertsey area, bungalows north of
Chertsey Bridge, areas north of Laleham
Ferry along the Surrey bank extending to
Penton Hook and Mixnams Farm.
West of the Anglers' Rest Hotel in the
Egham district, then upstream of Staines
Bridge to land within the Eton rural district.
The report states that it is reasonable to

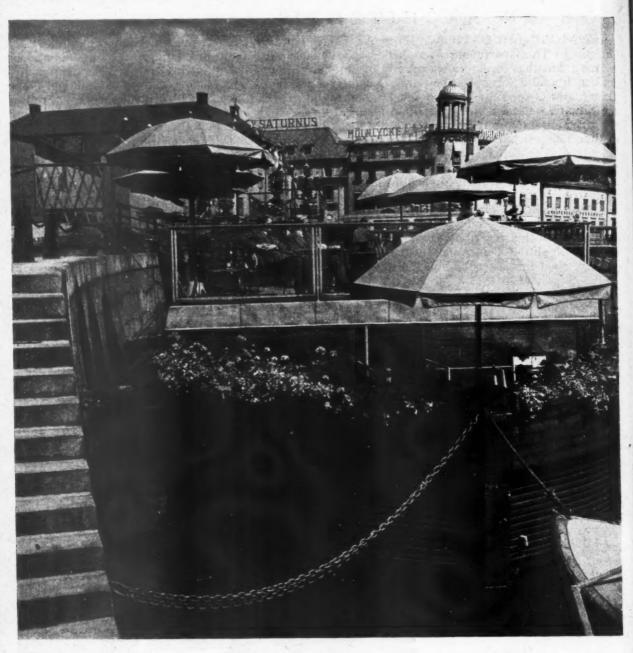
The report states that it is reasonable to assume that efforts will be made to provide a continuous riverside walk along one of the river banks.

This year's BRITISH INDUS-TRIES FAIR will have more exhibitors than ever before, and it is reported that oversea interest is unusually great. The BIF is to be held simultaneously at Earls Court and Olympia in London and at Castle Bromwich in Birmingham, from May 3 to 14. The heavier industries will be represented by 1,100 manufacturers exhibiting at Castle Bromwich, and the products of lighter industries will be shown by 2,300 exhibitors in London. The hardware, building and heating, electricity, and engineering industries will be exhibiting in Birmingham. The demand of manufacturers for floor space has greatly exceeded the amount available. In spite of reducing the permissible space for each stand, accommodation could still not be found for more than 600 applicants after the closing date last September. Mr. Maxwell Fry has been appointed consulting architect at Earls Court, and Mr. Basil Spence at Olympia.

\*\* ·
THE NORTH-WEST SURREY JOINT PLANNING MITTEE are considering proposals to clear a number of areas bordering the Thames from West Molesey to Old Windsor. Suggestions to be put to local authorities and planning bodies include the prohibition



Despite the representations of the Georgian Group and the Merseyside Civic Society, the Ministry of Works has decided to demolish the Liverpool Customs House, designed by John Foster in 1826. The building, which is the property of the Crown, was badly but not irreparably damaged in the blitz, and its future use was not apparent. After a detailed survey, it was suggested that the central portion of the building should be preserved, possibly for use as a maritime museum and that the Government should give the building and the site to the City of Liverpool with the benefit of the War Damage claims. The attitude of the Ministry of Works was sympathetic, but difficulties arose, and demolition was decided upon. This decision is economically sound, but the Customs House was of considerable architectural interest, and it is a nice point to balance financial and asthetic values, for which some provision has been made in the 1947 Town and Country The photograph shows the Customs House in its partly demolished state.



#### Photo Album:

## Floating Café

The Continental tradition of little cafés, with their tables out of doors, where it is possible to sit and chat with friends and watch the passing scene, is too well known to need description. The photograph shows a variation on this theme: a barge café moored in one of Gothenburg's canals, gay with geraniums and brightly-coloured

umbrellas. It suggests not only an ingenious way of creating extra space in crowded towns, both for leisure and for utility, but also one way in which canals can be made attractive to the eye. Contrast the above with the photograph of Paddington basin published in the JOURNAL for March 4.

An appeal for £3,000 is being made to repair an ELEVENTH CENTURY CHURCH. Men repairing the roof of Checkley parish church, Staffordshire, have discovered the presence of the death-watch beetle in the timber. Repairs to the roof have already cost £400, and it is estimated that they will cost another £1,500. Repairs to the stonework will cost £1,100, bringing the total to

£3,000. Subscriptions may be sent to the non. treasurer of the Checkley Church Restoration Fund, Checkley Rectory, Tean, Stoke-on-Trent, or to the District Bank, Limited, Cheadle.

LORD SALISBURY has decided again to admit the public to a large

part of HATFIELD HOUSE, its gardens and park. During the war Hatfield House was used as a hospital and its valuable contents were stored away, but it has now been almost completely restored to its normal state. The house and grounds will be open from 10.30 a.m. to 5.30 p.m. on every weekday from Saturday, March 27, until September 30 this year. A charge of 2s. 6d. will be made.

THI PRO THI has o NE ANI The f of Bi bomb where struci April simila Scher 11.0 made ducti dustr Wor of the notic

> new elev ing, mac pap elec and Chi Mir scie dus

> > M

THE NATIONAL JOINT PRODUCTION COUNCIL FOR THE BUILDING INDUSTRY has arranged two demonstrations of BUILDERS PLANT AND POWER HAND TOOLS. The first will be opened by the Lord Mayor of Birmingham at 11 a.m. on April 6, on a bombed site in Coventry Road, Birmingham, where a new housing scheme is under con-struction for the Birmingham Corporation. The demonstrations will be continued on April 7 and 8 from 11 a.m. to 5 p.m. The Lord Mayor of Stoke-on-Trent will open a similar 3-day demonstration on a Housing Scheme at Trent Vale, Stoke-on-Trent, at 11.0 a.m. on April 13. The arrangements for these plant demonstrations are being made by the Midland Regional Joint Production. Comprisition for the Publishing Inc. duction Committee for the Building In-dustry, in conjunction with the Ministry of Works. They are intended to bring some Works. They are intended to bring some of the latest types of builders' plant to the notice of building firms and building trade operatives in the Midlands. All the machines to be exhibited are now on the market, and will be demonstrated under working conditions. Exhibits will include new types of mobile builders' hoists and alternate alternates allow types and seemed. elevators, aluminium alloy tubular scaffoldelevators, aluminium alloy tubular scanfolding, scaffold planks and ladders, and machines for roughcasting, preparing wallpaper and cutting plaster board, and other electrically operated hand tools. The plant and equipment will be demonstrated by the Chief Scientific Advisors' Division of the Ministry of Works, and will show how scientific research can help the building industry in improving construction methods. dustry in improving construction methods.

#### NEWS IN BRIEF

Minster Grammar School, Southwell, one of the most ancient schools in England, is to be rebuilt on a new site at an estimated cost of £50,000. Half this sum is to be provided by the church, who are appealing for funds. Donations may be sent to the Clerk to the Governors, Minster Grammar School, Southwell, Notts.

RNChatham War Memorial is now in process of construction. The memorial includes a series of 10 stained glass windows and the decoration of the choir and sanctuary of the Church for the control of the choir and sanctuary of the Church for the control of the choir and sanctuary of the Church for the choir and sanctuary of the Church for the control of the choir and sanctuary of the church for the choir and sanctuary of the church for the choir and sanctuary of the church for the church for the choir and sanctuary of the church for the of St. George ham Barracks George Chatham. The Chat-arracks canteen committee has ham Barracks canteen committee has given a sum sufficient to meet the greater part of the work, but subscriptions may be sent to the Senior Chaplain, R.N. Barracks, Chatham.



le

A new block of workers flats. have been built by the Chelsea Council on a bombed site in King's Road. Each flat has three bedrooms, living room, kitchen and bathroom. Hot water is by separate geysers. The rent is 16s. 6d. The flats were designed by Mr. J. A. Gough, Borough Engineer and Surveyor.

## THE PLANNING TEAM

THREE months from to-day, the Town and Country Planning Act of 1947 comes into force and will provide the framework of the future development of the towns and countryside of these islands. This measure is extremely complex, but probably contains all that any pre-war planner could have wished. It provides for universal planning control; it provides for planning in reasonably large units (County Boroughs and Counties), co-ordinated at a Regional level. The Act requires of planning authorities a survey and development plan, to be revised every five years, and for such plan to be carried into effect. These requirements necessitate most earnest consideration of the instrument required to operate

Planning authorities have but three months in which to prepare their machinery and may well be contemplating the situation with some dismay. This dismay arises from a growing understanding that the Act of 1947 is not merely an extension of earlier legislation but that for the first time planning is now concerned with every "development" and change in land use. They also have grave doubts as to how the planning aspect of all forms of development can be considered expeditiously and without producing friction between committees and individuals who have hitherto worked more or

less separately or autonomously.

Plans of the pre-1939 kind would have caused no difficulty, but the new plans are to be realistic and call for close and constant collaboration between several government departments, the principal offices of local authorities, their committees and perhaps a dozen or so other organizations. Planning authorities will suffer many disappointments if they think that all they need to do is to appoint a Planning Officer of the pre-war kind and provide him with a few assistants. Formerly the functions of the planning officer were almost entirely administrative and were safely left to junior officials or were included among the many other duties of senior officials. They could be adequately performed by rule-ofthumb methods. To-day a constructive plan is demanded, and rule-of-thumb methods have but little place. The new tasks call for a very much higher standard of technique as well as administrative ability of a high order. In addition, planning to-day demands clear-sighted imagination and courage.

If planning authorities attempt to carry out these new tasks with their former establishments, many of them are bound to fail. Naturally circumstances will vary among authorities in different localities. Some will be blitzed County Boroughs where a rapid completion of the essential proposals will be vital, some will be more or less static County Boroughs, where a slower pace is appropriate, some will be whole counties with complex problems of industrial and agriculture adjustment and urban and rural balance. Others will be largely national parkland and have special requirements of their own.

The two most urgent steps for Planning Authorities to take are

first to re-organize their Planning Committees, which will become in effect the major policy-making committees. In future these might well consist of the Chairman and Vice-Chairman of most of the other Committees. The executive part of such a committee should be small—five or seven members with the best Chairman the Council can muster. The second step is to appoint a Planning Officer whose primary qualification should be a knowledge of the developments in Town Planning technique since 1939, and the ability to apply his knowledge to the special problems of the locality. Long experience of administering previous planning legislation is not essential for this task.



The Architects' Journal

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

N O T E S & T O P I C S

PETERLEE (NEE EASINGTON)

A new town that is really going ahead inevitably puts the others—which have theoretically been going ahead for so long, but now seem further off construction than ever—somewhat in the shade. So, with the Minister of T & CP's statement of last week, giving the membership of the Development Corporation for the new town to be built near Easington, interest in the new towns definitely moves to the coalmining north, perhaps only just in time to save it from total evaporation.

Peterlee' is, I understand, to be the name of the town when it is completed—after a miners' leader much loved in the locality. Interest in a project that is both architecturally exciting and sociologically important (on account of all that it promises to do to revitalise an area of straggling mining villages without any sort of urban focus and any alternative employment) is enhanced still further by the news that Lubetkin is to be both

architect and planner. His appointment will be an inspiration to the younger generation of architects, and it is good to see another *designer* in charge of a new town when so much of town-planning has become merely legislative or statistical.

#### PARADOCTRINAIRE SCHOOL PRACTICE

I am considerably puzzled by the building policy of the Ministry of Education. The Crippsian edict, it seems, has laid down that the rising curves of school building expenditure should be flattened out after next June and maintained at the June level. This is expected to be at the rate of £25 to £30 millions a year, although even if it becomes higher the level will be maintained. It thus seems reasonable to expect the Ministry to push up the June level as fast as it can.

But the bulk of new school accommodation is in the form of substandard temporary hutting, although it is estimated that this represents a saving of only 8 per cent. in both costs and labour. We are therefore faced with the paradox of the Ministry economising by spending as much as it can now on accommodation it won't want later in order to have then enough money for the type of accommodation it will want.

THE BUILDING INDUSTRY REPLANNED

Much better than the average attempt to redesign the building industry is Mr. David Hall's Cornerstone\*, prepared in collaboration with the Labour Research Department. The author's main contention is that productivity is far too low, but he adds that "the biggest contribution to this

\* Lawrence & Wishart, 7s. 6d.

end must come from the building workers themselves." The usual contemporary delay in publishing, however, has made some of his arguments out of date, for we cannot even yet tell, as the AJ leading article observed last week, what difference last autumn's incentives scheme is likely to make in output. He revives once more the idea of a State Building Corporation and the greater use of direct labour, but it still seems impossible to produce a workable plan for nationalising the thousands of small country builders who between them manage a vast amount of work, and generally do it at a very reasonable cost.

#### PLANNING IN THE NURSERY

And I don't mean the sort of planning and interior decoration that intellectual parents tend to inflict on their offspring, but Mr. Oswald Milne's little booklet\* of gummed drawings designed to be stuck on matchboxes (two dozen of them) and used for planning a toy village. The idea seems to me a good one, the main snag being the uniformity in size, for although church, mansion and town hall use three boxes each, the rest of the houses use only one. Inevitably, therefore, the scale seems to slip a little here and there, but by no means outrageously so. One real disadvantage, of course, is that most architect fathers will be expected to produce a lot more designs of their own-not at all easy when the dimensions are 21 by 1½ inches.

#### WHAT THE PUBLIC LIKES

When, ten years or so ago, John Betjeman was editor of Decorationand what a surprising but triumphant appointment that was-he used to say that it was the duty of those who wrote about design and architecture constantly to study illustrations of those genuinely typical English homes which had never been touched by the hand of the professional. Some such excellent idea has occurred to the organizers of the Anglo - French Art Centre in St. John's Wood, where a macabre little exhibition consisting of pictures chosen at random from houses in Mayfair, Camden Town, Whitechapel and

<sup>\*</sup> Matchbox Village. By Oswald P. Milne. Published by Riddle Books for the Council for Visual Education. Price 1s. 9d.



The matchbox village, referred to in Astragal's note, in operation on the nursery floor.

Kensington is being shown under the title of "What the Public Likes." Attracted by the promise of this idea, I hurried there last week, past the graven cricketers on the corner of Lord's, and past the half-built block of flats which was to be modern architecture's showpiece of structural virtuosity.

ding

connownents

tell, last mn's

e in idea

and

but duce sing

ders

vast it at

lan-

that

flict

vald

ned

on

and

The

ain

for

wn

t of

bly,

) a

ans

an-

tect

e a

at

21

hn

ant

say

ote

on-

nse

ich

of

ent

of

St.

tle

res

y-

nd

hed

The gallery was empty. Through a closed door came the muffled fusillade of a French conversation like that which penetrates from the next compartment during a midnight halt at Dijon. The pictures were few and in-There were differently presented. three surprises-some Piranesis from Whitechapel, a Pièta by a barman in Camden Town, a self portrait by Scroggie from the Kensington home of somebody calling herself (and this was quite a surprise, too) a greyhound accessory manufacturer. The rest were both as expected, and yet not quite expected enough. From Mayfair and Kensington came, of course, G. F. Watts, the gilt-framed watercolour, and the Gainsborough-but no Russell Flint, Paul Henry or Olive Snell. From Whitechapel and Camden Town came the tapestry cat, the colour litho of Queen Victoria, the Italian peasant-curious the æsthetic loyalty of the British working class to Naples and Neapolitans-but no Landseer engravings, no portrait of Kitchener, no pin-up Petty girl.

Obviously, without the trained help of Mass Observation, no exhibition like this can hope to be even faintly representative, but it could, I think, have been more entertaining in content and in presentation. And surely it was a mistake to choose pictures from the homes, rich or poor, of artists?

MARS LOOKS AHEAD

The success of the CIAM Conference last autumn left in its trail a great deal of work for each of the member groups, especially in preparing for the seventh congress in the not too distant future. As a result of these commitments, I learn that the MARS Group have decided to appoint an assistant secretary to help Mark Hartland Thomas, whose new duties at the CID must make him a busier man than ever. The new assistant secretary (in succession to Cadbury Brown, who acted in this capacity for the Bridgwater Congress) will be Peter L. Coke, a member of the Architects' Co-operative Partnership.

FLOPSY MOPSY AND COTTON NAIL

Nineteen-year-old, blonde, demitassecup collector Matilda Nail, of Texas, was in Manchester and London over Easter as "the goodwill and fashion ambassador" of the American cotton industry. Elected "Maid of Cotton for 1948" last January for "outstanding intelligence, personality, poise and ability to meet people and talk before groups," she has been here with her advisers to display at the Cotton Board Design Centre her American wardrobe (everything the Maid of Cotton wears is Made of Cotton, even the luggage she carries it in) and to pick up the British dresses she is taking back to the States.

There's nothing like a handsome Texas girl to put things over, and British printed cottons, which are some of the best designed in the world, are lucky in their saleswoman. Unable, alas! to attend the Maid's reception, Astragal nevertheless hereby files this Nail for future reference.

ASTRAGAL-

## LETTERS

(Sir Lancelot Keay, P.R.I.B.A.

Miss E. Bright Ashford, B.A.

#### National Amenities Council

SIR,—In your issue for March 18, Mr. John Swarbrick calls attention to a letter from the late Sir Charles Reilly advocating the formation of "A National Amenities Council" which appeared in *The Times* as long ago as May 13, 1946.

Council" which appeared in *The Times* as long ago as May 13, 1946.

The fact that nothing tangible has come from the proposal after nearly two years, points to the conclusion that this new body, whilst it might satisfy the wims of a few, is not wanted by the great majority of those who are sincerely interested in maintaining and establishing such amenities as the changing conditions and prevailing austerity permit.

When the Royal Institute of British Architects was invited to support the formation of this new Council there was no evidence that any support was likely to be forthcoming from any of those bodies which usually collaborate with the Institute on matters of general interest.

At a time when it is so essential to speak with authority and unanimity, the setting up of subsidiary and redundant organizations is to be deprecated.

President, RIBA.

SIR,—In connection with the letter from Mr. Swarbrick in your issue for March 18, I am writing to give the considered opinion of two of the Amenity Societies on the subject of an Amenity Council, for both of which, the London Society and the Central Council of Civic Societies I am secretary, as well as being a member of the executive committees of three of the others.

We have of course often discussed the

We have, of course, often discussed the question of further amalgamation, and went fully into the matter in 1946, when Sir Charles Reilly's and Mr. John Swarbrick's former letter appeared, but we have always decided that it would not only be of no assistance but would have the effect of dissipating the interest of the public in the work of the individual societies and of delaying their action.

Each of the amenity societies has a completely different object, in connection with which technical knowledge is needed by its officers. The agendas are long and constantly growing, and it would be impossible to unite the various items so as to be considered at a sitting of one committee; it would merely cause unlimited confusion and delay. In order to avoid overlapping, constant co-operation takes place between the various officers, and many members sit on more than one of the executive committees, and so are kept in touch with all that passes. This prevents the duplication of work, and where any joint amenity action is needed, this can be, and is, taken.

E. BRIGHT ASHFORD, Organising Secretary, The London Society

### In Parliament

Questions recently put to the Minister of Works (Mr. C. W. Key) in the Commons reflected the concern felt by members at the threat of serious unemployment in the building and brickmaking industries. The Minister had something to say on the subject of building repair licences: "In future, if it appears that the restriction on new work

will make more building workers available for maintenance, repair and minor works than would be employed at the former level of licensing, the Regional Director of my Department will consult the Regional Con-troller of the Ministry of Labour about the possibilities of alternative employment. If the Ministry of Labour advise that alternative employment is available on essential work in the building industry or in other industries, the level of licensing of main-tenance, repair and minor works of a less urgent character will be restricted, so that the employment exchanges may offer the men employment on other essential work. If, on the other hand, alternative employment in essential work will not be available, additional licences for maintenance, repair and minor works will be issued."

Among the host of supplementary ques

Among the host of supplementary questions put to the Minister after his statement was this query from Sir Waldron Smithers (Con.—Orpington): "Are you aware that there are houses in my division, now uninhabitable, which for £60 or £70 could be made habitable? The material and labour are readily available, but we cannot get licences." licences."

Mr. Key replied that the licensing lay with the local authority in the area concerned, but Sir Waldron would not accept this. "The local authorities are limited," he de-"The local authorities are infined, the de-clared. "They would give the licences for them, but the Ministry of Works will not let them." Mr. Key, however, firmly denied the truth of the statement.

Later the Minister was asked by Mr. F. J. Erroll (Con.—Altrincham and Sale) whether, in view of the impending unemployment in the building and decorating industry, he would raise the present £10 limit on work which could be carried out without a licence. Mr. Key said the present licensing period during which the £10 limit operated expired on July 31 next, and the arrangements sub-sequent to that date were under consideration.

Sir Frank Sanderson (Con.-Ealing E.) was anxious about the workers in the brick-making industry. He pointed out that the London Brick Company had had to discontinue all-night shifts at Peterborough and at Bletchley Works, and their premises at Elstow were to close down completely. What did the Minister intend to do, in view of the departulation of the complete of of the demoralising effect upon this indusy? Mr. Key expected the present decline the demand for bricks to be temporary.

## THE CUTS IN BUILDING

[by Ian Bowen]

The value of work to be done under the heading "Construction" in the calendar year 1948, according to the Government's revised forecast, is £770 millions2. This is £55 millions less than the original forecast3 which was published in February, 1947, and this represents construction's share of the cut in capital expenditure announced last autumn<sup>4</sup>. The total cut thus last autumn4.

amounts to 6 per cent. on the original plan, which on the face of it does not seem a disastrous reduction from the point of view of the building industry or of the architectural profession.

But the reduction demands a somewhat closer examination. To begin with, while closer examination. To begin with, while the change in the forecast for the complete calendar year is not very large, the rate of constructional expenditure is to be reduced from £850 million per annum at June, 1947, to £700 millions at the end of 1948, a reduction of 18 per cent., which is much more serious for total "construction" (this in-cludes, it should be remembered, the repair of roads, permanent way, etc.) Figures for building and civil engineering, exclusive of the "direct labour force" activity of local authorities and other employers, is available in terms of manpower only; here the im-portant fact emerges that there are to be 144,000 less people engaged in building and civil engineering over the same period (June, 1947, to December, 1948). This is a reduction again of the order of nearly 18 per cent.

Nor is it clear that this is the end of the leoline. The number of houses under condecline. struction is to be reduced from 250,000 to struction is to be reduced from 250,000 to 140,000 by the middle of 1949; if this reduction is typical of the building programme as a whole, the year 1949 is to be the graveyard of many post-war building hopes and plans. Other forms of building than housing, even if they do not suffer this severe cut, must presumably decline sharply, new industrial building being specifically referred to in both White Papers' as a "heavy user of steel" due for a heavy "cut-back," the size of which cannot at present be precisely measured.

#### ARE THE CUTS JUSTIFIED?

Some slowing-down, and possibly even some cut, in the building programme, may be regarded as justified in view of the deterioration of the balance of payments during 1947. The quantitative question that remains to be answered is whether the evil consequences of the cut are outweighed by its economic advantages; or as this is, strictly, a qualitative question, it might be more correct to say that the size of the loss needs to be considered against the size of the gain—some act of judgment still being required for non-measurable items on either

The disadvantages of a cut of 18 per cent. or so, with the danger of a further cut in 1949, are very much greater than would be the effects of a 5 or 6 per cent. reduction. The question at issue is just how far this major reversal of policy jeopardises the whole success of the ten to twelve year postwar building programme. Building was to become an industry of steady employment; the building labour force was to be built up at an unprecedented rate by apprenticeship at an unprecedented rate by apprenticeship schemes, etc.; and payment by results was to selve the problem of incentives where now there was no unemployment. An 18 per cent. (and greater) cut consigns this policy to the dust-bin. What happens to the goodwill of the unions? How in future should Government promises of "continuous employment" be valued, if the quid pro quo for apprenticeship admission is now lightly to be set aside? What are the young craftsmen who have just learnt their trade going to say in the queues at the labour going to say in the queues at the labour exchanges?

These questions must be asked not in any polemical sense, but because the mere pos-ing of them makes clear the gravity of the issues that are now to be raised. Everyone connected with the building industry has a moral right to be told what gains his sacrifice of employment-opportunity or of advancement are intended to secure. The grounds for the cut in building employment,

and for the consequent upheaval in so many professions and industries must be good grounds.

#### REASONS FOR THE CUTS

The White Papers advance two main arguments for the building cut; the first is the shortage of materials, and in a lesser degree of over-all manpower for industryin general; the second (not wholly independent of the first) is the argument that it is necessary to close the "inflationary gap."

Shortage of materials is an argument that carries conviction in general terms; if less materials are to be available then new buildbe restricted accordingly. not possible to comment on the appropriate-ness of the reductions in the absence of detailed figures of the materials likely to be forthcoming. But a shortage of man-power as such is not so easy to accept. Unemployment is estimated to increase by Deemployment is estimated to increase by 50 per cent., that is by 150,000 between December, 1947, and December, 1948. Quite a substantial proportion of this increased unemployment, it may be assumed, will be building and civil engineering workers. But is it quite certain that these men could not have been found employment in the reprise and maintenance? ment in the repairs and maintenance'

of the construction industries?

Is the argument for creating unemployment among building workers to rest solely, then, on the need to close the inflationary gap? This would seem a return to the gap? This would seem a return to the tyranny of the "meaningless symbols" with a vengeance. For the main contribution to the closing of the gap would be secured by reducing the purchasing-power of builders (and architects) in work to the undesirably low level of the same classes out of work. Why should they be singled out for this sacrifice?

for this sacrifice?

Meanwhile, the workers and others still enjoying incomes are to spend on consumption more in 1948 than in 1947 (£7,675 millions against £7,300 millions—price level not stated). It is far from clear what this forecast of increased consumers' sterling expenditure is intended to mean, especially as food consumption and clothing consumption are to decline. But some rise in real consumption expenditure seems to be implied sumption expenditure seems to be implied, since it is anticipated that personal savings will decline from £625 millions in 1947 to only £450 millions in 1948. Now, the building industry might willingly take a cut if the sole purpose of the reduction was to increase necessary exports; but will it be so willing if one result of its effort is the in-creased prosperity of certain other (non-food and non-clothing) domestic industries? Is it sound policy to cut the country's vital capital investment for a mess of dubious

capital investment for a mess of dubious grey market pottage?

These questions perhaps raise issues that lie outside the scope of the building industry's own interests and necessities. But it may be important to realize that such deeper issues are involved, and not too readily to accept the view that the size of the capital cuts has been planned selectively and precient according to the best excitoral. and precisely according to the best national and precisely according to the best national interests. A rather tighter belt—or in more appropriate language, a slightly tighter control on personal expenditure on the less essential necessities of life—would easily restore £200 millions to the balance, and render the cut of building output wholly unnecessary in respect of the argument about closing an "inflationary gap." All that would then remain would be to arrange for such types of work to be done as were consistent with the supplies of building materials becoming available.

<sup>\*</sup>Cmd. 7344, p. 44, Table XXI.

'Since on repairs and maintenance far less materials (especially scarce materials) per head are used, materials should not be a bar to this policy.

\*Op. cit., Table XXII.

\*For instance, how far the changes in the purchase tax level affect the figure has not been publicly estimated.

¹This term includes, in addition to the output of the building and civil engineering industries, constructional work undertaken by employees of other industries, and the whole manufacturing cost of temporary houses.
²Economic Sarvey for 1948, Cmd. 7344, p. 39, Table XIX.
²Economic Sarvey for 1947, Cmd. 7046.
⁴Cmd. 7268, Appendix A.

<sup>&</sup>lt;sup>5</sup>Cmd. 7268, p. 12, and Cmd. 7344, p. 39.

tass.

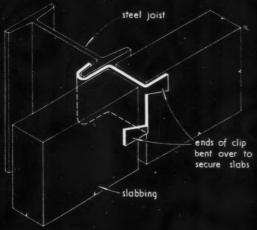
It is eof to tototy year assistance of toty year assistance of year assistance of year assistance of year assistanc

less head this

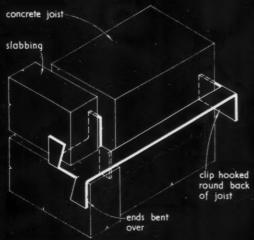
n the been



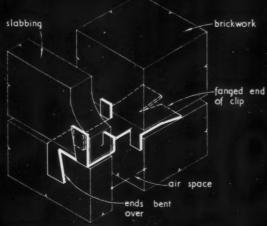
The Architects' Journal Library of Information Sheets 53. Editor: Cotterell Butler, A.R.J.B.A.



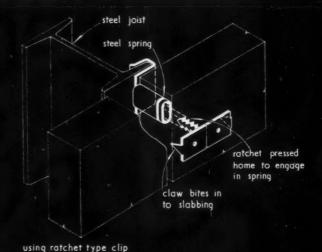
using bent-over clip SLABBING TO STEEL JOIST.

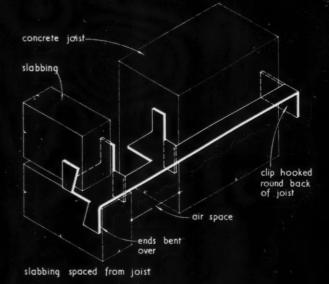


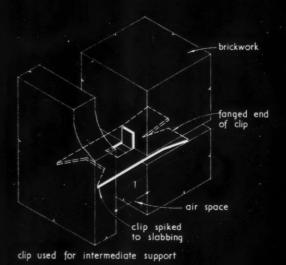
slabbing in contact with joist SLABBING TO CONCRETE JOIST.



clip used at joint in slabbing SLABBING TO BRICKWORK.







FIXITS: METAL FIXING CLIPS: TYPES DEVELOPED FOR FIXING LIGHTWEIGHT SLABBING. ( scale ) - ( ) Manufacturer: Thomas French and Sons Limited

## 26.J5 FIXITS METAL FIXING CLIPS: TYPES DEVELOPED FOR FIXING LIGHTWEIGHT SLABBING

This Sheet is the second illustrating examples from a range of clips evolved to solve the problems of fixing lightweight slabbing, timber, etc., to structural members. Six types are shown, all for fixing lightweight slabbing; Sheet 26.J4 illustrates other typical examples. The clips are purpose-made to the extent that fixings for special problems are developed to order, but use of an already developed type is more economical.

#### Types

Slabbing to steel joist: Two types of clip are illustrated. In the first one end of the clip is slipped over the flange of the joist and the other bent over the face of the slabs. The second type is in two parts and embodies a ratchet and steel spring.

Slabbing to concrete joist: Two types are illustrated. In the first the slabs are fixed in contact with the joist and in the second the slabs are spaced from the joist.

Slabbing to brickwork: The lower left hand drawing shows a clip for use at the joints in the slabs. The

drawing opposite shows a clip which would act as an intermediate support or fixing of a slab.

#### Trade Name

These products are manufactured under the trade name · Fixits · fleur de lis brand.

Compiled from information supplied by :

Thomas French & Sons, Ltd.

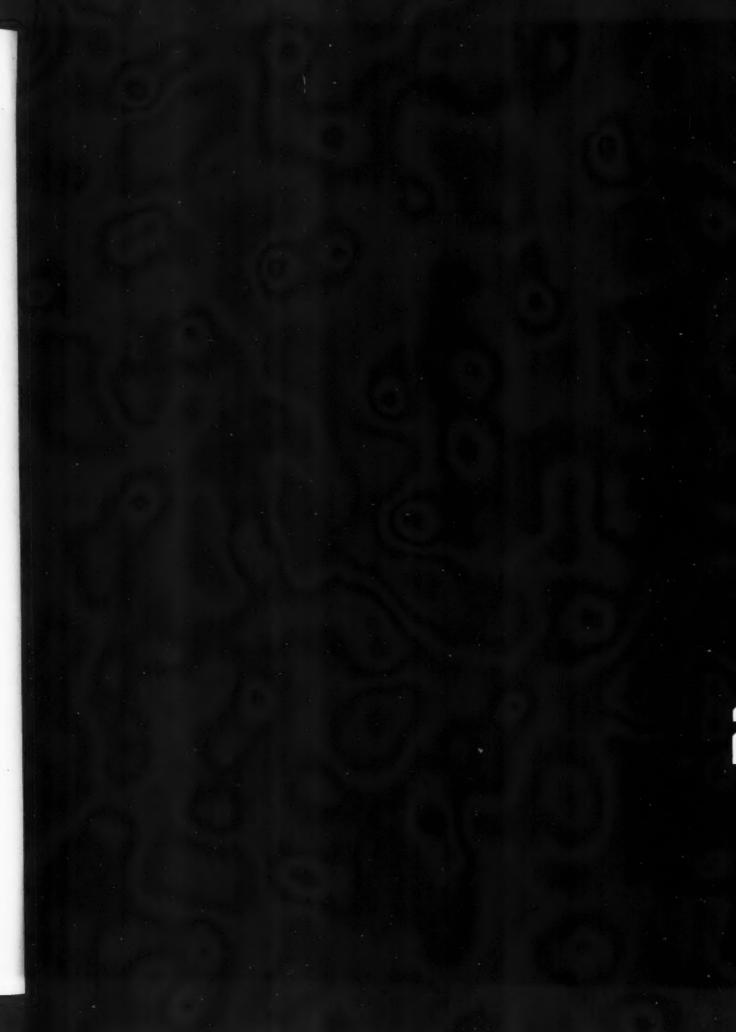
Head Office: Chester Road, Manchester, 15.
Telephone: Blackfriars 1887 (10 lines).
Telegrams: Rufflette Manchester.

London Office: 156-162, Oxford Street, W.1. Telephone: Museum 5558-9.

New York: 620, Fifth Avenue.

Massachusetts: Fleur-de-Lis Mills, Fall River.

Canada: 751, Victoria Square, Montreal.





#### WATER SUPPLY DETAILS | LEAD

The Architects' Journal Library of Information Sheets 54. Editor: Cotterell Butler, A.R.I.B.A.



TYPICAL FIXING METHODS FOR LEAD PIPES UP TO 1년 INTERNAL DIAMETER.

maximum spacing for hooks and clips 2'-0" for horizontal work 2'-6" for vertical work

maximum spacing for lead tacks 2'-0" for horizontal work 3'-6" for vertical work



under ground floor

pipe let \_O into joist pipe reeved thro' joist

across joist

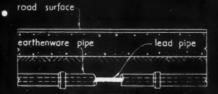


along joist



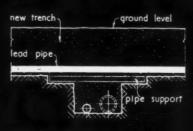
in wall chase

FIXING OF PIPES IN BUILDINGS.



under road carrying heavy traffic

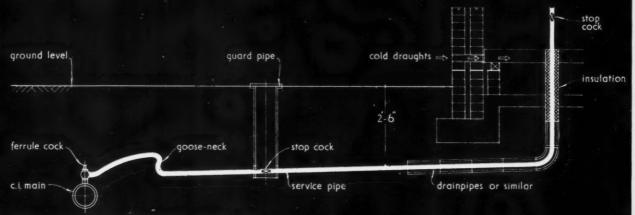
LAYING OF PIPES BELOW GROUND.



carried over recently filled trench



bedded in heavy clay soil



INSTALLATION OF TYPICAL WATER SERVICE PIPE.

LAYING AND FIXING LEAD SERVICE AND DISTRIBUTION PIPES.

#### 33.C10 LAYING AND FIXING LEAD SERVICE AND DISTRIBUTION PIPES

This Sheet summarises the main considerations involved and makes general recommendations for fixing and laying lead service and distribution pipes.

#### Fixing

Fixings should always be considered not only as a means of holding pipes in position, but also to provide them with support. Inadequate support may result in shortening the life of the pipe and in inefficient functioning of the water distribution system. Where practicable, fixing should be by continuous support, but where this cannot be done an adequate number of fixings should be allowed for.

Fixing Methods: For supply and distribution pipes up to 1½ in. bore three types of fixings are in general use. Pipe hooks should always be used with sheet lead strips (see illustration) to prevent damage to the pipe. Lead tacks may be soldered either on the face or back of the tack. Soldering to the back of the tack cannot usually be carried out in situ.

Horizontal Runs: Fixings for horizontal runs should be arranged at intervals not exceeding 2 ft. The use of hooks and clips should be limited to pipes up to 1 in. bore unless other support is provided. A continuous support may consist of a timber batten where concealment of the pipe is unimportant; if the pipe must be buried, a shallow chase should be provided complete with a removable cover. Fixings where continuous support is provided can be at greater intervals than stated above.

Vertical Runs: For pipes fixed vertically adequate fixing and support is provided by pipe hooks or tinned steel clips at intervals of 2 ft. 6 in. maximum or by lead tacks at 3 ft. 6 in. intervals. As with all pipe runs, if the wall to which the pipe is being fixed is external, it is good practice to provide a back board to give insulation. Concealed vertical pipe runs may be made by providing a shallow chase with a screwed access cover.

Interior Work: Pipes run beneath timber board and joist ground floors should not be looped over supporting walls on the surface of the oversite concrete. It is important that pipes in this position should be well lagged. Pipes running across joists in a roof space may be laid without extra support where joists are spaced at the normal 18 in. centres. If the pipe runs diagonally, thus increasing the distance between supports, a lay-board should be provided. A lay-board to support the pipe is advantageous where there is a risk of the pipe being trodden on.

Pipes running at right angles through timber joist floors can be accommodated and given support by boring the joists at about the centre (neutral axis) or notching at the top, preferably the former. Full clearance should be given round the pipe and easy access provided.

Pipes running with the joists can be conveniently supported by a small batten nailed to the face of the joist.

Burying Pipes: It is not good practice to bury pipes in a structure without providing means of easy access. Pipes should be concealed by means of ducts and chases with access covers, or use made of the incidental concealment provided by cupboards, fittings and appliances. If the burying of pipes in a structure cannot be avoided, they should be wrapped with a good waterproof building paper. This will allow for expansion of the pipe and in the case of work containing cement or lime will provide insulation against the possible corrosive effect of free lime.

#### Laying Pipes Below Ground

Protection should be provided against vibration, frost or mechanical damage caused by the drying out of clay soils or the settling of made-up earth.

The diagram showing typical installation of water service pipes indicates the following important aspects which deserve consideration:

Minimum depth to provide frost protection.

Continuous rise from the main.

Connection made at the top of the main.

Provision of a goose-neck in the pipe to guard against any tendency to pull away from the main connection, which may be set up by ground movement.

D

E

Properly insulated stopcock with provision for access.

Running the pipe beneath the building in drain pipes or similar to simplify removal for maintenance.

Compiled from information supplied by:

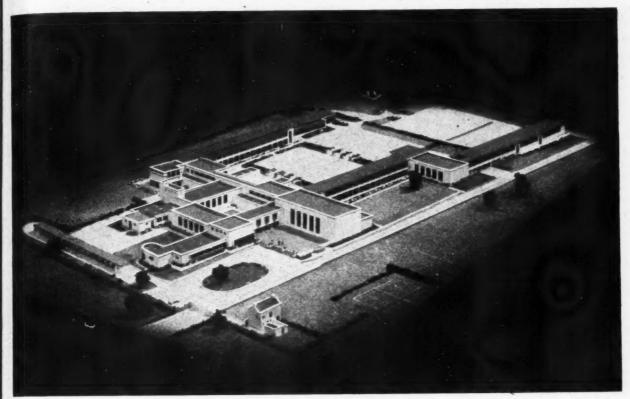
The Lead Industries Development Council

Address: Eagle House, Jermyn Street, London, S.W.1.

Telephone: Whitehall 7264.

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



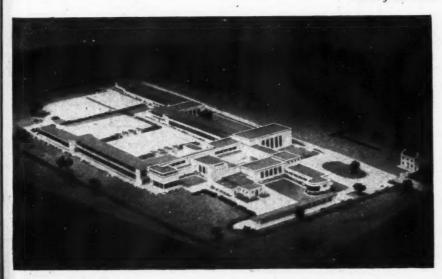


Model from north.

## COUNTY SECONDARY SCHOOL AT BEVERLEY

DESIGNED BY K. GIRAUD, EAST RIDING COUNTY ARCHITECT

Model from east.



GENERAL.—The scheme provides a four-stream modern and technical school for Beverley and the surrounding area, and the planning has been arranged so as to allow the use of the assembly ball, dining hall, one gymnasium, cloakrooms and adult common room for evening instruction. The model was made by L. J. Speight.

SITE.—The site, which has an area of 48 acres is enclosed on the south-east, north-east and north by high-class residential development, and is otherwise open to a large public common. It is in-tended that a further school of similar size for instruction in rural subjects shall be erected as soon as possible on the site and provision has been made for this in laying out the roads and other

#### COUNTY SECONDARY SCHOOL AT BEVERLEY

services. Approximately one-third of the children will travel to the school by omnibus from the surrounding country areas and arrangements have been made for these vehicles to enter the site.

PLAN.—The planning has been carried out on two floors. The plan form has been evolved with due regard to the necessity for grouping the rooms which are to be used for the purpose of adult, education and in the placing of the paved playing area for the preservation of the local amenities. The teaching rooms are disposed in two wings, the classrooms have a south-eastern aspect, and the rooms for special subjects face the north-west. The classrooms have been detailed with folding doors on the south-eastern elevation. The balcony, provided at first floor level, also acts as a sun canopy for the ground floor rooms. A workshop block has been placed separately, segregated from the remainder of the buildings by a second gymnasium.

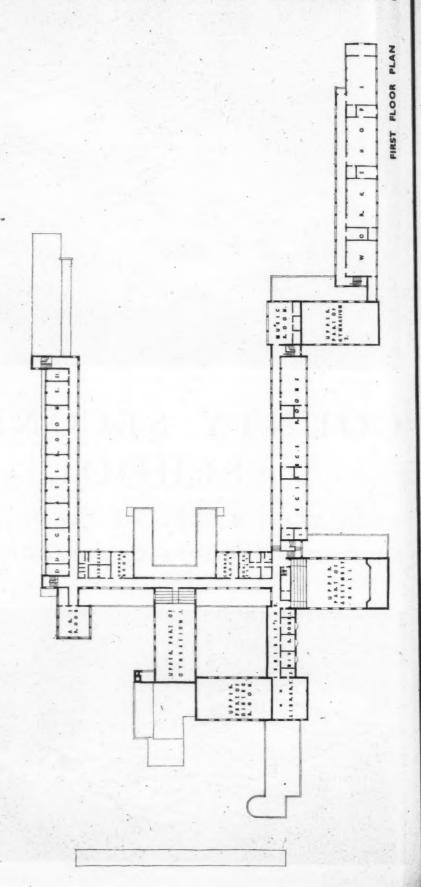
CONSTRUCTION.— The buildings are of steel-framed construction with brick 4½ in. cladding, lined internally with hollow tiles. The roofs and floors are reinforced hollow tile construction and the internal walls hollow tile finished with plaster.

ELEVATIONAL TREATMENT.

—The elevation treatment is generally simple in character, dependent on the massing for effect. The external finish is a grey-brown 2½ in. hand-made sand-faced brick with thin reconstructed stone linings to certain of the window openings on the main elevation.

INTERNAL FINISH.—In view of the economy which it has been necessary to exercise, the rooms generally will be finished in plaster with painted surfaces, composition floors and reconstructed stone stairs. Internal doors are of wood in metal trim and the windows throughout are metal casements.

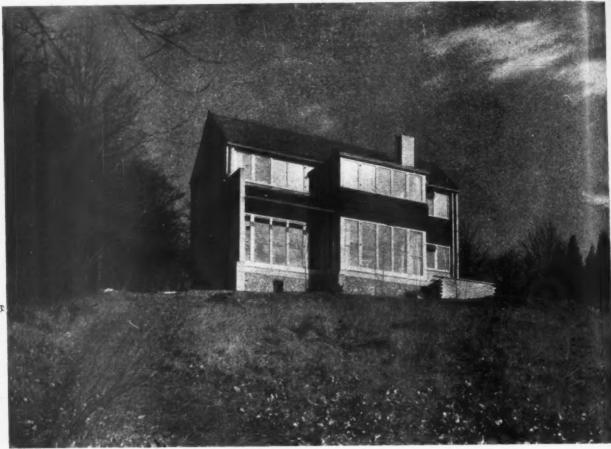
SERVICES.—The customary engineering services are provided, the heating throughout being from floor embedded coils with oil-fired plant. This latter was necessary in order to eliminate any possible smoke nuisance.



Y

FIRST FLOOR PLAN

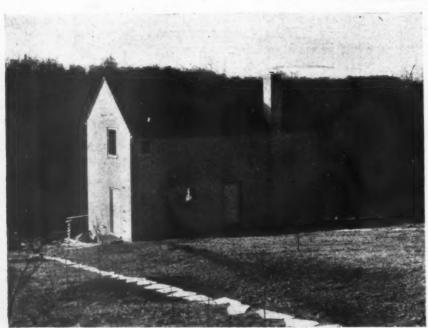
BY K. GIRAUD, EAST RIDING COUNTY ARCHITECT



From west.

## HOUSE AT CHORLEY WOOD

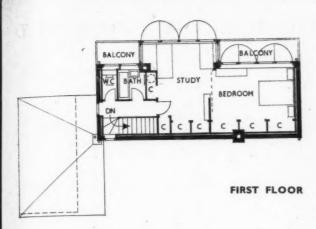
From north-east.

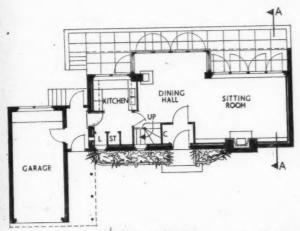


GENERAL.—This small house of traditional design is planned to have a large living space within 1,000 sq. ft. floor area, and to allow for extension when required. In view of restrictions in cost and shortage of materials, it was decided to concentrate all resources on building the shell and essential services only.

SITE.—A long site sloping steeply from N.N.E. to S.S.W., with a slight fall to W. The house is sited along the contours to minimise excavation, and for privacy all rooms face S.S.W. away from the road.

CONSTRUCTION.— The south front and window bay is steel framed and tile hung. The remaining three walls are 9 in. sandlime brickwork, garden wall bond, 2½ in. cavity and inner skin of 2 in. coke breeze slabs. Partitions 2 in. coke breeze slabs. ELEVATIONS.—Cream sandlime brickwork with struck joints of matching colour. Brick panel





est.

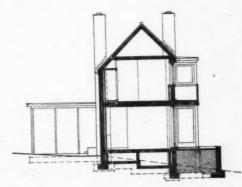
D

e of thin l to red. and derces ntial eply h a e is iniracy rom uth teel rein. wall abs. abs. ime of

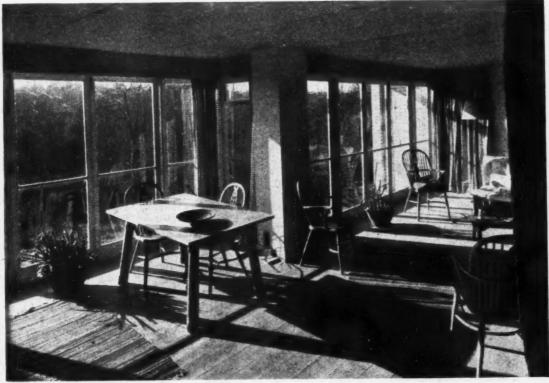




Above, from the south-east. Bottom, the living room.

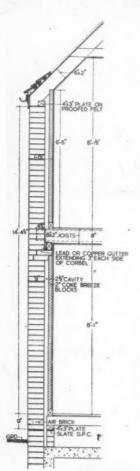


SECTION A-A

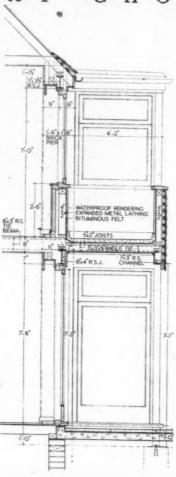


DESIGNED BY DAVID STOKES & BASIL SMYTH

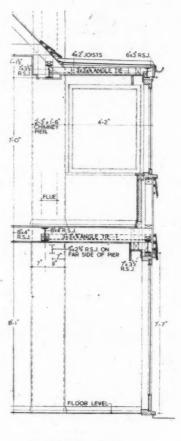
## HOUSE AT CHORLEY



DETAIL OF NORTH



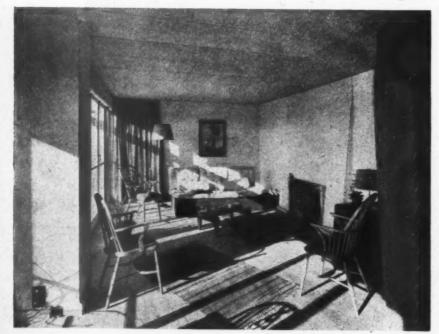
DETAIL OF PROPOSED BALCONY AND TERRACE



Si

DETAIL OF BAY
[Scale: \frac{1}{2}"=1'0"]





over front door for bas-relief carving. External woodwork painted white. R.W.P's and guttering painted blue-grey.

INTERNAL FINISH. — Walls-plastered and distempered, bath-room, w.c. and kitchen painted. Ceilings: celotex insulating board in 4 ft. by 2 ft. panels, V-jointed and distempered. Plasterboard and skim in kitchen, etc. Living-room: ceiling and west wall coloured primrose. North wall white, east wall pale turquoise. Reveals to openings, north wall primrose. Fireplace, cream brick surround. Bathroom, black and white decorative scheme for fittings, walls and ceiling lime-green. Kitchen, lime-green and white.

SERVICES. — Low-combustion stove with back boiler in dining area of living room. Open fire in sitting area. Hot water cylinder in linen cupbeard, all piping lagged. Hot water from back boiler in stove for winter use, immersion heater for summer use.

DESIGNED BY DAVID STOKES & BASIL SMYTH





Speeches and lectures delivered before societies as well as reports of their activities, are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full, but the extracts given are in the speaker's own words.

#### RIBA

#### Howard Robertson

March 9. At the RIBA, 66, Port-land Place, W.1. THE AMERICAN land Place, W.1. THE AMERICAN SCENE. The President of the RIBA, Sir Lancelot Keay, was in the chair.

My first, Howard Robertson: strongest, impression in revisiting America strongest, impression in revisiting America was the relatively vigorous and joyful state of American architectural design. I use the adjective "joyful" advisedly; for the leading American architects, and many of their clients, are remarkably free from design conservatism, and seem to be willing to try experiments in design and construction with an architecture with a second contraction. exuberant assurance that comes partly from self-confidence and partly from economic abundance. There are many Americans in every class who are willing to try everything once, because they feel that if there is a failure it can be washed out, and a fresh start made.

That applies equally to a business or a building. An architectural experiment which fails in part (and few fail completely) can be dismissed as a mishap or a bad debt. Its fate is to be pulled down and rebuilt on new and better lines. That applies most of new and better lines. That applies most of all to commercial structures, much less of course to the private home, scarcely at all to official buildings and monuments. These latter are, I think, regarded as symbols of permanence in a world where so much is ephemeral. If that surmise is correct it would help to explain the restrained and often classic character of so many Government buildings in Washington and some of the Town Halls in other cities. Monuments, such as the Lincoln Memorial and the Jefferson Memorial in Washington, are buildings which may disappoint many architects as not being contemporary in expression, but I think the American public likes them. They are calm and dignified, and their severe brand of neo-classic is timeless in that it is

already dated. It is unfair to say that these designs are completely still-born. With all their faults, they succeed in communicating an appropriate emotion to the common man, and architecture which does that is not entirely negligible, even though it cannot qualify as creative in the sense of the highest aspirations.

#### **EXPERIMENTS**

At the other end of the scale we see on the horizon semi-public buildings which are daringly experimental, such as Frank Lloyd Wright's Guggenheim Gallery; but quite a number of these are paid for by privately collected funds, and the donors are sometimes very willing to take a rick. times very willing to take a risk.
The Museum of Modern Art in New York

was quite experimental in many ways. broke fresh ground, and probably paved the way for the Saarinens, and Swanson, to win the competition for the new Smithsonian Museum in Washington, with a very modern concept. It cannot be said that it has had any effect on the design for the proposed Guggenheim Gallery, for Wright would only acknowledge as an influence Louis Sullivan, who is now deceased; but it may conceivably have had some sway with Wright's

The Guggenheim building is familiar to us by photographs, and well illustrates the spirit of carefree bravura in which many Americans enter into a scheme for putting up a costly experiment. Its dependence on ramps, and some of its other characteristics might conceivably prove unsatisfactory in practice; but even if it costs a great deal to build, and maintain, and even if it cracks build, and maintain, and even if it cracks and leaks, the promoters will probably find it to be an investment well worth while. People will come from all parts of the world to look at it and the pictures in it. Like Wright's Johnson office building in Racine, it will have enormous publicity value, and to an American, publicity value is an asset worth paying for; but it must not be overlooked that Wright's success is primarily due to the fact that he is an architect of outstanding genius. I think we have architects here who could plan with equal boldoutstanding genius. I think we have archi-tects here who could plan with equal bold-ness, and even with equal eccentricity. I have seen house designs by students in which platforms of glass and concrete were hung by wires from a central pillar containing the refrigerating and heating ducts and the dark room, and I am credibly informed that the schemes are quite practicable. I am also sure that the results would be agreeably sensational, as well as highly instructive; but they are not likely to get

#### EARLY PREFABRICATION

This brings me to an anecdote of American daring, this time by an architect who has made his name, but who was a poor though brilliant student when he made his great experiment. This was to purchase, for his young wife and himself, an all-metal pre-fabricated house which stood on stanchions fabricated house which subsequently was in an exhibition and which subsequently was transported to a charming country site. This house, for its day, had absolutely everything to make it qualify as modern. All the rooms were upstairs; the bathrooms and toilets were contrived in cunning curvilinear forms in the middle of free spaces, where their plumbing noises would be uninhibited The whole of the down pipes pessed through the column supporting the living room, and were acoustically strategic. The kitchen was full of sharp metal corners. My friend the architect bought this house because he was charmed by its assurances and seduced by charmed by its astuteness, and seduced by it had a dumb-waiter which came up from the kitchen and landed on the bedroom The house is still there. It was terrace. The house is still there. It was ruinous in cost of erection and maintenance. it leaked copiously, it rusted. My friend no longer lives in it, but has built a real house next door. He has kept his prefab, as a pet, and a reminder of human frailty, but now he thinks to pull it down and sell the nuts

and bolts, for though he has learned a great deal by living an experiment, he now feels that the day has come to try his experiments on his clients.

#### FINISH AND COSTS

The briskness of the American tempo has, of course, been slowed by the aftermath of war. Scarcities of labour and materials exist; prices of both are high, but the standard has not noticeably declined, and there is little "utility" finish and equipment execute in low cost housing and this feeling. except in low cost housing, and this finish would, with some notable exceptions, be classed here as comparatively would, with some includes exceptions, be classed here as comparatively luxurious. When the American cannot get what he wants he very rarely uses a substitute; he cuts out the thing, and forgets it. The standard of American finish, as well as that of design in general seems to me to remain of design in general, seems to me to remain very high, though my experience is neces-sarily very limited. It is saddening to note the difference between that conception of a standard and our own enforced poverty standards here, because through disuse we are risking to lose our craftsmanship, our

design faculties, and our sense of quality.

American costs, more than double prewar, still remain something of a puzzle to our building economists. Special missions have been to the States to study these things. have been to the States to study these things. I will only make one or two comments from my own limited observations, which are: that American costs per cubic foot appear to be about the same as ours, but for a much better finished article; that the working man earns about two and a half times as much, that he works at twice the speed, and that building contracting organization, planning, and equipment is definitely on a higher plane than here. The reasons may be temperamental, financial or governmental; I wou'd not know; but climate, incentive, and ambition to attain a higher living standard, are undoubted factors. The car, the washing machine, and "going places" are all incentives to spur the working man; and last, but not least, there is the American woman. That woman wants the American woman. That woman wants the American woman. That woman wants things, wants them quickly, and wants them all the time. Her husband has to try to be a good supplier. If he is not, the American wife can apply the age-old remedy.

#### UNITED NATIONS' HEADQUARTERS

My second episode has to do with something not entirely American, and that is the genesis of the architectural design for the new Headquarters Buildings for the United Nations in New York. I would like briefly to allude to that important project which concerns us all, for some of us may feel, as concerns us all, for some of us may feel, as do so many Americans, that in a concrete expression of building lies a powerful aid towards maintaining that spirit of the United Nations in which lie our hopes for future existence. These buildings are going to be inescapably a symbol, in addition to being the solution of a problem, and on the Director of Planning—Mr. Wallace Harrison—lies, in consequence, a great responsibility. The choice of Mr. Wallace Harrison as Chief Architect was a natural one. He had already prepared schemes for this site, and was thoroughly familiar with it. He is a man of wide experience and great capacities. man of wide experience and great capacities. And his office is one familiar with the New York building problem, including that of the skyscraper, at least one of which will almost certainly emerge from amongst the lower buildings forming the Conference and Assembly Halls of the new Headquarters.

#### THE BOARD OF DESIGN

Mr. Harrison's organisation included provision for the services as a Board of Design of ten architects from various countries, four of ten architects from various countries, four others as consultants, and three American consultants as well. All these architects were engaged to come to New York for four months, but not all could remain that long, including myself. We came, and went, and returned again. The size of the board of experts, the speed which governed the

elief vork gut-

D

alls athted. ard ted ard ring wall

vall ise. vali ick ınd

fit-

en.

on ng ler

ck 4

production of a scheme and estimates, the multiplicity of languages, the variations of temperaments and tempers, the inevitable clashes of opinion, were enough to daunt the stoutest. But Mr. Harrison survived it And if his experts agreed on one thing without dissension, it was in admiring his patience and diplomacy. Discretion forbids me from relating many a spicy anecdote. But it will be sufficient for me to tell you that we had with us at first such diverse characters as Le Corbuşier, a charming but firm Russian engineer called Bassov, and an equaliy charming and cultured Chinese architect and antiquarian. Then came Markelius, G. A. Soilleux from Australia, Cormier from Canada and Niemeyer from Brazil, a Czech, a Greek, a Uruguayan, a Pole and some others helped to season an architectural pudding which at times threatened indigestion. The first published sketches produced an outcry in one or the biggest New York newspapers, led, I am sorry to say, by some of our American professional colleagues. It is obviously impossible to please everybody, and quite clearly a number of people were ardently hoping for a building with a dome or at least a building which would be a "flop." Instead, they got a skyscraper, and what some people described as a train of freight Consternation was reported as general. But then it was also the case when the designs for Rockefe ler Centre appeared.

And now the Centre is recognized as one of the magnificent sights of New York. Mr. and foremost a "workshop for the United I think that is fair comment Nations The plan complexities are very great and there is no exact precedent for such a scheme. And having been a modest worker on it I can only say that a scheme costing some 16 million pounds on a 17-acre site a big one to evolve in such a limited time and under such conditions. But anyone who looks dispassionately at the international question will, P think, agree that the extreme urgency in getting the actual building started is fully justified.

The Board of Design had at its disposal

model makers, draughtsmen, and the inestimable services of Mr. Hugh Ferriss, an artist of outstanding ability who can pump perspective poetry into the most unpromising composition, merely by looking at it from the one precisely favourable point of view. I sometimes feel that the best way to utilize Mr. Ferriss's talents would be to toss him over the plans, go to bed, and turn up next morning to find the design all done. He is the perfect automatic pilot.

#### METHOD OF WORKING

The method of working was for all the members of the Board to get out schemes, and then to criticize them as a Committee Some 30 sketch plans were produced; and the final one came out as a sort of synthesis of all the good points. A report was produced and printed, and the plans have been unanimously approved by the General Assembly. The situation is that Congress is probably going to sanction an interest-free loan of some 65 million dollars to build the first section, which will include most of the works except the Special Agencies or Delegation buildings at the north end of the site. The final shape of the design and its

exterior treatment is a matter chiefly for Mr. Wallace Harrison and his associates; he has in Ralph Walker, Lious Skidmore, and Gilmore Clark consulting engineers and architects who are of the first rank; but for the moment the International Board of Design has finished its work, and the responsibilities are wholly American.

The scheme is not perfect. The site itself proved difficult from being so long and narrow. And there are many critics of the design, including Mr. Lewis Mumford, who has set out his views in the pages of the New Yorker. Just to show how the critics vary, I will quote two of them: Henry

Wright, Managing Editor of the Architectural Forum, calls the scheme "a completely workmanlike job." Frank Lloyd Wright calls the design "a super-crate, to ship a fiasco to hall" fiasco to hell.

#### TRIVIA

It is a far step from the gigantic United Nations scheme to the trivia which help to make up the background of the American scene; but there is a great deal to be learned from some of the detail of American custom, and I hope I may be excused for recording some minor impressions which, however slightly related to architecture, are indicative of trends. I feel that, if one were engaged in the export trade, for example, it would be helpful to observe some American characteristics which, taken together, might produce an idea of what the American of to-day appears to like, at any rate in the east and middle west.

First, there is the growing taste for colour. It crops out boldly in the bodies and upholstery of motor cars. A New York car park, viewed from above, is quite a kaleidoscope. Colour also appears seasonally in men's clothing. In the spring and summer the male becomes a regular peacock. He dresses in colour-suits, shirts, and need I mention the painted ties, which are stupendous. Everybody does it, and the effect is gay and heartening. Of course, this gives work for the cleaners. Americans are lavish in clothes maintenance, and their linen is to

English eyes extravagantly clean.

The gaiety is enhanced by the clear atmosphere, which can liven even the dullest streets; the daylight and atmospheric effects in New York are quite beautiful; they even moved Le Corbusier to rapture. At night the shop windows in the big cities are handsomely and skilfully illuminated. often leave the lights on all night which would be extremely painful to any sensitive official of Fuel and Power. Outside the big towns are scores of service stations and roadside cafés which also burn their lights. But many of them provide an all-night meal service as well.

#### CAFES AND HOTELS

The roadside cafés often belong to a chain company and are variations of proprietary standard types such as the "Diners" built to resemble railway dining cars. The furnishing and equipment are smart and bright, and very complete. The kitchens are small and spotless, and the food is well prepared and quickly served. The motorist is sure of a good meal at a reasonable price, and he can park his car under supervision and break his journey pleasantly and cheaply. We have nothing like these roadside cafes here, nor have we a real equivalent of the tourist cabins, with room and bath and carport, where the motorist can stop at low rates and be assured of warmth, a bath, and sometimes also food. The biggest and sometimes also food. The original cabins have a restaurant or buffet; the others are generally handy to such facilities. The American likes this free and easy accommodation; he has no tips to pay, and much lower room rates! He can stop along the highway, free from the turmoil of the city. In the hotels proper, great importance is attached to room service, which is generally efficient and sometimes offers the same menu at the same price as the dining room. The feature here is the hot cupboards which are attached to the underside of the trolley or table. The food stays warm to the last minute, and the table, with its folding flaps, easily handled by the waiter. A feature of hotel, café, and roadside cabin equipment is the use of standard measures and sizes for crockery glassware, etc. Whateve design, the size seems to be the same. Whatever the cuts down cost and makes for easy replacement. A feature of American big-scale planning which strikes all visitors is the parkways and highways between big towns. A few points are worth observing. One is the provision of a verge, not macadamized,

on each side of the highway. Any motorist who needs to stop for repairs pulls off on to this, so the rest of the traffic can flow on. Another point is that in places which rank as beauty spots the car parks are all arranged under trees or in clearings surrounded by trees. Thus they are out of sight, or inoffensive.

#### THE PUBLIC

A curious but rather amiable idea has been adopted in some towns where street works or cable laying are in progress. lettered board over the trench or obstruction advises the public as to what is going on, and states that the work is being done in the This explanation of the obpublic interest. struction, which appeals to the goodwill of the passer-by, seems to me to allay irrita-tions and to be a step in the right direction,

The public in certain cases is well looked but there are gaps; the renowned infrequency of public conveniences for one. The American, however, has no compunction about using hotel or any other available facilities. On the other hand, the big railway stations mantain their extraordinary standard of comfort, cleanliness, and convenience. A small detail noticed at the Pennsylvania Station in New York is the provision of travellers' lockers, which open, and provide a key, in return for 10 cents in the slot. You can leave things there all day, and pick them up in the evening (unless you lose the key).

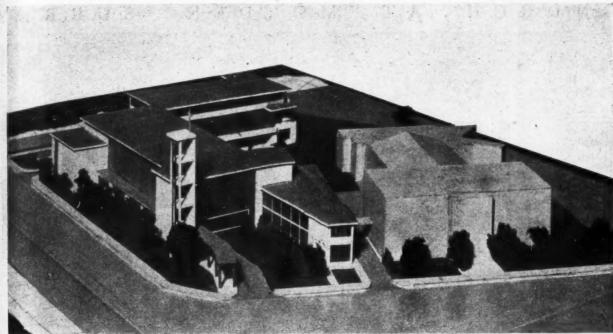
More significant in the national life than these gadget facilities is the increasing pro-vision for public enjoyment and recreation. There are a number of public clubs, open to all, for golf, tennis and even polo, with very modest charges. The same applies to such municipal enterprises as the vast Jones Beach, near New York. This admirable stretch of sands is beautifu'ly kept. No ball games or dogs are allowed on it, and the sands are scoured by attendants every day in the season, so the beach is always clean. You pay to park your car amongst hundreds of others, in numbered lots, but that is the only cost. The restaurants and cafés are excellent, and of varying grades. There are no houses; this is just a pleasure beoch, and in the summer it is everyman's paradise.

#### THE AMERICAN GENIUS

In conclusion, I must state my disagreement with some recent travel'ers who have criticized the poor finish of furniture, equipment, and building in the States, and con-cluded that we had little or nothing to learn in those directions or from organization. My impression is quite otherwise, though this may be due to a different field of experience. As I have already said, I have found that the American standard of finish, and of building generally, is in the main superior to the run of our work exthe most expensive and exc'usive. think we are losing our tradition of fine craftsmanship and conscientious work. while that may be happening momentarily America, there is the attraction of high wages, and possibilities of advancement, which create a competitive and eager spirit and the determination to improve.

I must also call attention in passing to the artistic strength which accrues to America through immigration. The field of architecture there has always been vastly enriched by the steady influx in America of many distinguished and talented men, immigrants or refugees from foreign countries. Many of them have a contribution to make; they have sought the land of opportunity, for varied reasons (some of them not so praiseworthy). But the effect is to enrich the land and language of their country of adoption.

I have not come to the Royal Institute platform to boost the USA. I have merely practorm to boost the USA. I have merely tried to give you my genuine impression of some of the good things; for the little that they are worth. I would sum them up by saying that I feel that American architecture is well on the up-grade. There is a great deal to criticize but far more to praise in this country of individual enterprise.



Model from west.

## CHURCH AT MORDEN

DESIGNED BY EDWARD D. MILLS

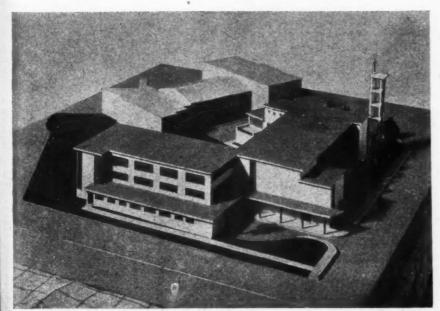
The building was designed as a Methodist Community Church with ancillary accommodation, including a small chapel club premises with communal restaurant, warden's flat and boys'-hostel. The scheme provides an all-purpose community church which permits various activities for all age groups. The c ntre would be run by the members with the assistance of paid full-time workers.

The site adjoins an important main road junction on a large LCC Housing Estate, and the siting of the new buildings was governed by an existing pseudoclassic church hall.

PLAN.—The church plan is simple with a large foyer to be comfortably furnished as a lounge for informal conversation and overlooking a pleasant garden. The tower is intended for bells, with an open-air pulpit at its base. The small chapel which has a separate covered entrance from the side road will be open at all times and can be cut off from the rest of the building. The church committee rooms, etc., and the church shop (for sale of literature, etc.) can be used with or without communication with the rest of the building.

CLUB PREMISES.—The ground floor consists of a communal restaurant with kitchens and small club rooms. The first floor has a self-contained warden's flat with further club rooms and a library. The second floor consists of a boys' hostel with dormitory, lounge and baths.

CONSTRUCTION,—The building has a reinforced concrete frame, with walls of rendered terra-cotta blocks. Windows are sliding metal



From north.

torist on to on. rank nged d by

been vorks vicely ction on, in the cobill of rritaction. ooked d inone. obuncvailbig inary

the the open, its in all (un-

with es to ones rable ball the day lean. Ireds the ex- are and

greehave juipconearn ican thertrent said, d of the ex-. I fine And

y in high hient, pirit the rica itecched diss or of nave

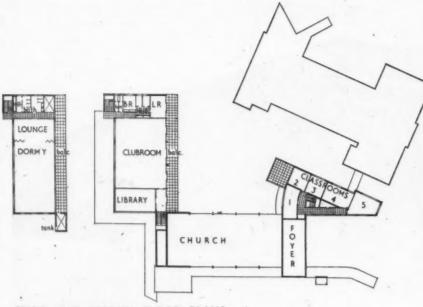
tute rely n of that by ture

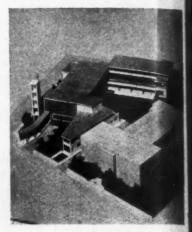
e in

ried

hy)

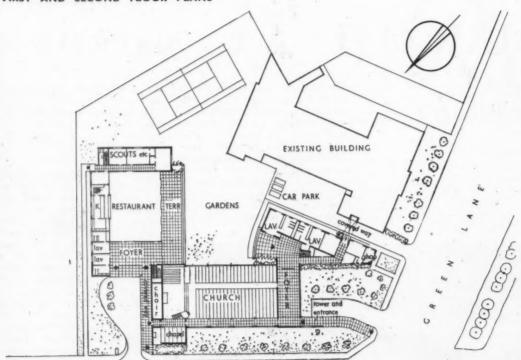
### CHURCH AT MORDEN, SURREY





Model from south.

FIRST AND SECOND FLOOR PLANS



DORCHESTER - ROAD

GROUND FLOOR PLAN

type or glass brick infilling. Flat terraces have been planned in conroofs and balconies are asphalte covered concrete. Internal partitions are terra-cotta hollow block.

junction with all rooms with a favourable aspect. The site will be laid out with gardens, lawns and trees.

ELEVATIONS. - Balconies and INTERNAL FINISH.-The in-

terior will be bright with considerable use of colour. Murals will be incorporated where suitable. Floors will be wood blocks in communal rooms with terrazo tiles for corridors.

EDWARD D. MILLS DESIGNED BY



# MILES AND MILES OF EXPERIENCE

### at your service

At a conservative estimate, we have supplied to various parts of the world, during the past 25 years, well over 1,000 miles of sliding door track and ancillary gear. The resulting fund of experience is freely at your service, together with fully trained technical representatives and a drawing office equipped to ensure that your requirements are efficiently interpreted.

New Information Volume No. 47, with diagrams, photographs and complete specification data, will shortly be available and will be reserved for you upon request.

Henderson

GEAR FOR ANY DOOR, PARTITION OR WINDOW THAT SLIDES

P. C. HENDERSON LIA

D. TANGENT WORKS BARKING . ESSEX

### SCHOOL FURNITURE



New

INI QU TH

prep

prin only item in c

IN

Cur

Info

wor

US

Rur

Pro Fed

Par

CE

ticu

and Bu

New MATERIALS

Design by James Leonord.

The E.S.A. offers School Furniture in a new combination of materials—light alloy and laminated plywood—fabricated by new and revolutionary processes. This makes possible greater strength, lightness and beauty of appearance, which is in keeping with all that is modern in architecture. We believe this new school furniture will meet with the Profession's wholehearted approval, since it combines progress towards better and brighter equipment — with the advantage of improved delivery.

Folder containing full details will be sent on request, or call and inspect this new furniture at our showrooms in London or Glasgow.

\* Orders should be placed at once to ensure delivery for the September term.



### THE EDUCATIONAL SUPPLY ASSOCIATION LIMITED

INCORPORATING RELFE BROS.

181, High Holborn, London, W.C.I. Tel.: Holborn 9116

101, Wellington Street, Glasgow, C.2. Tel.: Central 2369

INFORMATION SHEETS INFORMATION CENTRE QUESTIONS AND ANSWERS . CURRENT TECHNIQUE THE INDUSTRY . PRICES . TECHNICAL ARTICLES

### TECHNICAL SECTION

A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.

### INFORMATION CENTRE

I SOCIOLOGY. 2 PLANNING: General. 3 PLAN-ING: Regional and National. 4 PLANNING: Urban dd Rural. 5 PLANNING: Public Utilities. 6 PLAN-IING: Social and Recreational. 7 PRACTICE. NING: Regional and National. 4 PLANNING: O'Pan and Rural. 5 PLANNING: Public Utilities. 6 PLAN-NING: Social and Recreational. 7 PRACTICE. 8 SURVEYING. SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Concrete. 15 MATERIALS: Imber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: 13 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 20 CONSTRUCTION: Complete Structures. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION. ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHTING. 25 WATER SUPPLY, SANITATION 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

#### 1.4 sociology HOUSING SURVEYS: USA

Current Sources of Sociological Data in Housing. H. G. Brunsman. (American Sociological Review, April, 1947, pp. 150-

Informative account of USA progress in obtaining accurate statistics on wide range of subjects at reasonable cost.

Paper summarising procedures and results of housing surveys officially undertaken in USA since 1940. Some interesting notes on enumeration methods based on area sample enumeration methods based on area sample surveys. Disadvantages of quota samp ing methods. Surveys discussed in detail include wartime vacancy surveys with a view to allocating accommodation for industrial workers, undertaken by Division of Research and Statistics of Work Project Administration and Bureau of Labour Statistics and Bureau of Census; sample surveys in 1944 on general housing conditions in 1944 on general housing conditions in In 1944 on general housing conditions in USA as a whole; nation-wide survey of veterans' housing in 1946 conducted by Bureau of Census; a survey of livability problems of 1,000 families prepared by Federal Public Housing Authority in 1945. Particulars are also given of projected national sample survey of population, labour force, consumer income and housing again force, consumer income and housing again to be conducted by Bureau of Census.

#### 2.30 planning: general CENTRAL AREAS: DEVELOPMENT

Advisory Handbook on the Redevelopment of Central Areas. Ministry of Town and Country Planning. (HMSO, 1947. 12s. 6d.) Important official guide to planning and survey technique concerning redevelopment procedure of central urban areas with particular reference to war-damaged town centres. Aims of redevelopment, Local and regional surveys. Floor space index. Building use groups and use zones. Size of

122

central area. Daylighting control. Traffic requirements and roads. Parking. Layout of streets and street blocks. Open spaces Redevelopment stages. and planting. Appendices. Bibliography. Fully illustrated.

This valuable and informative document, which has been issued for the guidance of local authorities' planning officers and consultants, investigates the principles and standards that should govern the preparation and execution of redevelopment plans for central urban areas, and draws attention to the special problems of war-damaged cities, It is stated that the term "central area" refers to that portion of a town which contains principal commercial streets and usually main public buildings, and which comprises in general the core of the town's business and civic life. The methods of investigation adopted are based on the de-

investigation adopted are based on the detailed study of an un-named provincial town of about 250,000 inhabitants.

An introductory chapter discusses the pattern of land uses in central areas in relation to distinct historic phases in the growth of towns. It refers briefly to the difference between redevelopment problems in the difference between redevelopment problems. in war-damaged and undamaged towns, and in war-damaged and undamaged towns, and gives a general outline of the aims of redevelopment, stating that "the redevelopment plan and its supporting data should... show the proposed future location and size of the various zones in the central area, the density of building accommodation within them, and provision for the convenient. in them, and provision for the convenient circulation of pedestrian and vehicular traffic. It is also necessary that the plan should seek to retain and fortify well established uses that are suitable for a central area, and it should be capable of execution

by orderly stages . . ."

The second chapter of the report presents a most important outline of proposed survey technique considered under the headings of local and regional survey, and confined to the requirements of a minimum planning survey. The local survey should provide information on floor space in use for each main purpose, both in 1939 and at the time of the survey, and on condition and probable future life of buildings. It is recommended that the measurement, comparison and control of the density of buildings are constructed to the density of the d building accommodation should be made and exercised in terms of floor space indices which represent the ratio between total floor space and land area. Detailed information is provided on procedure and requirements of a field survey with full particulars on the calculation of floor space indices. The regional survey shou'd collect data on the

town's place within the surrounding region.

The subsequent stage in the preparation of a redevelopment plan depends on the adjustment between major decisions to be taken in regard to (1) the kinds of uses for which the plan should provide, (2) the amount and distribution of floor space and land required for each use, and (3) the lay-out of the main streets. Accordingly the handbook gives detailed guidance on these three aspects covering suitable and unsuit-able use zones for central areas together with their specific siting requirements, discussing densities and floor space indices in relation to the size of central areas, and suggesting the adoption of a new system of davlighting control in order to prevent buildings overshadowing one another, and

to allow developers considerable freedom in the choice of the block form of their

buildings.
Further subjects dealt with include traffic circulation, the layout of street blocks, the control of the external appearance of buildings, open spaces and street planting, and a study of redevelopment stages. Appendix I gives detailed information on 13 groups of building uses covering all forms of development required in a town. Appendix II contains a list of a large number of types of lead or building uses with the expression. of land or building uses, with the appro-priate building use group indicated for each. Appendix III discusses the daylighting of buildings and describes a method of testing layout plans of proposed buildings for this

### 6.19 planning: social and recreational

#### RECREATIONAL FACILITIES: USA

Standards of Recreational Facilities. Bureau of Governmental Research, Association of Washington Cities. (University of Washington, Seattle [USA]. \$2.00.)

Comprehensive American reference manual presented in loose-leaf form in order to allow for current additions, providing wealth of useful data on standard areas and requirements for individual and dual games, gymnastics, group or team games, and all those sports activities detailed in USA community recreation programme. dimensioned layout diagrams, details of apparatus, American bibliographical references. Constructional details and cost data purposely omitted. Absence of page references somewhat impairs usefulness of otherwise most informative publication.

#### 14.13 materials: concrete CEMENTS

Cement. Portland Cement (ordinary and ravid hardening) (BS 12:1947). Portland Blastfurnace Cement (not exceeding 65 per cent. blastfurnace slag) (BS 146:1947), and High Alumina Cement (BS 915:1947) (British Standards Institution. 3s. 6d. each.)

New editions specifying composition of various cements, sampling procedures, and tests for chemical composition, setting time, soundness, alternative methods of testing, strength (except for high alumina cement where the compressive strength test is retained), and revised tests for fineness, including the method of testing by determination of the specific surface as well as by sieving.

In the illustrated appendices to each specification are described the details of the methods of testing and of the required apparatus.

### 15.16 materials : applied fin ishes, treatments

### METALLIC SOAPS IN PAINT

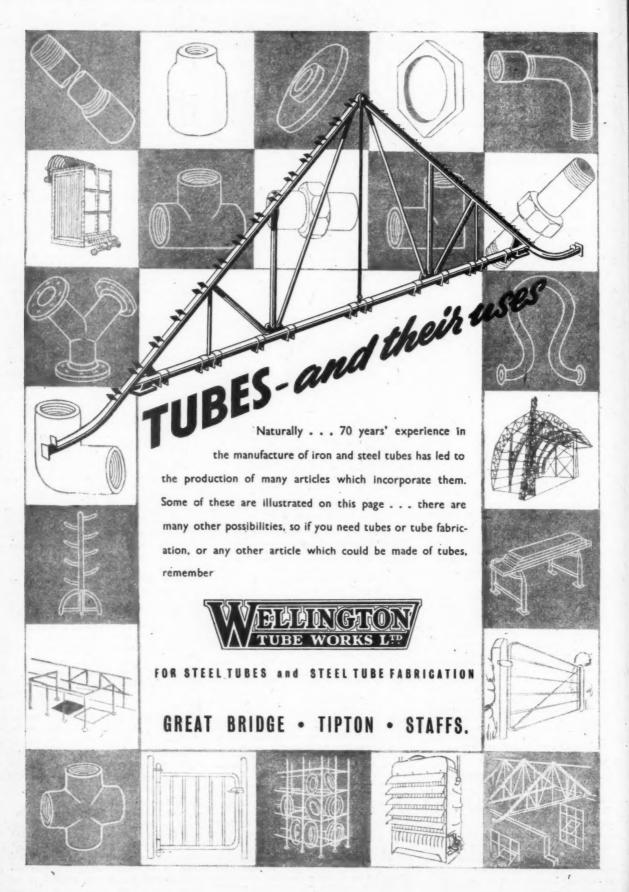
Lead Soaps. (The Decorator, Jan., 1948, p. 47.)

Brief non-scientific explanation of the formation, in a paint film, of metallic soaps by the interaction of the vehicle and the pigment particles suspended in it. The article is mainly concerned with lead soaps and their contribution towards the durability of the paint film.

#### 15.17 materials : applied finishes, treatments PAINTS FOR CONCRETE AND BRICK

Paints for Masonry Walls. Technical News and Research (Arch. Record [USA], Dec. 1947. pp. 115-116.)

Short summary, with tables and illustrations, of American tests of paints on concrete and brickwork. Description of behaviour of cement, water paints, oil base



paints.
results,
successi
types of
16.23
STABIT
The
Cullimo

paints,

Cullimo [USA], Very bringin domestic earth suggest not harning p 17.23 CODE A Prop. Reinfo Billig.)

plant, ture, of and point and point Behaving. [USA]

Relat

Sugge

The sive la years Madis of tim durati 20.5.4 " norr from reached can be for a but is der s loade

streng
it is
of the
in 27
trate
timbe
tion.
for s
begin

PRE-Cond Design

deali discu apply lllust exam

or so exam is vo

paints, resin emulsion and synthetic rubber paints. Tables show (a) a summary of test results, and (b) the time interval between successive coats of the paints on different types of wall surface.

#### 16.23 materials : miscellaneous STABILIZED EARTH

The New Adobe Houses. Clarence Cullimore. (The Architect and Engineer [USA], Jan., 1948.)

Very brief but very fully illustrated article bringing to the notice of architects the domestic use of adobe construction with earth stabilized by the addition of a small percentage of emulsified asphalt. The article suggests that this form of construction does not hamper the realization of modern planning principles.

#### 17.23 construction: general

### CODE FOR PRESTRESSED CONCRETE

A Proposal for a Draft C of P for Prestressed Reinforced Concrete. Kurt Billig. (Kurt Billig.)

Suggestions presented as a basis of discussion. Definition, materials, process and plant, shrinkage and creep, types of structure, data for design, strength requirements and permissible stresses.

#### 18.15 construction: theory

#### TIMBER: CONTINUED LOADING

Behaviour of Wood under Continued Loading. L. W. Wood. (Eng. News-Record [USA], Dec. 11, 1947, pp. 804-207.)

Relation between deformation, stress and duration for loading.

The article contains an analysis of extensive laboratory tests conducted over several years at the Forest Products Laboratory, Madison, Wisc. The load bearing capacity of timber depends to a great extent on the duration of the loading (see Nos. 1146: 20.5.43, 18.11: 1.1.48). The so called "normal strength" of timber is obtained from tests in which the failing load is reached within 5 to 10 minutes. This limit can be exceeded if the load is applied only can be exceeded if the load is applied only for a few seconds or a fraction of a second, but is substantially reduced by yielding under sustained loading, e.g., a timber beam loaded to 75 per cent. of its "normal strength" in bending fails after 27 days, and it is estimated that a load of 56 per cent. of the "normal strength" will cause failure in 27 years. Examples are given to illust in 27 years. in 27 years. Examples are given to illustrate the characteristics of the behaviour of timber beams under loading of long duration. A rate of yield remaining uniform for some time is a danger signal, when it begins to increase failure is imminent.

#### 18.16 construction: theory PRE-STRESSED CONCRETE

Concrete: Pre-stressed Reinforced. (Arch. Design. Feb., 1948, pp. 40-41.)

Third of a general series in this journal dealing with aspects of concrete technology; discusses theory of pre-stressing; methods of applying pre-stress, and practical application. Illustrated with diagrams and photographs; examples of completed structure given.

A useful summary of a subject about which there is little known amongst architects be-cause the high tensile steel required has not been available during the past ten years or so; there are consequently relatively few examples in practice. The information given is valuable in that it gives an outline of the reasons for using pre-stressing and explains briefly two methods in current practice features. tice for obtaining the required conditions.

One essential factor in producing pre-

stressed concrete is that the concrete itself shall be of a very high quality, and in this respect the earlier articles in the December and January numbers of "Architecturai Design" are of significance.

#### 19.34 construction: details

### INSULATION OF CONCRETE FLOORS

Insulation of Concrete Floors in Dwellings, (Arch. Record [U.S.A.], Jan., 1948, pp. 120-125.)

Insulation details suggested for concrete floors cast on the ground, based on tests by the National Bureau of Standards.

#### 20.63 construction: complete structures PREFABRICATED FACTORIES

Industrial Plants Packaged to Order. Merritt. (Eng. News-Record [USA], pp. 667-669.)

Increasing demand for prefabricated, multipurpose factories in metal or wood allowing economy and quick erection.

In USA a large number of firms have specialised in manufacturing the building frame and enclosure to factories. The owner must supply his own floors and sometimes also the roof covering. Mechanical and electrical equipment are, in general, not obtainable from the manufacturer. The complete enclosure may be dispatched within 2 weeks to 6 months from the receipt of the order, depending on the size of the structure.

Packaged buildings are either structures with load bearing walls or with frames. The length can be varied in multiples of , 4 or 8 ft. for the former, of 8 to 20 ft. for the latter. Clear widths may be as low as 6 ft. for load bearing types, up to 150 ft. with trusses or rigid frames. Heights are available between 8 ft. and 25 ft. clear.

The buildings are commonly in metal, with structural steel columns and roof members and galvanised copper steel sheets for walls and roofs. In some cases light gauge steel or timber is used in the structural frame and pitch protected steel, aluminium, asbestos cement or plywood in the walls and roofs. Panels are interchangeable, doors and windows can be located anywhere along the perimeter of a building.

The article shows several examples of

different types.

#### 20.64 construction: complete structures RC VIADUCT AT STOCKHOLM

A Reinforced Concrete Viaduct at Stock-holm. (Concrete and Constructional Engineering, Feb., 1948, pp. 41-46.)

New high level road and railway viaduct in reinforced concrete, 1,890 ft. long, comprising an open-spandrel arch of 367 ft. span and a girder bridge of 16 spans varying from 65 ft, to 95 ft. 6 in. Total width, 112 ft. 6 in. Arch of cellular cross section. Interesting road junction.

#### 24.68 lighting

### OFFICE LIGHTING

Test of the Influence of Lighting upon Office Work Production. Report jointly by the Public Buildings Administration and the Public Health Service of the US Government, (Lighting and Lamps [USA], Dec., 1947, p. 38.)

Proved improvement in output under new lighting conditions and decorations. Important; illustrated: photographs and diagrams.

This report records an official study of office lighting and production in a card-purching room at the Office of Internal Revenue. Objects of study were to find economic limits of wattage per sq. ft., and to find the maximum effective feeture record. find the maximum reflection factors practic-

In its original state the room was lighted by a pair of 300-watt direct-type fixtures in each of ten bays, 15 ft. × 24 ft. The ceiling and upper walls were light tan (acoustic treatment), the dado dark tan, and the floor dark brown. Illumination varied from 4 to 26 foot candles (1.6 watts/sq. ft.). Brightness ratios were 100 to 1 or more around the work.

All operatives had eyesight checked and All operatives had eyesight checked and corrected, and productivity established. Changes were made in stages, with production checks at each stage. Final condition was twenty rows of five fixtures each, the fixtures all having 2-40 watt 3,500° K white fluorescent lamps, hung 2 ft. from the ceiling, with about 35 per cent of light going up with about 35 per cent. of light going up and 40 per cent. down. Machines were repainted grey-green and grey, with a general colour scheme by Faber Birren. Intensity of 33-50 foot candles was finally obtained.

Most unfortunately the difficulty of the work itself was altered for the worse during

work itself was altered for the worse during the period, changing from forms with about 40 possible entries to 80. In the opinion of the operatives the work was 50 per cent. harder, but in spite of this there was a net gain of just over 5 per cent. In the circumstances this is regarded as a very substantial

This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.I.

### QUESTIONS AND ANSWERS

2937 PATENT PAYMENTS

In a recent issue of the ARCHITECTS' JOURNAL you gave some particulars as to the amount of time during which a Patent is valid.

Could you please tell me what payments are necessary to obtain and retain a Patent?

To obtain a Patent an application must be submitted to the Patent Office on application form (Patent Form 1 stamped £1) accompanied by two copies —stamped £1) accompanied by two copies of a provisional specification prepared on Patents Form 2. Within a year this must be followed by two copies of a complete specification prepared on Patents Form 3 (one stamped £4). When the application is reported as in order and has been accepted, the acceptance is advertised in the Official Journal (Patents), and if no opposition is lodged within two months, a Patent is granted upon payment of a sealing fee of £1 (Patents form 12). £1 (Patents form 12).

No further payment is ordinarily required until before the expiration of the fourth year from the date of the Patent, and each succeeding year during the term of the Patent when a renewal fee is payable as follows:

Before the expiration of the 4th year from date of Patent and in respect of the 5th year, £5, and similarly:

5th year 6th year 6th year 7th year £7 7th year £8 8th year 9th year 8th year £9 9th year 10th year 10th year 11th year £11 £12 12th year 11th year 13th year £13 12th year 13th year 14th year £14

" 14th year " 15th year … £15 Before the expiration of the 15th year and in respect of the remainder of the term of the Patent, £16.

The form printed below is to assist readers requiring up-to-date information on building products and services. Complete and post it to The Architects' Journal, 9,11 and 13, Queen Anne's Gate, S.W.I, and the advertisers listed will be asked to supply information direct.

### ENQUIRY FORM

| I am interest<br>appearing in<br>Journal. | ed in the<br>this is: | follows<br>sue of | ing o  | ndverti<br>he Arc | sements<br>chitects |
|---|-----------------------|-------------------|--------|-------------------|---------------------|
|   |                       |                   |        |                   |                     |
| ***************************************   |                       |                   |        |                   |                     |
| *****************                         |                       | ********          |        |                   |                     |
| ***************************************   |                       |                   |        |                   |                     |
| ****************                          |                       |                   |        |                   |                     |
| **********                                |                       |                   | ****** |                   | **********          |
|   | ***********           | ***********       |        |                   |                     |
| ****************                          | **********            | ***********       |        |                   |                     |
| Please ask particulars                    |                       | turers            | to     | send              | further             |
|   |                       |                   |        | 4                 |                     |
| NAME                                      | ******                |                   | ****** |                   | *******             |
| ADDRESS.                                  | ***********           |                   |        | ********          | ******              |
|   |                       | *********         | ****** |                   | *********           |
|   |                       |                   |        | 4.1               | 1 1 4 48            |

### Announcements

At the thirty-first annual general meeting of the Cast Stone and Concrete Federation, the chairman, Mr. J. W. Panton, presented the report and accounts for the past year. He said the most arduous task had fallen on the shoulders of the Federation's two representatives who sit on the Joint Co-ordinating Committee of the Cast Stone and Cast Concrete Products Industry, and the members' gratitude and appreciation was conveyed to them. The good relationship between members and their employees has continued throughout the year, and the Federation's representatives on the National Joint Industrial Council have at all times endeavoured to foster the needs of production, good working conditions, and the well-being generally of management and men. The Federation is not a price-fixing organisation, but exists for the purpose of seeing that its members' and the public's interests are safeguarded in all matters affecting the concrete products industry.

On the official opening day of the Ideal Home Exhibition at Olympia, the King and

On the offici. I opening day of the *Ideal Home Exhibition* at Olympia, the King and Queen chatted for a short time with Mr. Bernard J. Nicholson, M.B., Chairman of Jenson & Nicholson, Ltd., at the Robbialac Stand. The King asked Mr. Nicholson the origin of the trade-name Robbialac, and was told that it commemorated the 14th century Italian sculptor—Luca Della Robbia. After many experiments, Robbia perfected an enamel glaze, which was destined to found a great ceramic industry. Since then, many attempts had been made to discover the secret of Robbia's beautiful glaze, but without success. Forty years ago, however, paint scientists produced an enamel of similarly exclusive characteristics, and it was named Robbirlac as a tribute to the great sculptor. The Queen was particularly interested in the nine miniature rooms, decorated in

modern and period styles with standard Robbialac products in present supply. The Duchess of Gioucester, who also visited the Robbialac Stand during a tour of the exhibi.ion, showed great interest in the model Tudor dining room.

### Buildings Illustrated

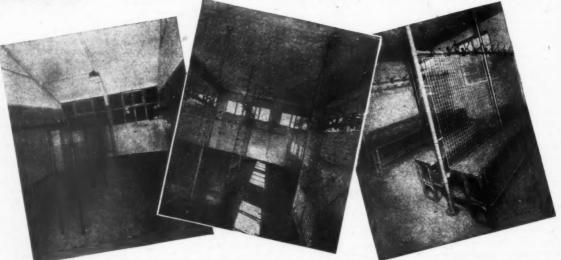
House at Chorleywood, Herts (pages 306 to 308). Architects: David Stokes and Basil Smyth, FA.R.I.B.A. General contractor: Ca.case by Edis (Building Contractors), Ltd.; Roof by Sabey & Son (Islington), Ltd.; Internal Finishings by Gullett & Sons, Ltd. Sub-Contractors: Bricks, London Brick Co., Ltd.; structural steel, W. H. Armfield, Ltd.; tièes, A. H. Herbert & Co., Ltd.; stovcs, Park Foundry (Belper), Ltd.; electric wiring, G. Adey; plumbing, A. Brignell; sanitary fittings, J. Young & Co., Ltd.; casements, Henry & Farthing, A. E. Lindsey & Son, Ltd.; window furniture, J. Young & Co., Ltd.

### Correction

In the caption to the illustration of the Poplar pre-cast concrete flats on page 253 of our issue for March 18, it is stated that the flats were designed by the Engineer's Department of the Poplar Borough Council. This is incorrect. The plans were prepared by the Ministry of Works in collaboration with the Engineer's Department of the Poplar Borough Council. The Ministry's architects did the drawings from which the work was carried out. The technical officers of the Ministry also made their contribution.

CEL

CLOAKROOM EQUIPMENT LIMITED IS CONCERNED SOLELY WITH THE MANUFACTURE, FABRICATION AND ERECTION OF CLOAKROOM AND CLOTHING STORAGE FACILITIES AND ALLIED EQUIPMENT FOR ALL PURPOSES.



Cloakroom Equipment Limited is unique in that it offers a specialist service fully qualified for the correct interpretation of architects' needs and anxious to explore, with them, all means of improving the standard of cloakroom fittings and clothing storage equipment generally.

CLOAKROOM EQUIPMENT LTD.
STATION STREET, BROMSGROVE, WORCS.

### FIREPLACES

to your own design in BRICK MARBLE STONE ALL-TILE



The design and structure of a modern home calls for the highest technical skill in construction, and the execution of the planned scheme.

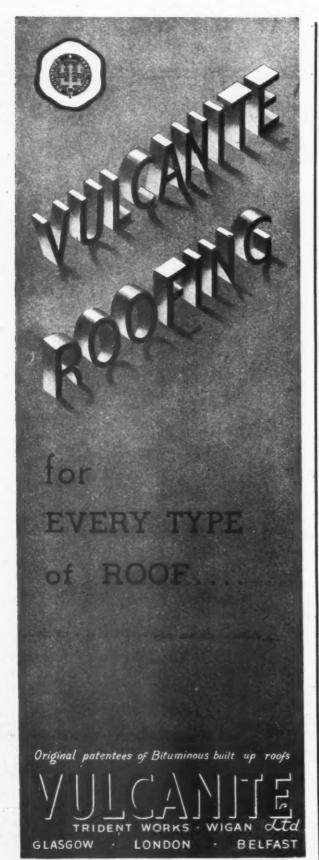
In the presentation of this scheme the fireplace plays a most important part, and the sound construction and durability of a Finch fireplace provides complete assurance of satisfaction.

Whether the scheme be Modern or Period or to a personal taste, there is a Finch fireplace to suit, and our staff of design experts are always available to advise and suggest suitable designs for a fireplace in—Marble, Stone, Brick or All-tile.



### B. FINCH & CO. LTD.

BELVEDERE WORKS, BARKINGSIDE, ESSEX . Telephone : VALENTINE 3461





### Tribute to Quality

Industrial space heating and product drying demands, as nothing else, quality in the heating plant used. At all times, without fail, it must function to a determined degree of efficiency under conditions of widely varying character. This list, greatly abridged, of some of the hundreds of Universal and

Projectaire users is a tribute to the quality — reflected in performance — of the products we make.

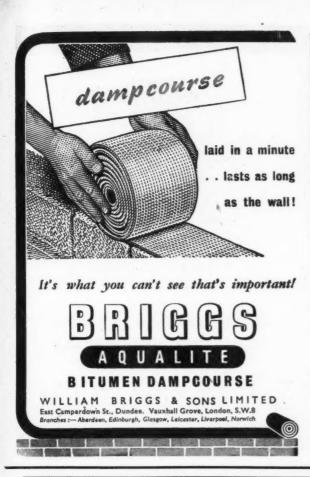




### BRITISH TRANE CO. LTD

VECTAIR HOUSE · 52 CLERKENWELL CLOSE · LONDON · E.C. 1

Phone: Clerkenwell 6864 & 3826. · Grams: Enartrane, Smith, London.



### Towards a STANDARD WORK



### ON DRAUGHTSMANSHIP AND DRAFTING PRACTICE

A series of Information Sheets is being issued by Eagle Pencil Company, which will provide a comprehensive source of reference on every aspect of draughtsmanship. The Sheets, of which over 50 are at present planned, should prove particularly valuable in assisting the

standardisation of drafting practice throughout an individual office. Copies of the Sheets will be sent, as they become available, to those who desire them.

"Chemi + Sealed"

TURQUOISE DRAWING PENCILS

EAGLE PENCIL COMPANY · TOTTENHAM · LONDON · N 17

### AN ANTI-INFLATION MEASURE



### AGAIN REDUCE PRICES

Following upon the reduction in the price of 40-and 60-watt Mazda Lamps from 1/7d. to 1/3d. in 1945, and the reduction of the 4 ft. and 5 ft. Mazda Fluorescent Lamps from 17/6d. to 16/6d. and 24/od. to 20/od., respectively, in January, 1948, Mazda now announce further price reductions, in conformity with the National policy of combating inflation:—

|          | FROM |     | то      |          |
|----------|------|-----|---------|----------|
| 100-watt | Is.  | 9d. | Is. 8d. | Clear or |
| 150-watt | 2s.  | 9d. | 2s. 5d. | Pearl    |
| 200-watt | 4s.  | 6d. | 4s. 0d. | CI       |
| 300-watt | 8s.  | 0d. | 7s. 6d. | Clear    |
| 500-watt | 10s. | 6d. | 9s. 6d. | only     |

Tax extra on 100, 150, and 200 watt lamps. The above price reductions apply to Single Coil Lamps 100-130 and 200-260 volts, and are effective from 15th March, 1948.





MAZDALUX

FITTINGS

The British Thomson-Houston Co., Ltd., Crown House, Aldwych, London, W.C.2





Functionally perfect and perfectly simple, the FORDHAM is still ahead of its time. The shell is a seamless steel pressing, unbreakable, frostproof and rustproof, yet so light in weight that installation requires minimum effort. Write to-day for full details.



FORDHAM PRESSINGS LIMITED, DUDLEY RD.
WOLVERHAMPTON PHONE: WOLVERHAMPTON 23861.

# EXCEL

Send us your Enquiries for

Asphalte • Laminated Felt Roofings Pitchmas • Tar Paving

ON APPROVED LIST OF ALL GOVERNMENT DEPARTMENTS

### **EXCEL SERVICE ENDURES**

### EXCEL ASPHALTE CO. LTD.

Broadway Chamber, Hammersmith, W.6

Telegrams: "CESLYM," LONDON. Telephone: RIVerside 6052 (4 lines)

### BELLS AND TOWER CLOCKS



SHELL-MEX HOUSE, LONDON

### TOWER CLOCKS

of all types, with dials from 2 ft. dia. upwards

RINGING PEALS, CHIMES CARILLONS, SINGLE BELLS

Please let us have your enquiries

### GILLETT & JOHNSTON LTD.

CROYDON, SURREY
Founders of Famous Bells
Tel.: Thornton Heath 3221 (5 lines)

"A. B. S."

### NON-CANCELLABLE SICKNESS AND ACCIDENT POLICY

PROVIDES AN INCOME continuing during Total disablement

By any Sickness

By any Accident

Of any Duration

THIS POLICY CANNOT BE CANCELLED by the Company before age 65, no matter how severe the claims experience may be.

Particulars from :-

The Secretary,

A.B.S. INSURANCE DEPARTMENT

66, Portland Place, London, W.I.

Tel: WELbeck 5721.

### Service Counters

CAFES, SNACK BARS CANTEENS & RESTAURANTS



Counters made by Henderson are ideal for small establishments because they are light, easily handled, and adaptable to any size or shape. Finished in stove enamel to match your colour scheme, stainless steel, and with counter tops of non-staining heat-proof plastic. No permits are required.



ELSTREE WAY, ELSTREE, HERTS - Phone: ELSTREE 1758 (3 lines).









Patent

memb or sh It is t any do

Mulli

nothing to the nightingale but very
much to the sound technicians who
seek to reproduce its song.

If quality of tone really matters an
ATM system is the solution to Sound

Distribution problems for all places of business and entertainment.

Complete permanent installations are available on rental terms. Write for booklet P.124.



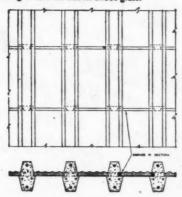
AUTOMATIC TELEPHONE & ELECTRIC CO. LTD.,
Melbourne House, Aldwych, London, W.C.2
Phone: Temple Bar 4506. Grams: Strowger, Estrand, London.
Also at: Birmingham, Bristol, Glasgow, Leeds, Manchester,
Newcastle, Sheffield. Strowger Works, Liverpool, 7.
A11133-AVIA

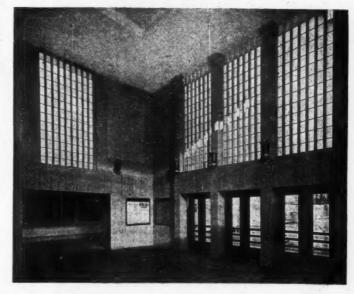
### GLAS-CRETE WINDOWS

REINFORCED CONCRETE AND GLASS CONSTRUCTION

Patent "Cristol" Window construction, comprising vertical R.C. mullions, grooved and slotted to receive "H" bronze members, which in turn carry special high-relief glass units or sheet glass.

members, which is the construct windows continuously up to any desired height, as the weight of each glass is carried on the "H" members, which, in turn, transmit it to the mullions. Mullions are spaced at 9in. or 12in. centres when high relief glass units are used, but may be spaced up to 2ft. centres when glazing is carried out in sheet glass.





J. A. KING AND COMPANY LIMITED 18'1 QUEEN VICTORIA STREET, LONDON, E.C. 4

TELEPHONE CENTRAL SESS 4 LINES)



### CRANHAM-A NEW WORD FOR CONSISTENCY

"If winter comes can spring be far behind"... no ... inevitably spring blossoms... sports its vagaries of wind and weather. Unlike Cranham Blocks whose qualities are a model of consistency | ... qualities essential to post-war reconstruction jobs and designed to resist the capriciousness of the seasons. . . 10 provide insulation against heat and sound, damp and fire ... qualities which combine with lightness and great mechanical strength, and a special key for plastering.

Write to-day for full technical details.

SANKEY'S

### CRANHAM BLOCKS

J. H. SANKEY & SON LTD.

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

Telephone: HOLborn 6949 (14 lines)

Telegrams: Brickwork, Estrand, London



### WATERTIGHT ROOFS the approved method

TRETOL WATERPROOFING PASTE—a pure Bitumen mastic for application by trowel to cracks and joints. TRETOL FIBROUS COMPOUND—a heavily reinforced cold Bitumen compound—applied by brush. Will effectively waterproof badly-worn felted, asphalt, metal and concrete roofs.

Tretol Ltd., 12-14 North End Road, London, N.W.II

Tel.: SPEedwell 4621 (5 lines)



FIBROUS COMPOUND WATERPROOFING PASTE



'BULLDOG'

TIMBER CONNECTORS
ARE SIMPLE TO
USE

I While the members are held temporarily in place by nails, a bolt hole is bored through the assembly.

2 The members are lifted apart and the toothed connectors are placed between the adjacent faces of the members to be connected.

3 The members are then drawn together by means of the bolt until the projecting teeth of the metal plates are completely embedded in each contacting timber surface.

The 'Buildog' timber connector consists of a metal plate with the edges turned off at right angles to form sharp triangular teeth projecting evenly from both sides of the plate.

in co pr

fo

In use, these connectors are embedded firmly between the lapped members, thus greatly increasing the small bearing area provided by a bolt alone, and enabling the stresses to be distributed over practically the entire cross section of the Timbers involved.

'Bulldog' connectors put timber construction on a sound engineering basis and the consequent increase in efficiency results in an amazing saving of timber, time and material.

Full details and technical advice are available to everyone interested.



\*Bulldog \* Timber connectors are also made with teeth on one side only for timber to steel joints, or for portable and demountable timber buildings.

BULLOGG TIMBER CONNECTORS

W. F. HOLLWAY & BROTHER, LIMITED,
42, GRAFTON STREET, LIVERPOOL &

### To all concerned

### in planning and building homes

We have had over 30 years specialized experience in the design and production of electric fires, cookers and domestic electric appliances. Our present production is largely devoted to orders for Housing Schemes and enquiries from architects and builders are always welcomed.

The fire illustrated is the popular Belling Wall Panel Fire.



You can't beat a

BELLING & CO. LIMITED, BRIDGE WORKS, ENFIELD, MIDDLESEX. PHONE HOWARD 1212 C.B.C.524

## for Heat Insulation in Building:



WOOD wool slabs, though unusually light, have a greater structural strength than any other commonly used insulating material. They have been used for years as a *permanent* building material in some of the World's severest climates.

Their large yet handy unit size enables them to be handled with ease and low labour cost. Wood wool slabs are ideal for speedy and economical building construction.

Wood wool slabs can be used for permanent shuttering for concrete walls and roofs. They will take any suitable surfacing: plaster, rendering, bitumen, etc. They are rot-proof, vermin-proof and fire-resistant.

Enquiries should be addressed to the members of the Wood Wool Building Slab Manufacturers' Association whose trade names and addresses are given below.

- GYPKLITH
  - Gyproc Products Ltd., Westfield, Upper Singlewell Road, Gravesend. Telephone: Gravesend 4251.
- The Marley Tile Co., Ltd., London Rd. Riverhead, Sevenoaks, Kent. Telephone: Sevenoaks 2251.
- THERMACOUST Thermacoust Ltd.,
  - 39, Victoria Street, London, S.W.1. Telephone: Abbey 5726
- . Lithalun Products Ltd.,
  - Pontalun, Bridgend, Glam.
    Telephone: Bridgend 213.
- SUPALITH . . Supalith Ltd., Alpha Works, Havelock Rd., Southall, Middx. Telephone: Southall 2821

W.W.20.

### PLIMBER provides the ideal

LICENCE FREE wallcladding & partitioning board



Because of its rigidity, Plimber can be erected with the minimum timber studding or by several alternative methods of fixing. Its excellent thermal and sound insulating qualities make a 1" single board partition satisfactory for offices or between rooms and passages. Quickly and economically erected, it saves time, material and labour. Plimber may be attractively painted or sprayed without flaking. Plimberwood, the medium density board, is available in 8' 6" x 3' 6", 7' 0" x 3' 0" and in two smaller sizes and in four thicknesses  $\frac{5}{3}$ ",  $\frac{3}{4}$ ",  $\frac{7}{3}$ ", 1".

\*You are invited to write for this PLIMBER BOOKLET which gives full information and retail prices, any of the Plimber distributors listed below.

WHOLESALE DISTRIBUTORS: C. F. Anderson & Son, Ltd., Harris Wharf, Graham Street, London, N.I. Alvin Morris, Ltd., Black Bull Street Saw Mills, Leeds, 10. John Bland & Co. Ltd., East Moors, Cardiff. C. V. Creffield & Co. Ltd., Leyborne House, Leyborne Avenue, Northfields Avenue, London, W.I.S. Gabriel, Wade & English Ltd., Aldwych House, Aldwych, London, W.C.Z. Graham & Wylie Ltd., Greenhad Sawnils, Mill Street, Glasgow, S.E. Horsley Smith & Co. (Landon), Ltd., Cannon Wharf, Evelyn Street, London, S.E.B. Horsley Smith & Co. Ltd., Hedon Road, Hull.

Horsley Smith & Co. Ltd., Hedon Road, Hull.

Bamber Bridge, Preston. W. W. Howard Bros. & Co. Ltd., 4 Stanhope Street, Euston Road, Landon, N.W.I. Jewson & Sons, Ltd., Colegate, Norwich. Jewsons Ltd., Great Western Docks, Plymouth. Mallinson & Eckersley Ltd., Worsley Street, Salford, 3. Midland Wallboards Ltd., St. Vincent Street. Birmingham 16 Scottish Speedwell Co. Ltd., 245 Crownpoint Road, Glasgow, S.E.

Ho

Arc Bui

BRITISH PLIMBER LTD., 90 REGENT ST., LONDON, W.1 . REGENT 5765

USE PLIMBER AND SAVE TIMBER



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



" EVERLASTO ?

BRITAIN'S SUPER SASH CORD

- \* Weatherproofed by special process at no extra cost \* Non Stretch . \* Durable
- \* Rot Proof \* Long Cost

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

Specified by

Specified by Housing Directors, Architects, and Builders

ng

is W

T

Waterproof and Rot Proof

### SASH CORD



ENDLESS CORD STRONG • DURABLE Ask for details and prices Also ideal for Colour Poles, Aerial Poles, Inside Clothes Airer Rails, etc.

> Made in all lengths Write for details

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



For high quality Decorative Finishes specify

GUARDI AN HARD ENAMEL GLOSS PAINT

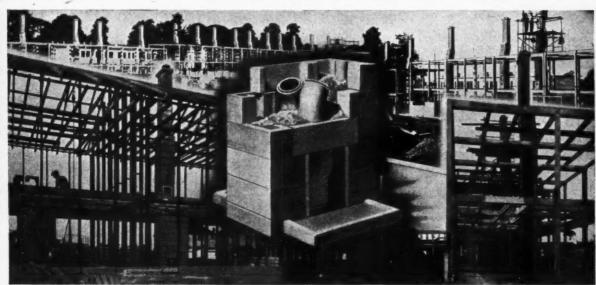
MAY-FAIR FLAT WALL ENAMEL

Manufactured by

THE TEMPLE VARNISH CO. LTD.

43 ALDWYCH, LONDON, W.C.2

Tel: TEMple Bar 9935



TRUE FLUE the speedily erected FLUE

These photographs show a few of the building estates using the TRUE-FLUE system, which is a patented method of constructing domestic flues of correct design with the minimum of labour.

The chimney breasts may be constructed with the original form of concrete block which can be speedily erected independently of the remainder of the building structure; alternatively our system may be incorporated in the usual brick construction.

The Lintel and "gather-over" immediately above the fireplace are designed as one streamlined unit which eliminates the usual reinforced lintel or arch and ensures a trouble-free flue. This unit can be used with obvious advantages with any type of construction.

For full details write for our descriptive booklet

TRUE FLUE LTD., CONVECTOR HOUSE, ACACIA ROAD. ST. JOHN'S WOOD, N.W. 8.

#### **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 Krst post on Friday morning for inclusion in the following Thursday's

Replies to Box Numbers should be addressed tre of "The Architects' Journal," at the address

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

None of the vacancies in these columns relates to a man between the age of 18 and 50, incusive, or a woman between the age of 18 and 40, inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order. 1947, or the vacancy is for employment excepted from the provisions of that Order

### Public and Official Announcements

6 lines or under. 16s.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND GURVENORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having s.aff vacancies. Address: 75, Earon Place London S W 1 Tel Stoke 5615. 901

LONDON COUNTY COUNCIL.

WACANCIES FOR PLANNING STAFF IN THE ARCHITECT'S DEPARTMENT FOR WORK ON THE COUNTY OF LONDON PLAN.

Applications are invited for a number of positions in the following grades:

PLANNING OFFICER. Grade III, £550 to

2700 a year.
TECHNICAL ASSISTANT. 55s. a week to

TECHNICAL ADSIDIARY.
2580 a year.
Commencing rate of pay will be according to qualifications and experience. There will be opportunities for competing, on meril, in due course for permanent appointment and for positions in the higher grades on the occurrence of vacancies. Successful candidates will be subject to the Council's Superannuation and Provident Fund.

The planning work involved includes assistance in the detailed development of Reconstruction Area schemes and the preparation of revised soning plans.

anning plans.

A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should possess architectural, serveying, or town planning qualifications.

Application forms may be obtained from the Architect to the Council (P), County Hall, Westminster Bridge, S.E.1 (enclosing stamped addressed foolscap envelope). Returnable not later than ten days from this date.

Canvassing disqualifies. (340) 668

Carvassing disquaines. (340) 808
CITY AND COUNTY OF THE CITY OF
EXETER.
Applications are invited for the following
populations on the staff of the City Architect's

appointments on the Salarian ASSISTANTS, Vacancies (a) ARCHITECTURAL ASSISTANTS, Vacancies and temporary staff. Salaries (a) ARCHITECTURAL ASSISTANTS, Vacancies on the permanent and temporary staff. Salaries equivalent to A.P.T. Grades I. II. III or IV. i.e., ranging from £330 to £465 per annum, according to qualifications and experience. Candidates should be experienced in Housing, Educational and general Municipal building works.

works.
(b) STRUCTURAL ENGINEERING

Candidates should be experienced in Housing. Educational and general Municipal building works.

(b) STREUCTURAL ENGINEERING ASSIS.

TANT, on the permanent staff. Salary, A.P.T., Grade V. i.e., £460 to £510 per annum.

Candidates should have had experience in both design and execution of steel-framed and reinforced concrete structures.

(c) MAINTENANCE SURVEYOR, on the permanent staff. Salary, A.P.T., Grades IV to V. i.e., £420 to £510 per annum.

Candidates should have a thorough knowledge of building maintenance works and construction, be able to write specifications and reports, be conversant with contract procedure, and be able to check accounts and keep records. They should have sound administrative experience in Local Government work, and preference will be given to those with experience in the maintenance of public buildings, including schools and housing.

Cost-of-living bonus, at present £59 198. 3d, per annum, is payable in addition to the salaries stated for each of the above appointments. Housing accommodation will be found for those appointed to some of the above posts.

All the above appointments will be subject to one month's notice on either side.

Permanent appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and successful applicants for these appointments will be required to pass a medical examination.

Canvassing will disqualify, and candidates must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience, salary required (in the case of architectural assistants' posts only), and the earliest possible date when available, together with copies of recent testimonials, should be sent to H. B. Rowe, F.R.I.B.A. A.M. IStruct.E.

City Architect. 2. Southernhay West, Exeter, not later than 12th April, 1948.

Exeter. 3rd March, 1948.

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following

pointment:— ASSISTANT QUANTITY SURVEYOR (Grade VI) at a commencing salary of £595, rising by annual increments of £20/£25 to a maximum of

annual increments of £20/£25 to a maximum of £660 per annum.

Preference will be given to applicants who are members of the Royal Institution of Chartered Surveyors (Quantities Sub-Division), and who have an adequate experience in the preparation of Bills of Quantities, and in measuring and in settlement of final accounts.

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

examination.

a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 17th April 1948.

Architect, Surrey County Council, County Hall, Kincston-upon-Thames, not later than the 17th April, 1948.
Canvassing, either directly or indirectly, wild signality a candidate from consideration.
The Council will be unable to provide any housing accommodation, and the successful applicant will be expected to make their own arrangements in this direction.

DUDLEY AUKLAND.
Clerk of the Council.
County Hall, Kingston-upon-Thames.

County Hall, Kingston-upon-Thames.

MIDDLESEX COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Established vacancies, pensionable, subject to medical examination:

(a) SENIOR QUANTITY SURVEYOR. Commencing salary, £950×230—£1.100 p.a. Extensive experience in all matters concerning the preparation of Bills of Quantities.

(b) QUANTITY SURVEYOR. Commencing salary, £700×225—£350 p.a. Fully experienced in estimating, cost analysis, and statistical recording of costing data.

(c) SENIOR ASSISTANT ARCHITECT. Commencing salary, £750×250—£350 p.a. Wide

(c) SENIOR ASSISTANT ARCHITECT. Commensing salary. £750 × 250—2850 p.a. Wide architectural and administrative experience with a Local Authority essential.
(d) ASSISTANT ARCHITECTS. A.P.T., VIII (£645 to £720 p.a.). Must be fully analified (preferably, for certain appointments, with experience in Educational buildings). Required to act as Senior Assistants to Area Architects and attend Committee meetings, etc.
All salaries plus any temporary coat-of-living

attend Committee meetings, etc.
All salaries plus any temporary cost-of-living
bonus (now £60 p.a.).
Application ferms (stamped addressed envelope)
from the County Architect. 20, Vauxhall Bridge
Road, S.W.1 (stating (a), (b), (c) or (dl), to be
returned by 21st April, 1948 (quoting D.872 A.J.).

COUNTY BOROUGH OF SOUTHEND-ON-SEA. Abolications are invited for the following appointments in the Department of the Borough Engineer and Survevor:—
(a) SENJOR ASSISTANT QUANTITY SURVEYOR. Grade V (\$550-\$15-\$570).
(b) ASSISTANT BUILDING SURVEYOR. Grade IV (\$450-\$15-\$255).
(c) ASSISTANT ENTATES SURVEYOR. Grade III (\$450-\$15-\$295).
In all cases subject to superannuation and medical examination. Honsing accommodation may be made available shortly.
Candidates should be Chartered Surveyors, qualified in the appropriate Sub-division, or hold equivalent qualifications, and in addition for (a) have experience in larce public buildings; for (b) be accustomed to Municipal work; for (c) have experience in land acquisition and compulsory purchase.
Annications, stating age, education, professional training and qualifications, and past and present appointments and experience, accompanied by one copy testimonial and two prefessional preferences, to be sent to the Boreach Engineer, Municipal Buildings, Southend-on-Sea, by 16th April, 1948.
Canvassing will dismailiv.

Municipal Buildings, Southend-on-Sea.

Town Clerk.

Municipal Buildings, Southend-on-Sea. 17th March, 1948.

CUDWORTH UPBAN DISTRICT COUNCIL.
ENGINEER AND SUPVEYOR'S DEPART.
MENT
APPOINTMENT OF ARCHITECTURAL
ASSISTANT (GRADE IV).
ADDications are invited for the above appointment, in the Office of the Protineer and Surveyor to the Council, at a salary in accordance with A.P. & T. Division, Grade IV, of the National Scale of Salaries, £480-£255.
The person appointed will be responsible for the preparation of plans, specifications, and bills of quantities for honsing schemes, and for checking of Interim Valuations and settling up of final arcunts for same.
Housing accommodation will be provided for the specessful applications, stating are, details of qualifications and experience, together with copies of three recent testimucials, should be sent to the undersigned, endorsed "Architectural Assistant," not later than 12th April 1948.

C. M. PRATT, Solicitor, Clerk of the Council.
March, 1948.
526

CITY OF STOKE-ON-TRENT.

CITY ARCHITECT'S OFFICE.

Applications are invited for the following appointment on the Establishment Staff of the City Architect's Department:

ONE ASSISTANT QUANTITY SURVEYOR.

Salary, A.P.T. Division, Grade VI, £595-£660.

The selected applicant will be required to pass a medical examination, and the appointment will be subject to the following:—

(1) One calendar month's notice on either side.

(2) The provisions of the Local Government Superannuation Act, 1937.

(3) The National Scheme of Conditions of Service for Local Government Officers.

Applicants must be members of the Royal Institution of Chartered Surveyors (Quantities), and must be competent in all branches of quantity surveying practice.

The successful applicant will be assisted in obtaining housing accommodation if required.

Applications, giving date of birth, particular of education and training, qualifications, experience, present and previous appointments, with copies of two recent testimonials and names and addresses of two persons to whom reference may be made, should be received by J. R. Piggot, F.R.I.B.A., City Architect, City Architect's Department, Kingsway, Stoke-on-Trent, not late than 16th April, 1948.

HARRY TAYLOR.

HARRY TAYLOR, Town Clerk

Town Hall, Stoke-on-Trent.

Town Hall, Stoke-on-Trent.

WEST ESSEX COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from Associates of the Royal Institute of British Architects for the appointment of an ASSISTANT COUNTY ARCHITECT on the permanent staff, at an inclusive salary of £710 per annum, rising by annual increments of £25 to £810 per annum. The appointment may be made at a commencing salary higher than the minimum of the scale.

Applicants must have had wide experience of structural calculations and supervision of building works.

structural calculations and supervision of building works.

Further particulars and forms of application should be obtained from F. R. Steele, F.R.I.B.A., F.R.I.C.S., M.T.P.I., County Architect, County Hall, Chichester, to whom completed forms of application must be submitted not later than the 20th April, 1948.

T. C. HAYWARD,

County Hall, Chichester.

19th March, 1948.

539

19th March, 1948.

CITY OF COVENTRY.

Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:

(a) ONE ASSISTANT ARCHITECT (Education action)

Salary grade, A.P.T., Va, commencing at £550 p.a. and rising to £610 p.a. Candidate should be Associate Members of the Royal Institute of British Architects, or hold equivalent

tute of British Architects, or hold equivalent qualifications.

(b) ONE ASSISTANT ARCHITECT.

Salary grade, A.P.T., III. commencing at £48 p.m. and rising to £495 p.a.

(c) ONE SENIOR ASSISTANT QUANTITY SURVETOR.

Salary grade, A.P.T., Va, commencing at £58 p.a., and rising to £610 p.a. Candidates should be Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Division). Salary increments are subject to satisfactory service.

Salary increments are subject to satisfactory service.

The posts are subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be requisite from the Council's medical referee. The successful male applicants will be required to contribute to the Coventry Municipal Officers' Widows' and Orphans' Pension Fund.

Applications must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than Monday, 12th April, 1948.

Canvassing, directly or indirectly, will be a disqualification.

D. E. GIBSON,

D. E. E. GIBSON, City Architect.

, Warwick Row, Coventry. 26th March, 1948.

VACANCIFS FOR ARCHITECTURAL STAFF IN THE ARCHITECT'S DEPARTMENT. Applications are invited for the following posi-

ARCHITECTS. Grade III, £550-£25-£700 a year. TECHNICAL ASSISTANTS. £440-£20-£580. Section (a).

TECHNICAL ASSISTANTS.

£440-£20-£580.

Commencing rates will be according to qualifications and experience.

Candidates for Grade III positions should possess professional qualifications, equivalent to Associate Membership of the Royal Institute of British Architects.

Successful candidates are required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for selection by merit for permanent appointment and promotion.

promotion.

Apply to the Architect (A), County Hall, Westminster Bridge, London, S.E.1. enclosing stamped addressed foolscap envelope (743).

5, Regent Street, Barnsley. March, 1948.

WES'
COUN
APPOIN
Applicationed
(a) ARE
(Probable orsham.) Saiary, Salary, 2710).
The peradvising of and to as developme should ha tions, and experience (b) TEC (TWO). One will at Worth

Salary, Salary, 2570). Application and development mediate estate or placations. (c) TEC To wor Salary, 525). Applica ing out
and pres
have had
of plann
Applicant
examinat possess of (d) PL. MAN).
To word Salary, £436).
Applica and show have ha

Planning cesential The a Governm tion.
Applic tions, extogether whom reacled Plannin to reach Applic they are they ar Council Canva

Parti forms of 10th A signed. Candi a thoroand be and sp work of Schools

Guildh 18th

Vaca Housis connec ngs, a the co Succes vident ment

sab-co

(b) sidera means final For Direc Hall,

WEST SUSSEX COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
APPOINTMENT OF TECHNICAL STAFF.
Applications are invited for the undersentioned appointments:—
(a) AREA PLANNING OFFICER.
(Probably to take charge of Area Office at
testam.)

Horsham.)
Saiary, A.P.T. Division, Grade VII (£635×£25—

YOR.

side. 15 0[

ed in

red.

T.
If the t ang by ncing le.

uncil.

539 wing ation ncing dates Insti-alent

£450 TITY

£580 hould

stitu ctory

dical ll be icipal d. otain-

disitect.

516

AFF posi-

700 a

ualiould

t to

ntri-

The person appointed will be responsible for advising on control of development in the area, and to assist in the preparation of outline and development plans for the County. Applicants should have the necessary professional qualifications, and should have had considerable practical experience in development administration. experience in development administration.

(b) TECHNICAL PLANNING ASSISTANTS

(b) TECHNICAL PLANNING ASSISTANTS (TWO).
One will be required to work in the Area Office at Worthing, and one at County Hall.
Salary, A.P.T. Division, Grade V (£520×£15—

Applicants should have had a good practical experience in Town and Country Planning for urban and rural areas, including control of new development, and should have passed the Intermediate examination of the Town Planning Institute or possess other suitable professional qualifications.

cations.
(c) TECHNICAL PLANNING ASSISTANT.
To work at County Hall.
Salary, A.P.T. Division, Grade IV (£480×£15—

Applicants should have had experience in carrying out basic surveys, and the ability to map and present the information. They should also have had general experience in the preparation of planning schemes for urban and rural areas. Applicants should have passed the intermediate examination of the Town Planning Institute or possess other suitable professional qualifications. (d) PLANNING ASSISTANT (DRAUGHTS-KAN).

IAN). To work in the Area Office at Corsham. Salary, A.P.T. Division, Grade I (£390×£15—

2435).
Applicants should be experienced draughtsmen, and should be capable of making surveys and have had experience of ordnance sheet revision.
Planning experience, though desirable, is not

The appointments will be subject to the Local Government Superannuation Act, and the successful applicants passing a medical examina-

Applications, stating age, education, qualifications, experience, present employment and salary, together with the names of three persons to whom reference could be made, must be sent in saled envelopes, and addressed to the County Planning Officer, County Hall, Chiehester, Sussex, to reach him by Monday, the 12th April, 1948. Applicants must state it to their knowledge they are related to any member of the County Council or to any senior official of the County Canvassing will disqualify.

T. C. HAYWARD,

Clerk of the County Council.

County Hall, Chichester.

COUNTY BOROUGH OF NORTHAMPTON.
BOROUGH ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECT, GRADES IV & V,
Particulars of the above appointment and
forms of application, which must be returned by
19th April, may be obtained from the undersirand.

18th April, may be obtained Architects, have signed.
Candidates should be Registered Architects, have a thorough training in design and construction, and be capable of preparing working drawings and specifications in relation to the architectural work of an authority, which in this case includes Schools, Housing and General Work.

C. E. VIVIAN ROWE,

Town Clerk.

Guildhall, Northampton. 18th March, 1948.

LONDON COUNTY COUNCIL.
QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors, in the Rossing and Valuation Department, for work in connection with the development of cottage states and the construction of multi-storey dwellings, at consolidated salaries of up to £590 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contibute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:—
(a) Measurement of work in construction of sub-contracts; preparation of cost statistics, estimates, etc.
(b) Management of housing contracts of conderable value; interim valuations for payments; measurements of variations and settlement of final accounts.

Forms of application may be obtained from the Director of Housing and Valuer. The County Hall, Westminster Bridge, S.E.I. (a stamped addressed foolscap envelope required). Completed forms must be returned not later than swen days after the appearance of this notice.

BUCKS COUNTY COUNCIL.
COUNTY ABCHITECT'S DEPARTMENT.
Applications are invited for the under-mentioned

Applications are invited for the under-mentioned appointments:—
DEPUTY COUNTY ARCHITECT. Salary scale, \$910×£25-£1,060 p.a. Candidates must have had professional and administrative experience in Local Government or Central Government Service. They must be members of the R.I.B.A., and preferably hold a University degree or equivalent in architecture.

SENIOR ASSISTANT ARCHITECT. Salary scale, £760×£25-£860 p.a. Candidates must be members of the R.I.B.A. and have had a thorough training and experience in the carrying out of modern building works.

ARCHITECTURAL ASSISTANT, Grade V. Salary scale, £520-£570 p.a. Candidates must be fully qualified, and reference will be given to those having particular knowledge in the design and/or construction of Schools, Police or Health works.

those having particular knowledge in the design and/or construction of Schools, Police or Health works.

ARCHITECTURAL ASSISTANT, Grade I. Salary scale, £390-£435 p.a. Candidates must have general Drawing Office experience, and preference will be given to those who are studying for Associateship of the R.I.B.A.

Details of the above appointments and forms of applications may be obtained on application to F. A. C. Maunder, County Architect, County Offices, Aylesbury, to whom applications must be delivered not later than 19th April, 1948.

GUY R. CROUCH.

County Hall, Aylesbury.

County Hall, Aylesbury.

COUNTY BOROUGH OF SWANSEA.

BOROUGH ARCHITECTS DEPARTMENT.

Applications are invited for the following appointments on the Established Staff in the Borough Architect's Department:

TWO SENIOR ASSISTANT QUANTITY SURVEYORS (Grade VI, A.P.T.).

Salary, £595 to £660 per annum.

The salary scale is that of the National Scheme of Conditions of Service.

Applicants must be under 45 years or age unless in Local Government Service, and must be Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Section). Candidates should have experience in the preparation of Bills of Quantities, Specifications and Estimates for Schools, Houses and Buildings of various types.

for Schools, Houses and Buildings of various types.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

The appointments may be terminated by one month's notice on either side.

Forms of application may be obtained from the Borough Architect (Mr. H. T. Wykes, F.R.I.B.A.), Guildhall, Swansea.

Applications, accompanied by copies of three recent testimonials, and enclosed in an envelope endorsed "Senior Assistant Quantity Surveyor," must be delivered to the undersigned not later than Tuesday, 20th April, 1948.

Canvassing, directly or indirectly, will disqualify.

Guildhall, Swansea. March, 1948. 527



BOROUGH OF REIGATE.

APPOINTMENT OF ARCHITECTURAL

ASSISTANT.

Applications are invited for the appointment of Architectural Assistant on the staff of the Borough Engineer and Surveyor, at a salary in accordance with Grade IV of the A.P.T. Division of the National Scale of Salaries (£480-£525 per annum). Applicants should have previous experience in connection with the design of buildings and estate development, and the conversion of existing properties into flats. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. Forms of application may be obtained from Mr. George G. Sanderson, A.M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Reigato.

Applications, endorsed "Architectural Assistant," and accompanied by copies of three recent testimonials, must reach the undersigned not later than the 17th April, 1948.

HEBER DAVIES, Town Clerk.

Town Hall, Reigate. March, 1948.

March, 1948.

COUNTY BOROUGH OF WOLVERHAMPTON.
APPOINTMENT OF TOWN PLANNING
ASSISTANTS.
Applications are invited for the following permanent appointments on the staff of the Borough Engineer:
CHIEF PLANNING ASSISTANT. Salary grade. A.P.T. VIII (£958-£960. consolidated).
PRINCIPAL PLANNING ASSISTANT. Salary grade. A.P.T. VII (£958-£960. consolidated).
GENERAL PLANNING ASSISTANT. Salary grade. A.P.T. II (£450-£455. consolidated).
JUNIOR PLANNING ASSISTANT. Salary grade. A.P.T. II (£390-£455. consolidated).
DRAITGHTSMAN. Salary grade, Misc. II (£375-£420. consolidated).
Applicants for the pest of Chief Planning Assistant must be qualified both by examination and experience to take charge of the Planning Section of the Department under the direction of the Borough Engineer. Living accommodation in the form of a 4-roomed Flat in pleasant surroundings will be made available to the successful candidate, if married.
Applicants for the remaining appointments must have had previous experience with a Planning Authority and hold qualifications suitable to appointment applied for.
The appointments, terminable by one month's notice on either side, are subject to the provisions of the Local Government Officer's Superannuation Art, 1937, and the successful candidates will be required to pass a medical examination. The conditions of service will be those of the National Joint Conneil for Local Authorities' Administrative. Professional. Technical and Clerical Services.
Applications, together with copies of three recent testimonials, should be delivered to the undersigned not later than Monday, the 19th April. 1948, in a sealed envelope suitable wendered. Canvassine, directly or indirectly, will be a disqualification.

J. BROCK ALLON, Town Clerk.

Town Hall, Wolverhampton. 22nd March, 1948.

### Architectural Appointments Vacant

4 lines or under, 5s.; each additional line, 1s. 6d.

COMPETENT ARCHITECT'S ASSISTANT required on South Coast; must be good draughtsman and experienced in all working drawings, specifications, etc. Apply by letter to Box 510, giving qualifications, and stating salary required.

A RCHITECTURAL ASSISTANT required in S.E. Kent; working drawings, specifications, and good general knowledge of construction essential; salary £400-£500, according to experience. Box 1065.

TWO Junior and one Intermediate standard for busy West End architects' office. Box 509.

THE GAS LIGHT & COKE COMPANY.
QUALIFIED ARCHITECTURAL ASSISTANT
required. Preferably experienced in the design,
alteration and maintenance of industrial buildings, and capable of preparing surveys, working
drawings, details and specifications. Knowledge
of quantities an advantage.
The appointment would be permanent and
pensionable, salary according to experience and
qualifications, stating age, experience and
qualifications, should be sent to the Staff Controller, The Gas Light & Coke Company, 30.
Kensington Church Street, W.8.

A SSISTANT required in Staff Surveyors to Large Industrial Company in London; experienced in surveys for maintenance, dilapidations, schedules, pricing valuations, etc.; A.R.I.C.S. preferred; £500 p.a. Write Box 538.

WELL-KNOWN Transport Organisation require services of ARCHITECTURAL ASSISTANT, well versed in light industrial construction, and able to carry job through to final account with minimum of supervision; salary, £600 p.a. Write, with full details of experience, to Box 537.

A RCHITECT and Surveyor to Large Industrial Organisation, with Head Office in London, requires the services of a PRINCIPAL ASSISIANT; applicants should have wide experience in design and construction of all classes of buildings, particularly light industrial Garages, and be capable of carrying out schemes from sketch plans to final account, including specifications, obtaining consents, licences, a knowledge of present-day prices, dilapidations and ability to supervise staff is necessary; experience in management of property would be an advantage; F.R.I.B.A or F.R.I.C.8. preferred; salary £1,000, or according to qualifications; age not over 45. Write, giving fall details of experience, in chronological order, to Box 536.

ARCHITECTURAL ASSISTANTS, preferably qualified and with experience of industrial buildings, are required by a public utility company in London; salary according to qualifications and experience. Apply Box 535.

RCHITECT-QUANTITY SURVEYOR required; General and Housing experience necessary; car driver; experience in settling final Accounts and Quantities; salary, £400.£500, depending on experience; flat available. Saunders & Partners, Architects, Castlegate, Newark-on-Trent.

COMPETENT ARCHITECT and BUILDING SURVEYOR ASSISTANT required for South London office. Write, stating age, experience, and salary required, to Box 525.

RCHITECTURAL ASSISTANTS required for Liverpool office; sound training and experience essential; administrative ability and experience an asset; salary commensurate with qualifications; give full particulars. Box 530.

WANTED.—Semi- or fully qualified ASSIS-TANT, with practical experience, for Architect in Private Practice; write, stating qualifications and salary asked. Reply Box 541.

JUNIOR ASSISTANT (Inter. R.T.B.A. standard); working drawings, surveys, and specifications; salary according to experience.—Watson & Johnson, 5, Victoria Square, Birmingham, 2.

A SSISTANT, capable of preparing working drawings and specifications from sketch plans, required by West End Firm of Architects; state age, experience, and salary required.

### Architectural Appointments Wanted

SCHOOL trained ASSISTANT (29), awaiting R.I.B.A. final result in April, requires progressive position. Box 1056.

### Other Appointments Vacant

4 lines or under, 5s.; euch additional line, 1s. 6d.

DRAUGHTSMAN with Architectural training for Exhibition Designing and Detailing. Davíd Esdaile & Co. Ltd., 30, Stannary Street. Kennington, S.E.11. REL 1666.

CLERK OF WORKS required for Northern Ireland; duration of work for satisfactory man not less than 18 months; all round building experience, especially on industrial work desirable; salary about £570, plus allowance, plus cost occasional travel to England. Full details of qualifications, age, and employment over the last 15 years, should be stated in application to Box 540.

#### Services Offered

4 lines or under. 2s. 6d.: each additional line. 1s.

CENTLEMAN, with extensive experience in the Building Industry, and very large personal connection with Architects, Surveyors and Local Authorities, seeks appointment with progressive company desiring experienced representation. Box 54.

YOUNG free lance DESIGNER-DRAUGHTS-MAN, in London, offers his services for Exhibition Stand detailing, etc.; quick and efficient service. Box 521.

#### For Sale

4 lines or under, 5s.; each additional line, 1s, 6d.

FOR SALE.—Available for immediate delivery: 200 Cast-iron Cisterns. 2 and 2½ gall., both painted and galvanized; 300 Cast-iron Manhole Covers and Frames, 24 in. by 18 in. by 56 lbs., and heavier. Taylor Bros. & Co., Seaton Street, Hull. 'Phone 36135.

ROR 'SALE.—Linen and Hessian Scrim available for immediate delivery; also Paperbacked Scrim. Taylor Bros. & Co., Seaton Street, Hull. 'Phone 36135.

TOR SALE.—Creosote, 40 galls., 70s., delivered in free drum; Refined Tar (needs heating), 75s.; Barn Tar (can be painted on cold), 80s. Frank Coopers, Canterbury.

"A RCHITECTURAL REVIEW," 1932-1939 inclusive (less January, 1932, and July, 1939), also 24 Publishers' Binding Cases for same; price £5. Eeles, Mill House, Elsenham, Essox. 524 STRATTON, "Orders of Arch.," 30s.; "Form and Design," 21s. Waldram, "Principles of Struct. Mechanics," 3s. 6d. Robertsas. "Arch. Composition," 5s. 6d. Tunnard, "Gardes in Mod. Landscape," 12s. 6d. Yorke, "Modern House" 21s.; "Modern Flat," 30s. All excellent condition. Box 533.

CREOSOTE, 40 galls., 70s. delivered in fra drum; Refined Tar (needs heating), 76a. Barn Tar (can be painted on cold), 80s. Fran Coopers, Canterbury.

### Miscellaneous

4 lines or under, 5s.; each additional line, 1s. 6d.

A J. BINNS, LTD., Specialists in the supply and fixing of all types of fencing, guard rail, factory partitions and gates. Harvest Works, 99-107, St. Pauls Road, N.1. Canonbury 3061.

NEWER HEAT DISPLAY, Building Center, Conduit Street, W.L. New solid-fuel appliances. New heating methods. New standard of home comfort. Open 10-5. Organised by the Coal Utilisation Joint Council.

STEEL SCAFFOLD FITTINGS, unused; available for prompt despatch. Box 1041.

OUTH AFRICA.—The Builder's paradise, liner and rail, £100; no waiting. Write O.P.S.A. Club, Veryan, Cornwall, stating desired date.

C'ENTRAL HEATING OIL BURNERS-Insist on the Brisiah-made Parwingers stoking, clean, trouble free; no waiting for cal or coke deliveries; no embargo now. Write at once to Parker, Winder & Achurch, Ltd., Maken, 80, Broad Street, Birmingham, 1.

I SOMETRIC, Logarithmic and Graph Sheet Write for a "Chartwell" List. W. Heffa & Sons, Ltd., Dept. S.H., Cambridge.

PERSPECTIVES, Wash Drawings, Lettering—
For every kind of activity demanding the expert use of pencil, pen and brush. R. Laverty, 44, Aldershot Road, Guildford, Surrey,

WANTED, urgently, Double-Elephant or Antiquarian Portfolio; write, stating condition and price. Box 520.

PRACTICE.—Architects interested in pur chasing Practice, with sound connections in Wolverhampton, Birmingham area. Box 532

### RIBA INTER, FINAL & SPECIAL FINAL.

Postal Courses in all subjects of the examination syllabus (including Professional Practice) are conducted by THE ELLIS SCHOOL OF BUILDING Principal; A. B. Waters, M.B.E., G.M., F.R.I.B.A. 18, ALBANY HOUSE, WORCESTER.



### "UNO" STENCILS

for Lettering ENGINEERS' & ARCHITECTS' PLANS

A. WEST & PARTNERS Ltd.
36, BROADWAY, WESTMINSTER, LONDON, S.W.1



REBUILD
with

ACCRINGTON 'NORI' BRICKS

• FACINGS
• ENGINEERING
• ACID-RESISTING

ACCRINGTON BRICK & TILE COMPANY
ACCRINGTON Telephone: ACCRINGTON 2684

by P
is offered greatest co

greatest collowing
Architecture
Architectura
And Building Con
Building Con
Interior

Building Sp and Guantity Sur Structural St Civil Engineer Special of the R.I.E LSTRUCE., (Examina Write to-c

INTI CORRESPO Dept. 141 KINGSWA

"FRANIHIC P

Wm. (of Bunh 14, Nort

HOME

N

R.W

SWAN Feltham 30

Phone:
PER 1 for relia
Electric

Specificati schemes SERV WA

### SOUND INSTRUCTION | SIGNSby Postal Method

is offered by the world's largest and greatest correspondence school in the following subjects:

ioliowitis and Architecture Architecture Architectural Drawing and Designing Building Construction, laterior Work and Quantities and Quantities and Quantities Quantity Specifications and Quantities Quantity Surveying Structural Steelwork (All Engineering

free 75s.; rank 546

pph nard orka

nin ap-dard the 730

vajj.

rite ired 1060

S-coal cas ezs,

E.-

Surveying and Mapping Municipal Engineering Plan and Map Draughtsmanship

Structural Engineering Structural Engineering
Concrete Engineering
Structural Drawing
Construction Draughts
Sanitary Engineering
Air Conditioning
Heating and Ventilation

Special Courses for the Diplomas of the R.I.B.A., I.O.B., R.I.C.S., I.C.E., I.M.E. LStruc.E., R.S.I., I.S.E., etc.

(Examination students are coached till successful)
Write to-day for Syllabus of our Courses
in any of the subjects mentioned above

### INTERNATIONAL

**WRRESPONDENCE SCHOOLS, LTD.** Dept. 141, International Buildings KINGSWAY, LONDON, W.C.2



ō

Established over 100 years.

### J. W. GRAY & SON LTD.

FRANKLIN HOUSE," 37, RED LION ST. HIGH HOLBORN, LONDON, W.C.I. Phone: CHANCERY 8701 (2 lines).

### LIGHTNING CONDUCTORS

Manufacturers and Erectors

Wm. OLIVER & SONS, Ltd. (of Bunhill Row), 12/13 Bow Lane, E.C.4

City 3335
H, Norman Rd, Northfield, Birmingham 31. Priory 1762.

HOME GROWN

**HARDWOODS** SOFTWOODS

Quota Merchants for NATIONAL STOCK

### STEELWORK BY

SWAN WORKS, HANWORTH, MIDDX

\*Phones ; Fultham 3007. Sunbury 3210.

'Grams;
" Sharman." Felth

PERIVALE 7251

for reliable and prompt **Electrical Installations** 

Specifications and complete schemes gladly submitted
SERVICE ELECTRIC CO. LTD.
WATER ROAD, ALPERTON, MIDDLESEX



**★Built** and erected to Architects' drawings

H. L. HINCKS The Largest Signmakers in the Midlands.

175 Bromsgrove Street, Birmingham, 5. 'Phone: MID. 2037

### by **MORR**

Herbert Morris Ltd

Loughborough

Engineering branches in London, Głasgow, Manchester, Birmingham, Leeds, Sheffield, Newcastle, Cardiff, Bristol, Dundee, Liver-pool, Nottingham, Bury St. Edmunds, Belfast

### ANCHORAGES TO CONCRETE

SPEARPOINT Floor Clips, DOVETAIL Masonry Slot and Anchors and ANKORTITE Box Fittings.

### ABBEY BUILDING SUPPLIES CO.

6, Waldemar Road, Wimbledon, London, S.W.19 Telephone: Wimbledon 4178.

Pressed Steel Tanks by

BRAITHWAITE

& CO ENGINEERS LTD KINGS HOUSE, HAYMARKET, S.W.1

### FOR SATISFACTION-



SAND FACED BRICKS

Manufactured by

THE HAMMILL BRICK CO . LTD EASTRY · SANDWICH · KENT

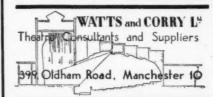
Telephone: EASTRY 247 FOR SAMPLES

### MUMFORD BAILEY & PRESTON LTD

AIR CONDITIONING & HEATING HOT & COLD WATER SERVICES

SANITARY ENGINEERING ETC.

NEWCASTLE HOUSE - CLERKENWELL CLOSE - LONDON - E - C - 1 Branches at Bournema



### MODELS

ESTAB. BY

John B. THORP FOR

98 GRAY'S INN ROAD,

TOWN PLANNING PUBLIC BUILDINGS ESTATES and INTERIORS

TELEPHONE: HOLBORN 1011

#### THE "BULLSEYE" STAPLING PRESS



PRICE 15/- each Staples 2/- per 1,000

Prices include Purchase Tax Send for our lists.

Can also be used as a Tacker for fastening labels to wooden boxes.

SABELL & CO. (Stationery)
22, BROMSGROVE ST., BIRMINGHAM, 5

### INFORMATION SHEET

MAXHEAT TUBULAR HEATERS

CATALOGUES, ALSO

Obtainable from
The Wardle Engineering Co., Ltd., Old Trafford, Manchester 16

dm. WA.8

For ELECTRIC MOTOR STARTERS

The BUILDING CENTRE 9 CONDUIT STREET, LONDON, W.I. TELEPHONE MAYEAR 8641

...a permanent and constantly changing Exhibition and free information service for all interested in building and its equipment

Daily 10-5 ADMISSION FREE Saturday 10-1



### Alphabetical Index to Advertisers

|  |           |   |              |   | 139  |
|--|-----------|---|--------------|---|------|
| 111 - D-011 - G16- 741                     | PAGE      | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~                                       | PAGE         |   | . P. |
| Abbey Building Supplies, Ltd               | liii      | Garn Green & Rustick Slate Quarry, The                                      |              | Mumford, Bailey & Preston, Ltd                                      | - 17 |
|  | lii       | Gaskell & Chambers, Ltd.  |              | Neuchatel Asphalte Co., Ltd   | -    |
| Aidas Electric, Ltd                        | XIX       | General Cable Manufacturing Co., Ltd  | -144         | Oliver, Wm., & Sons, Ltd.   | 153  |
| Architects' Benevolent Society             | xlii      | Gillett & Johnston, Ltd   | xlii<br>liii | Paragon Glazing Co., Ltd.   | -    |
| Ascot Gas Water Heaters, Ltd               | xi        | Gray, J. W., & Sons, Ltd  | 1111         | Park Foundry (Belper), Ltd  |      |
| Associated British Oil Engines Co., Ltd.   | xxiii     | Ltd.  | 11           | Prodorite, Ltd  |      |
| Associated Meal Works (Glasgow), Ltd.      |           | Griffiths Bros. & Co., Ltd.   | XXX          | Pynford, Ltd.   | -    |
| Austin Hall Group of Companies, The        | vi        | Gyproc Products. Ltd.   | xxiv         | Pyrotenax. Ltd.   |      |
| Automatic Telephone & Electric Co., Ltd.   |           | Hall, John, & Sons  |              | Ronuk, Ltd.   | 3    |
| Baldwin, Son & Co., Ltd                    | ii        | Hammill Brick Co Ltd., The  | 1111         | Rubery Owen & Co., Ltd.   | 100  |
| Bayliss Kenton Installations, Ltd          | -         | Hamilton Photo Print Service, Ltd   | -            | Sabell & Co   |      |
| Belling & Co., Ltd                         | xlvii     | Harvey, G. A., & Co. (London), Ltd  |              | Sadler, Thos., Sons & Co., Ltd                                      | 1.75 |
| Blackburn, Thomas, & Sons, Ltd             | xviii     | Helliwell & Co., Ltd  |              | Salter, T. E., Ltd  |      |
| Bone, Connell & Co., Ltd                   | li        | Henderson, P. C., Ltd   | xxxv, li     | Sankey, J. H., & Son, Ltd   | ix.  |
| Booth, James, & Co., Ltd.                  | viii      | Henderson Safety Tank Co., Ltd  | xliff        | Sankey, Joseph, & Sons, Ltd   | -    |
| Booth, John, & Sons (Bolton), Ltd          | xvii      | Higgs & Hill, Ltd.  |              | Santon, Ltd.  | - 1  |
| Braby, Fredk., & Co., Ltd.                 | xiii      | Hineks, H. L.   | mi           | Secomastic, Ltd.  |      |
| Braithwaite & Co., Engineers, Ltd          | 1111      | Hollway, W. F., & Brother, Ltd  | xlvi         | Scaffolding (Great Britain), Ltd                                    | -    |
| Briggs, William, & Sons, Ltd               | . xli     | Hurseal, Ltd.   |              | Sealocrete Products, Ltd  | -    |
| Ltd., The                                  | vii       | Imhof, Alfred, Ltd.   | XXX          | Service Electric Co., Ltd   |      |
| British Gas Council                        | VII       | Imperial Chemical Industries  | xliii        | Shaffer, James, Ltd.  | -    |
| British Insulated Callender's Cables, Ltd. |           | Insulite Products Corporation, Ltd<br>International Correspondence Schools, | XIIII        | Sharman, R. W., Ltd   |      |
| British Ironfounders' Association          |           | Ltd   | liii         | Smiths' Fireproof Floors, Ltd.                                      | - 1  |
| British Plimber Ltd                        | xlviii    | Jenkins, Robert, & Co., Ltd.  | lv           | Spiral Tube & Component Co., Ltd., The                              | - 3  |
| British Thomson-Houston Co., Ltd., The     | xli       | Key Engineering Co., Ltd  |              | Stelcon (Industrial Floors), Ltd                                    | - 0  |
| British Trane Co., Ltd                     | xl        | King, J. A., & Co., Ltd   | xlv          | Stobart & Son, Ltd.   |      |
| Building Centre, The                       | liii      | Kwikform, Ltd.  | XXV          | Styles (Contractors), Ltd   | -    |
| Bull Motors (E. R. & F. Turner), Ltd       |           | Lamont, James H., & Co., Ltd  |              | Sundeala Board Co., Ltd   |      |
| Celotex, Ltd                               | xxi       | Leaderflush, Ltd  |              | Temple Varnish Co., Ltd   | - 5  |
| Cement Marketing Co., Ltd                  | XV        | Lead Industries Development Council   |              | Tentest Fibre Board Co., Ltd  | -    |
| Cloakroom Equipment, Ltd                   | xxxviii   | Lever, James, & Son, Ltd  | xlix         | Thornton, A. G., Ltd.   |      |
| Colt, W. H. (London), Ltd.                 | iii       | Lightfoot Refrigeration Co., Ltd  |              | Thorp, John B   |      |
| Copper Development Association             |           | Limmer & Trinidad Lake Asphalte Co.,  | 2222         | Tretol, Ltd   | - 1  |
| Craptree, J. A., & Co., Ltd                | XXVII     | Ltd.  | xliii        | True-Flue. Ltd.   | 1    |
| Edgar, Wm., & Son, Ltd.                    | xli<br>v  | Lloyd Boards, Ltd.  | -lw          | Turners Asbestos Cement Co., Ltd                                    | - 3  |
| Educational Supply Association, Ltd        | xxxvi     | Loft Ladders, Ltd<br>London Brick Co., Ltd                                  | xlviii       | United Paint Co., Ltd., TheVal de Trayers Asphalte Paving Co., Ltd. |      |
| Ellis School of Building                   | lii       | Mallinson, William, & Sons, Ltd.  | XXVI         | Versil. Ltd.  |      |
| Ellison, George, Ltd.                      | liii      | Marley Tile Co., Ltd.   | xxxi         | Vulcanite, Ltd.   |      |
| English Joinery Manufacturers' Assoc       | ****      | McCall & Co. (Sheffield), Ltd.  | 2221         | Wardle Engineering Co., Ltd., The                                   |      |
| Evered & Co                                |           | Merchant Adventurers, Ltd.  |              | Ware, W. C., & Sons, Ltd  | _    |
| Excel Asphalte Co., Ltd                    | xlii      | Merchant Trading Co., Ltd., The   | xii          | Watts & Corry, Ltd  |      |
| Fenning & Co., Ltd                         | iv        | Metallic Seamless Tube Co., Ltd   |              | Wellington Tube Works, Ltd  | XX   |
| Ferodo, Ltd.                               | xxxii     | Metropolitan-Vickers Electric Co., Ltd.                                     | -            | West, A., & Partners, Ltd   | -    |
| Ferrocon Engineering Co., Ltd              |           | Mills Scaffold Co., Ltd   | lvi          | Wheeler, F. H., & Co., Ltd  | -    |
| Finch, B., & Co., Ltd                      | xxxix     | Midland Woodworking Co., Ltd  |              | Williams, John. & Sons (Cardiff), Ltd                               | XX   |
| Fordham Pressings, Ltd                     | xlii      | M.K. Electric, Ltd  |              | Wimpey, George, & Co., Ltd  | X    |
| Foyles                                     |           | Monk Metal Windows, Ltd   |              | Wood Wool Building Slab Manufacturers'                              |      |
| Freeman, Joseph, Sons & Co., Ltd           |           | Morris, Herbert, Ltd  | liii         | A880C   | . 3  |
| French, Thomas, & Sons, Ltd                |           | Morris, M. A., Ltd  | xxxiv        | Wright, Anderson & Co., Ltd   | -    |
| For Appointm                               | ents (War | ated or Vacant), Competitions Open, Drawin                                  | gs, Traci    | ngs, etc., Educational,   |      |

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales, see pages 1, 11 and 111.



FOR HOT AIR WHERE

YOU

**VOLEX** 

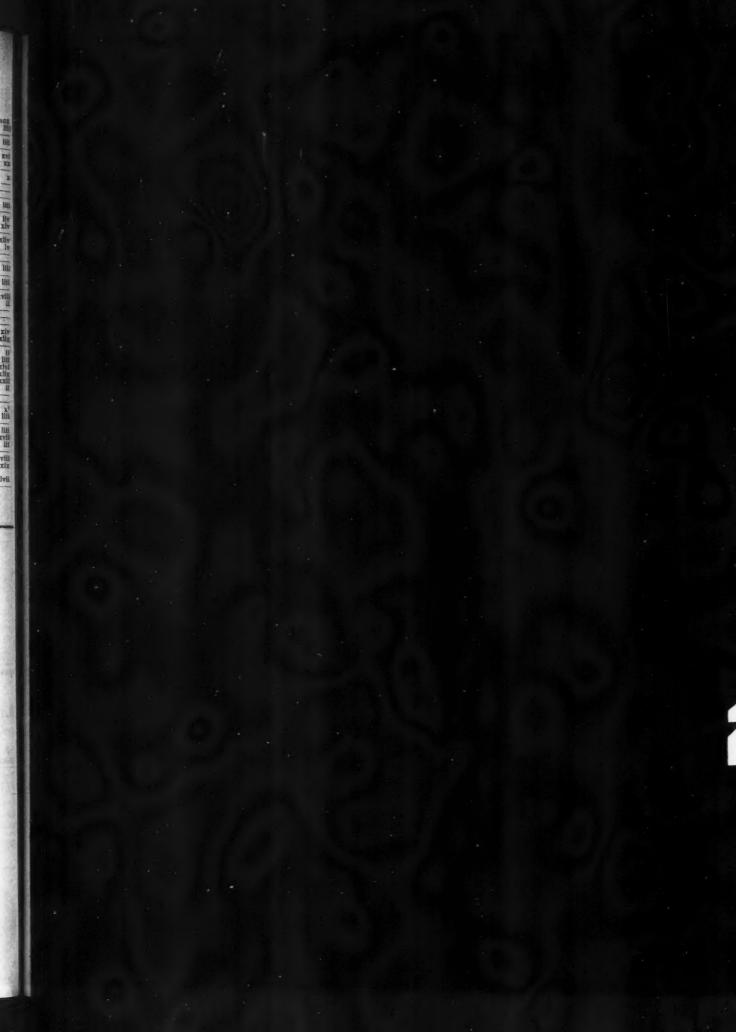
DON'T

HOT AIR SYSTEM VENTILATES
AS IT HEATS

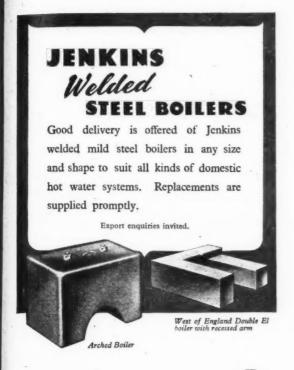


The ideal atmosphere in which to work or relax—an even temperature with draughtless ventilation—is assured by installing the VOLEX Warm Air Heating and Ventilating System. Summer and Winter, VOLEX provides a constant supply of fresh warm air wherever it is required. In factories and, workshops, shops and offices, public buildings and the home, VOLEX is recognized as the most efficient modern system of heating and ventilation.

SOLE MAKERS: T. E. SALTER LTD., BLOOMFIELD TIPTON, STAFFS. TELEPHONE: TIPTON 1657/1658







# what is STRAMIT?

STRAMIT is a new, light-weight, insulating, structural board, simple and economical to use, and FREE of LICENCE.

STRAMIT is straw + pressure + heat.

STRAMIT is light, rigid, tough, easily worked with ordinary carpenters' tools.

STRAMIT is suitable for all forms of partition, for wall linings, ceilings, roof and floor insulation, exhibition and window display.

STRAMIT boards are sold at a competitive price in 8 ft. x 4 ft. sheets, 2 in. thick.

For further particulars apply to your nearest Lloyd Board Distributor, or to

### LLOYD BOARDS LTD.

15 PORTMAN STREET, LONDON, W.1

### Robert Jenkins & Colld.

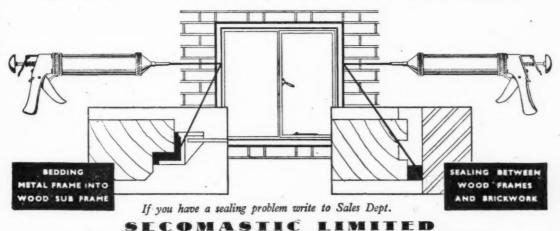


Telephone: Rotherham 4201-6 (6 lines)

### The MODERN METHOD of SEALING WINDOW FRAMES

POR sealing wood and metal window frames Secomastic possesses many advantages over traditional jointing compounds, the most important of which are permanent elasticity and tenacious adhesion to all building materials. Secomastic offers complete resistance to heat, cold, moisture, acidity or alkalinity.

Secomastic will not slump in a vertical joint or seep into and stain porous materials. It is easily applied with great speed and precision by Seco hand or air-operated gun, and can be painted any colour within 24 hours of application. Joints sealed with Secomastic permanently withstand shrinkage, expansion and shock.



25, UPPER BROOK STREET, LONDON, W.I. Phone: Mayfair 9080.

