

THE ARCHITECTS' JOURNAL



PUBLIC LIBRARY
AUG 5 1948
DETROIT

★ 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 Jc one week, Jc to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

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

Letters

Societies and Institutions

TECHNICAL SECTION

Information Sheets

Information Centre

Current Technique

Questions and Answers

Prices

The Industry

PHYSICAL PLANNING SUPPLEMENT

CURRENT BUILDINGS

HOUSING STATISTICS

Architectural Appointments
Wanted and Vacant

| | | |
|-----------|---|---------------------|
| IEE | Institution of Electrical Engineers. Savoy Place, W.C.2. | Temple Bar 7676 |
| IES | Illuminating Engineering Society. 32, Victoria Street, S.W.1. | Abbey 5215 |
| IGE | Institution of Gas Engineers. 1, Grosvenor Place, S.W.1. | Sloane 8606 |
| IHVE | Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. | Sloane 3158 |
| IBD | Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. | Euston 2450 |
| ILA | Institute of Landscape Architects. 12, Gower Street, W.C.1. | Museum 1783 |
| I of Arb. | Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. | Temple Bar 4071 |
| IOB | Institute of Builders. 48, Bedford Square, W.C.1. | Museum 7197 |
| IR | Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1. | Monarch 7391 |
| IRA | Institute of Registered Architects. 47, Victoria Street, S.W.1. | Abbey 6172 |
| ISE | Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. | Sloane 7128-29 |
| LIDC | Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. | Whitehall 7264 |
| LMBA | London Master Builders' Association. 47, Bedford Square, W.C.1. | Museum 3891 |
| MARS | MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8. | Park 7678 |
| MOA | Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. | Whitehall 3400 |
| MOE | Ministry of Education. Belgrave Square, S.W.1. | Sloane 4522 |
| MOH | Ministry of Health. Whitehall, S.W.1. | Whitehall 4300 |
| MOLNS | Ministry of Labour and National Service. St. James's Square, S.W.1. | Whitehall 6200 |
| MOS | Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. | Gerrard 6933 |
| MOT | Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. | Abbey 7711 |
| MOTCP | Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. | Whitehall 8411 |
| MOW | Ministry of Works. Lambeth Bridge House, S.E.1. | Reliance 7611 |
| NAMMC | Natural Asphalt Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1. | Abbey 1010 |
| NAS | National Association of Shopfitters. 9, Victoria Street, S.W.1. | Abbey 5277/8 |
| NBR | National Buildings Record. 37, Onslow Gardens, S.W.7. | Kensington 8161 |
| NCBMP | National Council of Building Material Producers. 2, Caxton Street, S.W.1. | Abbey 5111 |
| NFBTE | National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. | Langham 4041 |
| NFBTO | National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4. | Macaulay 4451 |
| NFHS | National Federation of Housing Societies. 13, Suffolk St., S.W.1. | Whitehall 2881/2/3 |
| NHBRC | National House Builders Registration Council. 82, New Cavendish Street, W.1. | Langham 4041 |
| NHTPC | National Housing and Town Planning Council. 41, Russell Square, W.C.1. | Museum 1264 |
| NPL | National Physical Laboratory. Head Office, Teddington. | Molesey 1380 |
| NRIAD | National Register of Industrial Art Designers. National Gallery, Trafalgar Square, W.C.2. | Whitehall 2415 |
| NSAS | National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1. | Abbey 1359 |
| NT | National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. | Whitehall 0211/2 |
| PEP | Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. | Whitehall 7245 |
| PWB | Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1. | Reliance 7611 |
| RCA | Reinforced Concrete Association. 94, Petty France, S.W.1. | Whitehall 9936 |
| RIAS | Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. | Edinburgh 20396 |
| RIBA | Royal Institute of British Architects. 66, Portland Place, W.1. | Welbeck 5721 |
| RICS | Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. | Whitehall 5322 |
| RFAC | Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. | Whitehall 3935 |
| RS | Royal Society. Burlington House, Piccadilly, W.1. | Regent 3335 |
| RSA | Royal Society of Arts. 6, John Adam Street, W.C.2. | Temple Bar 8274 |
| RSI | Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. | Sloane 5134 |
| RIB | Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. | Wimbledon 5101 |
| SBPM | Society of British Paint Manufacturers. 20, Piccadilly, London, W.1. | Regent 6347 |
| SCR | Society for Cultural Relations with the USSR. 98, Gower Street, W.C.1. | Euston 6272/3 |
| SE | Society of Engineers. 17, Victoria Street, Westminster, S.W.1. | Abbey 7244 |
| SFMA | School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C. | Chancery 5313 |
| SIA | Structural Insulation Association. 14, Moorgate, London, E.C.2. | Central 4444 |
| SIA | Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1. | Metropolitan 8344 |
| SNTPC | Scottish National Town Planning Council. 11, Drumshugh Gardens, Edinburgh, 3. | Holborn 2646 |
| SPAB | Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. | Temple Bar 5006 |
| TCPA | Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. | City 6146 (3 lines) |
| TDA | Timber Development Association. 75, Cannon Street, E.C.4. | Victoria 8815 |
| TPI | Town Planning Institute. 18, Ashley Place, S.W.1. | City 1476 |
| TTF | Timber Trades Federation. 81, Cannon Street, E.C.4. | Mayfair 8866 |
| WDC | War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. | City 4263/4 |
| WEDA | Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. | Oxford 47988 |
| ZDA | Zinc Development Association. Lincoln House, Turl Street, Oxford. | |

No. 2789]

[Vol. 108

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

Price 9d.

Registered as a Newspaper

FOR EFFICIENT
SCHOOL KITCHEN VENTILATION
INSTALL
THE GREENWOOD-AIRVAC "MECHAVENT"

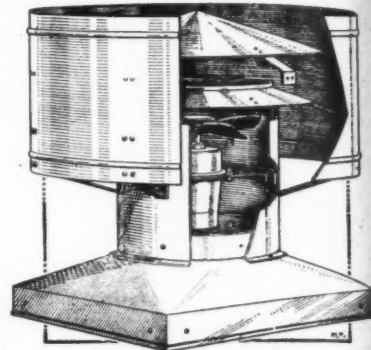
A powerful dual-purpose Roof Mounted Extractor operating mechanically and, with fan and motors switched off, as a natural power Extractor. Schemes submitted for balanced Ventilation by means of Unit or Trunked systems.

Standard stack sizes for fans of 9" up to 24" diameters, with exhaust capacities of from 250 to 4,000 cubic feet per minute. Square base for flat roof shown. Ridge and sloping bases supplied.

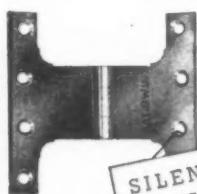
SPECIALISTS IN THE DESIGN AND MANUFACTURE OF MECHANICAL AND STATIC VENTILATORS, FAN UNITS, AND VENTILATING EQUIPMENT OF DISTINCTION. VENTILATING ENGINEERS.

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD.
BEACON HOUSE · KINGSWAY · LONDON, W.C.2

Chancery 8135/6,7



"Airvac," London.



SILENCE
IS
GOLDEN

FIX

BALDWIN'S

Cast iron parliament hinges

Sole Manufacturers:

BALDWIN, SON & CO. LTD., STOURPORT-ON-SEVERN

M-W.54

**STEEL FRAMED
BUILDINGS
AND ALL TYPES OF
RIVETED & WELDED
STRUCTURAL WORK**



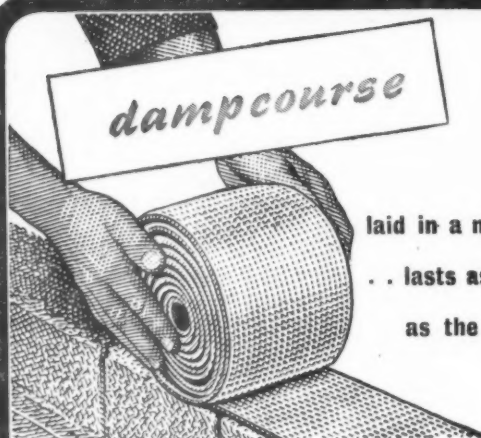
BONE, CONNELL & CO. LTD.

NETHERTON WORKS, WISHAW, LANARKSHIRE.

TELEPHONE: WISHAW 543-4 TELEGRAMS: "STRUCTURAL WISHAW."

Glasgow Office: 219, St. Vincent St., Glasgow, C2. Phone: Central 8111.

London Office: 529, Grand Buildings, Trafalgar Square, London. Phone: Whitehall 4272.



dampcourse

laid in a minute
... lasts as long
as the wall!

It's what you can't see that's important!

BRIGGS

AQUALITE

BITUMEN DAMPCOURSE

WILLIAM BRIGGS & SONS LIMITED

East Camperdown St., Dundee. Vauxhall Grove, London, S.W.8
Branches:—Aberdeen, Edinburgh, Glasgow, Leicester, Liverpool, Norwich



*Worthy
OF ITS PLACE IN THE PLANS OF THE FUTURE*

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.

The
Fordham
Seamless Steel **FLUSHING CISTERN**

FORDHAM PRESSINGS LIMITED, DUDLEY RD.
WOLVERHAMPTON

PHONE: WOLVERHAMPTON 23861.



C



C
b

- T
b
st
- C
st
- L
o
- N

For

COME RAIN..COME SHINE



House at Crown Lane, East Burnham, Bucks,
roofed with Colt Shingles.

Architects : Tubbs, Duncan & Osburn, AAA.R.I.B.A.

Colt Shingles prove Britain's best All-Weather Roofing

- The form and nature of the shingles combine to provide a close and completely stormproof weather shield.
- Colt Shingles are only the finest carefully selected material.
- Light weight permits considerable savings of structural timber.
- No maintenance costs.
- Colt Shingles are licensed additionally to maximum timber allowance.
- Immediate delivery from stock.
- Expert advice and fixing service always available.
- Concise details on waterproof qualities, weight, insulation, etc., on request to:

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

Telephone : Elmbridge 6511 (4 lines)

COLT *Canadian Cedar Wood* **SHINGLES**
(CEDAR WOOD TILES)

For all DOMESTIC, AGRICULTURAL, and INDUSTRIAL BUILDINGS

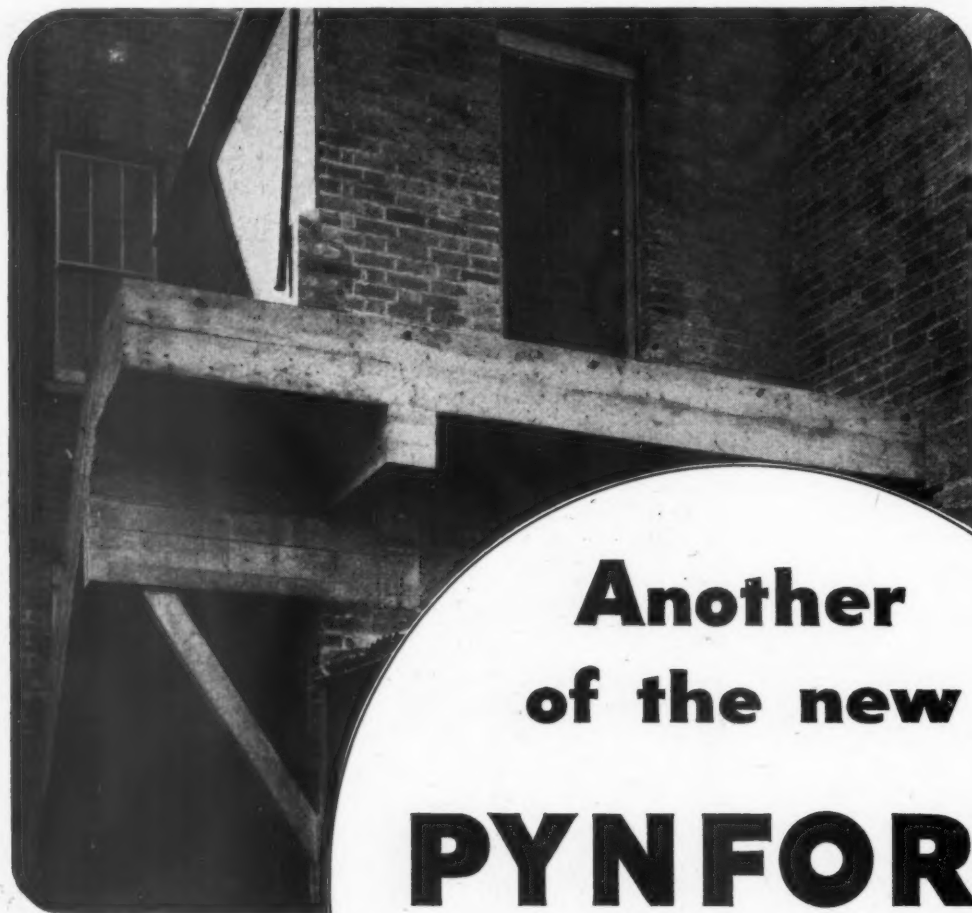
**AGRICULTURAL
BUILDINGS**

DWELLINGS

SCHOOLS

**COUNCIL
HOUSES**

CHURCHES



**Another
of the new
PYNFORD
UNDERPINNING
METHODS**

★ PYNFORD BEAMS
are backed by two
generations of under-
pinning experience.

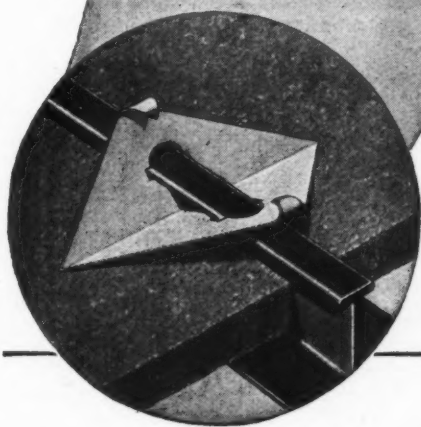
- PYNFORD BEAMS are almost a doctor.
- With PYNFORD BEAMS it was possible to underpin two walls at high level and create support for this staircase and landing.
- PYNFORD BEAMS have made possible jobs much too costly by other forms of construction.
- PYNFORD BEAMS are definitely the answer to a vast number of building problems.

PYNFORD LTD. · 74, LANCASTER ROAD · STROUD GREEN · LONDON, N.4

Telephone: ARCHWAY 2372

DESIGNED FOR STRENGTH
AND INSULATION

This new Sundeala Aluminium Alloy Tee Bar uses the well-known 'V' clip method of Board-retention. The unslotted, flanged-head Tee Bar lends itself admirably to the extrusion process of manufacture and the flanged head has been developed to give maximum strength. The seamless base (only .05" thick) provides an improved and unobtrusive panel border. Trimming members (Tee noggings, Channels, Angles, etc.) are also available in alloy.



No permit is required and supplies will be available shortly. Send us drawings or details of your insulation requirements.



SUNDEALA BOARD CO. LTD., ALDWYCH HOUSE, LONDON, W.C.2. Tel: CHAncery 8159

THE YOUNG IN HEART

With the wisdom of the old: that is the prevailing quality of the King organisation, and it is reflected in all their products. An alert and sensitive eye, and ear, for the new materials, and the latest processes, is part of the secret of King efficiency. As for new methods of application, King does not wait for these: it creates them.



KING SLIDING DOOR GEAR



SPECIAL KING FEATURE NO. 5

Other features of King Door Gear include: King-Alloy Rolled Steel Section. Domed Top sheds all moisture. Ball or Roller Bearings for easy running. Anti-rust finish. Lateral movement for easy running. Tecalect Pressure Lubrication.

A door that runs on King Sliding Door Gear is a gliding example of perfect smooth running. Long years of careful study and experience have helped to place King Door Gear in the foremost position. No other make possesses all the valuable features which are incorporated in the King Product.

For ease of operation, neat appearance, engineering excellence and long life, specify King Sliding Door Gear.

WRITE FOR ILLUSTRATED BOOKLET AND PRICE LIST

GEO. W. KING LTD., D.G.B. WORKS, HITCHIN, HERTS
PHONE: HITCHIN 960 (10 LINES)



**The best meals start in
kitchens planned by**

Radiation

Large Cooking Equipment, Ltd.

PALATINE WORKS, WARRINGTON, LANCs.

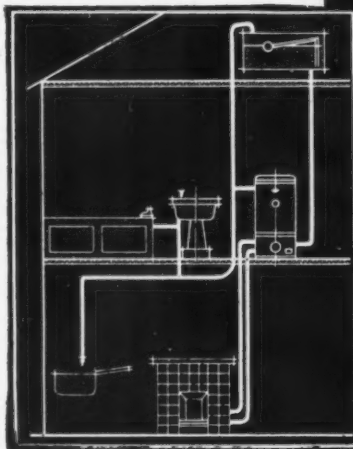
*A Comprehensive Range of Large Cooking Equipment is Displayed
at the Radiation Showrooms, 8, Stratford Place, W.1. Phone: Mayfair 6467*

FOR FUEL ECONOMY

THE FIRST SCIENTIFICALLY-DESIGNED COAL-ELECTRIC WATER HEATING SYSTEM

**Consumes LESS Coal—LESS Electricity
... yet gives MORE Hot Water**

DESIGNED for small dwellings, the type C.E.L. Sadia Coal-Electric Water Heater is an efficient, factory-made unit to work in conjunction with solid fuel boilers. It ensures a continuous supply of thermostatically controlled hot water all the year round with a minimum consumption of fuel. The Sadia C.E.L. will supply all the hot water requirements of a small household.



Improves Back Boiler Efficiency

THE Sadia type C.E.L. takes the place of the old hot water tank, storing all heated water in an effectively insulated container. Heat losses are reduced to a minimum and there is virtually no waste of fuel. In summer, it is unnecessary to light fires in order to provide hot water and so the house remains cool. In winter the thermostats avoid the use of electricity when the back boiler is in operation. Due to high thermal efficiency the C.E.L. will work only with small boilers or preferably saddle-back boilers, where the heating can be controlled by a damper.

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

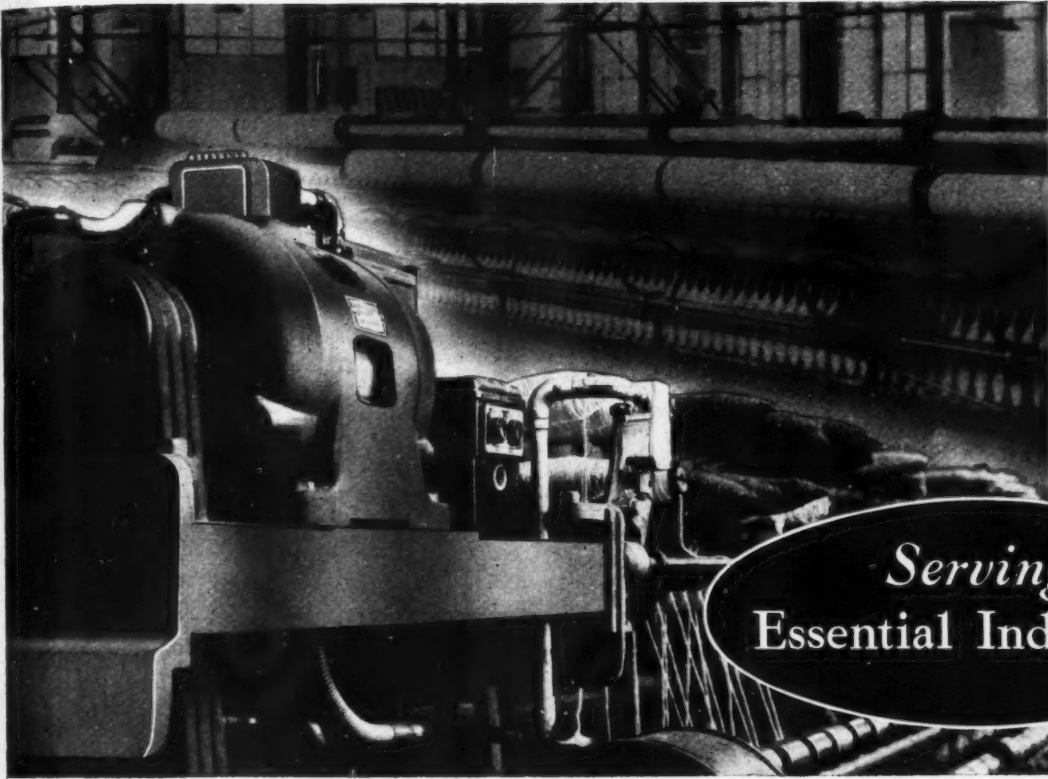
SADIA
HOT WATER BY
ELECTRICITY



AIDAS ELECTRIC LTD.

WRITE TODAY
for free Illustrated Folder giving full details of the Sadia C.E.L. Coal-Electric Water Heater.

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

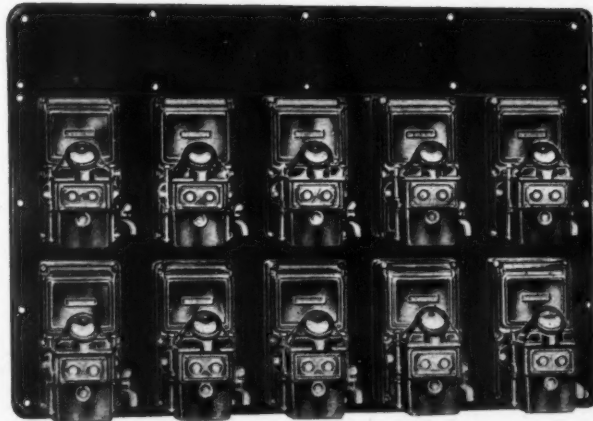


This picture of part of the mill of C. & J. Hirst & Sons, Ltd., shows a battery of Crabtree auto-controlled spinning mules, and a twisting frame.

*Serving
Essential Industries*

Textile Production

At no other time has textile production been of such vital importance. And at no other time has the complicated machinery of textile manufacture been in such short supply. Nevertheless, determined efforts are being made to overcome these difficulties and new and more efficient spinning and weaving plant is gradually coming into service. It is noteworthy that the electrical control of much of this plant is being entrusted to Crabtree protective gear. In the Huddersfield mills of C. & J. Hirst and Sons, Ltd., for example, Crabtree gear is widely employed and is contributing in no small measure to the annual processing of more than a million yards of finished cloth.



A Crabtree control panel installed in the finishing room.

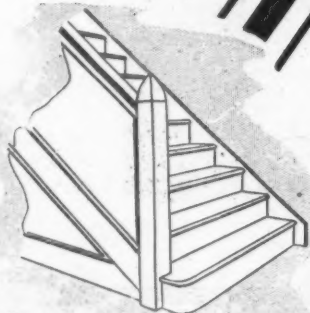
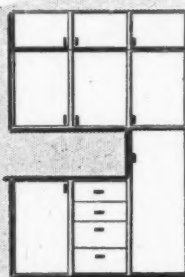
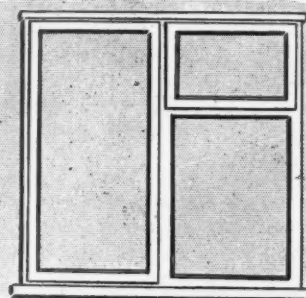
CRABTREE

A name synonymous with Progress in Accessories and Switchgear

"Crabtree" (Registered)

C621/106 Advt. of J. A. Crabtree & Co. Ltd., Lincoln Works, Walsall, England

Selected Timber seasoned by the most modern methods, accurately machined, faultlessly assembled by skilled craftsmen, and minutely inspected by experts makes the **PERFECT JOINERY** of which **MAGNET** are so proud: while planned production methods ensure *Quick Delivery.*



Whitley St., BINGLEY, YORKS.
Phone : BINGLEY 547 (5 lines).

London Rd., GRAYS, ESSEX.
Phone : TILBURY 77 (5 lines).

Love Lane, ASTON, BIRMINGHAM.
Phone : ASTON CROSS 3291-2.



KS.

AM.



PAINT has to be applied to many things, to bridges and bottle caps, to buses and bicycles, by methods ranging from the oldest — brushing — to the most modern — electro-static deposition. Whatever the job, there is an I.C.I. paint to suit the conditions, and I.C.I. Technical Service to show the best way.



IMPERIAL CHEMICAL INDUSTRIES LIMITED
PAINTS DIVISION **SLOUGH, BUCKS.**

D.D.763

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
TRAFFORD PARK MANCHESTER 17

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

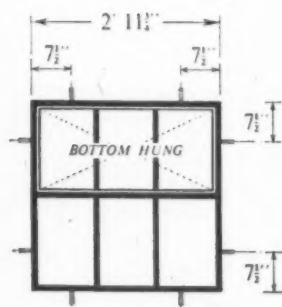
Telegrams: "SYMARECTA" HAMMER LONDON

JONWINDOWS

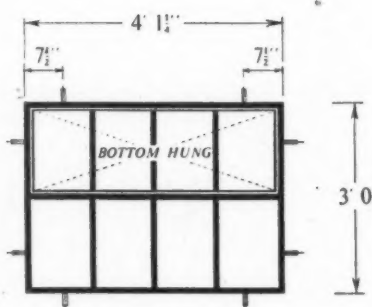
For Agricultural Buildings

IN THREE STANDARD SIZES :—

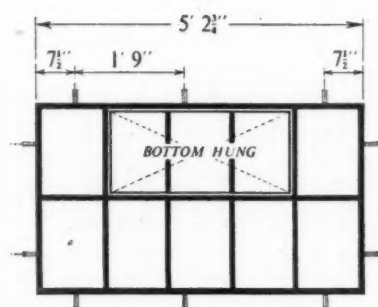
Type
AG 1



Type
AG 2



Type
AG 4



To Standard Specifications
RUSTPROOFED BY ZINC-SPRAY PROCESS
Approved by the Ministry of Agriculture & Fisheries

Available for IMMEDIATE DELIVERY!

JOHN WILLIAMS & SONS (Cardiff) LTD.

EAST MOORS, CARDIFF. Tel.: 2501 Grams: "METAL CARDIFF."

London Office :

BANK CHAMBERS, FINSBURY PARK, N.4.

Tel.: Archway 2294.

13535

xiv



SERVICE in GLASS by CLARK-EATON



INFORMATION on the various types of Glass manufactured, and their applications, is available in convenient form in the Clark-Eaton Information Booklet. The purpose of this announcement is to outline Clark-Eaton service in the fashioning, processing and delivery, and/or fixing of Glass in its cut and finished form. This service may be summarised as follows:—



I. SUPPLY OF GLASS

All standard types for various building trade and other applications are cut to requisite sizes and shapes, and delivered to site, including: PLATE, SHEET, FIGURED ROLLED, CATHEDRAL, CAST, WIRED CAST, WIRED PLATE, REEDED, PRISMATIC, HEAT-RESISTING SHEET, "VITROLITE," MARMORITE, POT OPAL, "ARMOURPLATE," ANTIQUES, ROSETINT PLATE, INSULIGHT HOLLOW GLASS BLOCKS, "FLYGLASS," SLATES and TILES.

II. GLAZING

- (a) **For Shopfitting:** PLATE GLASS WINDOWS (extra large sizes a speciality), BENDS, BARLESS MITRED FRONTS, WINDOW ENCLOSURES, SHOWCASES, DOORS, TRANSOMS, FACIAS, STALLBOARDS, PILASTERS, etc.
- (b) **For Housing:** Contracts undertaken for TEMPORARY or PERMANENT HOUSING, FLATS, CONVERSIONS, WAR DAMAGE REPAIRS.
- (c) **For Commercial and other Buildings:** Windows, Roofs and Skylights in BANKS, OFFICES, FACTORIES, SCHOOLS, HOSPITALS, POWER STATIONS, POST OFFICES, etc.

III. WALL AND CEILING FACING IN GLASS

Complete installations in $\frac{1}{8}$ in. "Vitrolite," an opaque material with a brilliant fire-finished surface. Colours at present available: Black, White, Green, Green Agate, Primrose. Extensively used for FOOD FACTORIES, MILK DEPOTS, BREWERIES, CAFES, CLOAKROOMS, BATHROOMS.

"Vitrolite" can be used for CEILINGS, and there is also available for this purpose 21 oz. Pot Opal Sheet.

Black Marmorite, $\frac{1}{8}$ - $\frac{1}{2}$ in., $\frac{1}{2}$ in., and $\frac{3}{4}$ in., is suitable for PILASTERS, STALLRISERS, BAR-FRONTS, COUNTER TOPS, etc.

IV. INSULIGHT HOLLOW GLASS BLOCK INSTALLATIONS

Complete planning and fixing of this modern form of construction is undertaken. Glass blocks are suitable for PARTITIONS IN OFFICES OR INDUSTRIAL BUILDINGS, STAIRCASE AND CORRIDOR TREATMENTS, SECTIONS OF WALLS OF DAIRIES, HOSPITALS, SCHOOLS, STORES AND PRIVATE HOUSES.

High insulating value for temperature and sound. Good light transmission and fire-resisting properties.

V. GLASS PROCESSING ("Work-on Glass")

The following processes are carried out: BEVELLING, EDGE-POLISHING, BRILLIANT CUTTING, DRILLING, SILVERING, ACID EMBOSING, SANDBLASTING, WRITING, PAINTING AND FIRING.

These processes are used to shape, to decorate, to obscure, to facilitate fixing and to produce:—

Manufactured Products—such as MIRRORS, DECORATIVE PANELS, SHELVES, SPLASHBACKS, TABLE TOPS, SHOP FITTINGS, FACIAS, SIGNS; also BANK, PUBLIC HOUSE AND OTHER WINDOWS.

VI. STAINED GLASS, LEADED LIGHTS AND COPPERLIGHTS

- (a) Designs submitted for STAINED GLASS FOR CHURCH AND HERALDIC WORK. Skilled Artists on permanent staff. Every operation, including firing of colours, is completed in Clark-Eaton workshops.
- (b) LEADED LIGHTS FOR DOMESTIC AND SHOP WORK can be promptly supplied.
- (c) COPPERLIGHTS, Decorative or Plain to L.C.C. Fire-Resisting Specification, are manufactured in newly installed up-to-date plant.

VII. VENTILATION THROUGH GLASS

For ventilation of glass-enclosed premises, three patterns of adjustable Glass Ventilator are manufactured: CIRCULAR HIT-OR-MISS TYPE (revolving disc) with either round or pear-shaped holes; CIRCULAR SWING TYPE (bronze frame, central pivot); LOUVRE TYPE.

VIII. TECHNICAL SERVICE

- (a) **Specialist Representatives**, well versed in the technicalities of glass and its applications, are always available for consultation. In view of constantly changing conditions it is advisable to discuss requirements as they arise. Clark-Eaton will always be pleased to report on the current position.
- (b) **Literature.** For fuller information and data on types, applications and treatments of glass, please send for Information Booklet.

JAMES CLARK & EATON LTD.

(Amalgamating James Clark & Son, Ltd., and Eaton, Parr & Gibson Ltd.)

SCORESBY HOUSE, GLASSHILL STREET, BLACKFRIARS, LONDON, S.E.1

Phone: WATERloo 4611 (15 lines)

CANTERBURY: Orchard Street. Telephone: 2407

EASTBOURNE: Waterworks Road. Telephone: 3980 (2 lines)

BOURNEMOUTH: Kemp Road, Winton. Telephone: Winton 280 (2 lines) READING: Basingstoke Road. Telephone: 81681 (2 lines)



SANITARY EQUIPMENT

at
BOURNE SECONDARY MODERN SCHOOL
SOUTH RUISLIP

Introducing "SANITARY APPLIANCES FOR SCHOOLS" by FROY

This up-to-date catalogue illustrates and describes every item of sanitary equipment specially designed for all categories of school building.

A few suggested layouts of toilet rooms for all classes of schools are also incorporated in the catalogue, and another section is devoted to domestic-type sanitary equipment suitable for teachers' quarters.

The catalogue is collated on the loose-leaf principle to facilitate the insertion of additional pages as new designs and developments are introduced.

We shall be pleased to forward a copy of this catalogue on request.

Architect, Howard V. Lobb, F.R.I.B.A., for the Middlesex County Council

This new school is recognised to be the very last word in up-to-date planning and it is significant that the Architect has specified Sanitary Fittings by Froy. We have considerable experience in the supply of Sanitary Appliances for Schools, and our services are always at the disposal of Architects who are engaged in the erection or extension of such buildings.

by FROY



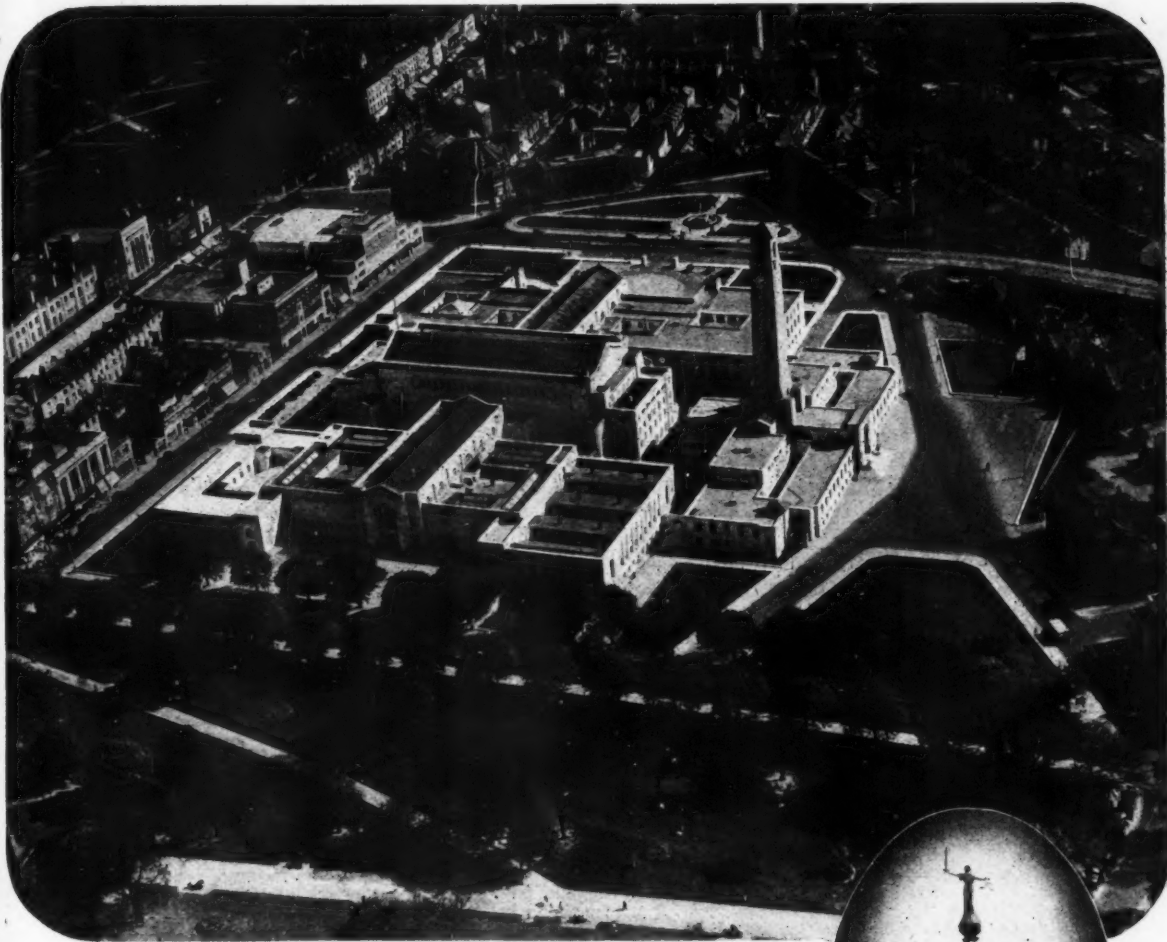
W.N.FROY & SONS LTD

(Established 1850)

BRUNSWICK WORKS, HAMMERSMITH, LONDON

Showroom Entrance, 64, King Street, W.6
Telephone: RIVERSIDE 4101 (24 lines)





SOUTHAMPTON CIVIC CENTRE.

E. BERRY WEBBER, ESQ., A.R.I.B.A.



Besides covering the recently completed Southampton Civic Centre, Braby Copper Roofing was also used on the Old Bailey over 40 years ago.

COPPER ROOFING

by

BRABY



Also at
BELFAST and PLYMOUTH

FRED^K BRABY & CO. LTD.

| | | | | |
|-----------|-------|---|-------|-------------------------------|
| LONDON | - - - | Fitzroy Works, 352-364, Euston Road, N.W.1 | - - - | Telephone: Euston 3456 |
| GLASGOW | - - - | Ida & Victoria Works, Deptford, S.E.8 | - - - | Telephone: Tideway 1234 |
| LIVERPOOL | - - - | Eclipse Works, Petershill Road, Glasgow, N. | - - - | Telephone: Springburn 5151 |
| BRISTOL | - - - | Havelock Works, Aintree, Liverpool, 10 | - - - | Telephone: Aintree 1721 |
| EXPORT | - - - | Ashton Gate Works, Bristol, 3 | - - - | Telephone: Bristol 64041 |
| | - - - | 110, Cannon Street, London, E.C.4 | - - - | Telephone: Mansion House 6034 |



... and they're available NOW!

C.S.A. Units can be selected and grouped to cover every kitchen plan—for one house or a thousand. Every unit in the C.S.A. range is precision designed and engineer built, passed by a fully qualified Inspection Staff. C.S.A. Units are built entirely of stainless steel and aluminium, eliminating corrosion troubles, and they will last indefinitely. The full range is illustrated in our brochure, available on application. Copies will be sent by Air Mail to Overseas enquirers.



UNLIMITED FLEXIBILITY IN KITCHEN PLANNING

C.S.A.

Industries Limited

This is a typical Unit of the many types available — a pressed stainless steel sink and drainer mounted on an aluminium under-frame with drawer, supported by wall-brackets. Finished in Silvasheen, cream, pastel blue or green.

WARWICK
PHONE: WARWICK 500 & 501
GRAMS: CONSCREW, WARWICK

2 HEADS are better than 1



Most electrical engineers in the business know Pritchett & Gold, not only as makers of dependable batteries but as people who actually enjoy having their technical brains picked. Part I of the service we provide is a staff of specialists whose job is either to prepare complete and detailed specifications

for any kind of battery installation or merely to give an impartial 'second opinion' on any existing scheme. Part II provides for complete equipment and installation and Part III for regular inspection, maintenance & replating

PRITCHETT & GOLD and E.P.S. CO LTD
50 GROSVENOR GARDENS LONDON SW1

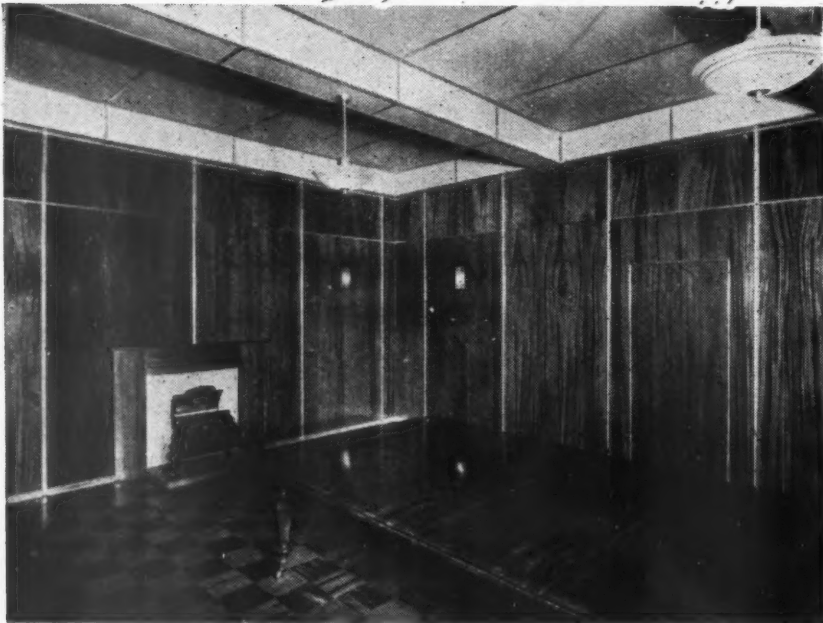
Batteries and Control Panels for Emergency Lighting

P.G.13048

TIMBER—OLD AND NEW



(Above) Room from Clifford's Inn (late 17th century). Now in Victoria and Albert Museum. Drawing by permission of Architectural Press.



(Left) Boardroom of the Meadow Dairy Co., Ltd., Nottingham.

The room from Clifford's Inn, with its wide oak panels, heavy mouldings and elaborate carving, is a beautiful example of the use of timber—but it is a museum piece. Its modern counterpart is the Meadow Dairy Boardroom. Here is timber again, beautifully used, but this time timber in one of its newest forms, a veneered plastic constructional panel—easy to erect, easy to keep clean, depending for its decorative effect on simplicity of line and on the natural grain and texture of the mahogany.

Copies of this series of advertisements may be obtained on application

DENNY MOTT & DICKSON LTD.

ADELAIDE HOUSE • KING WILLIAM STREET • LONDON • E-C-4

TELEPHONE MANSION HOUSE 7961

Branche. and Subsidiaries at:

BELFAST • BIRMINGHAM • BLACKBURN • BRISTOL • CARDIFF • DEWSBURY • GLASGOW • GRAVESEND • HULL
KING'S LYNN • LETCHWORTH • LIVERPOOL • MANCHESTER • NEWCASTLE • PRESTON • SOUTHAMPTON

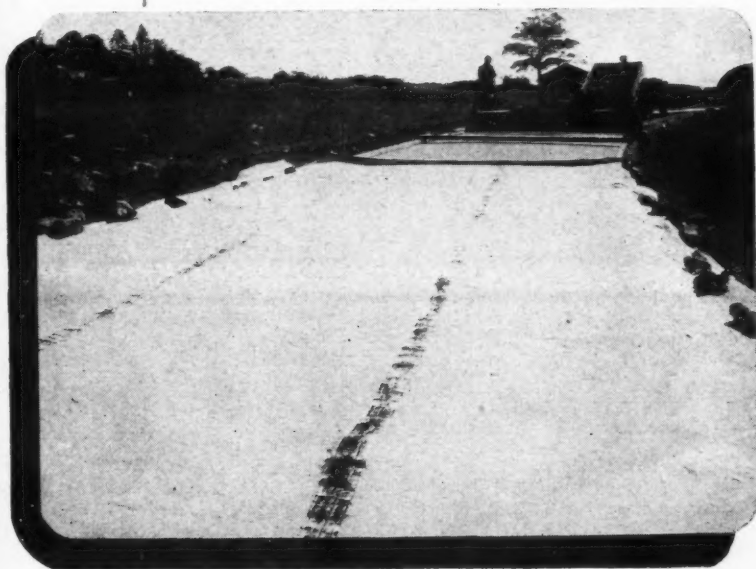


DMD XL/5-48

SISALKRAFT

Concrete Curing Blankets

(PREFABRICATED)



The supreme building paper. Reinforced, waterproof, pliable and clean. Of proven dependability in its many applications. Restricted in supply but ample in performance. Technical information on request.

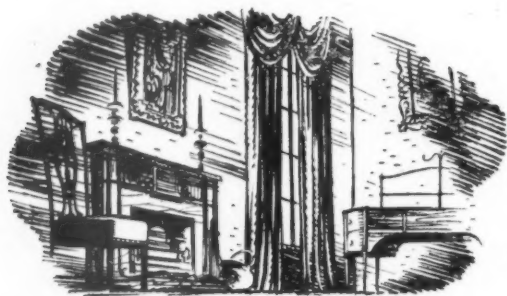


Sole Distributors
for British Sisalkraft Ltd.

J.H.SANKEY & SON.LTD

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

TELEPHONE: HOLBORN 6949 (20 lines) TELEGRAMS: BRICKWORK, ESTRAND, LONDON



Between the grace and beauty of an 18th Century drawing room and the clean lines and labour-saving simplicity of a modern flat, stretches a wide gulf of time. But while style and taste change with changing fashion, certain products—like Nobles and Hoare's paints and varnishes—remain unchanged in quality



and excellence. Over 160 years ago, ladies and gentlemen of discrimination were finding that Nobles and Hoare's paints enhanced the beauty of their homes. Today, the demand is as great as ever for finishes with a long tradition of quality.

NOBELIN ENAMEL PAINT · ALBAGLOSS SUPERFINE WHITE ENAMEL · ALBAMATTE FLAT OIL PAINT · BODICOTE READY MIXED UNDERCOAT · VARNISHES OF HIGHEST QUALITY

Nobles & Hoare Ltd.

Established 1787

Varnish, Paint and Cellulose Lacquer Manufacturers

WOODBIDGE WORKS · KINGSTON ROAD · LEATHERHEAD · SURREY
Tel.: Leatherhead 2450 & 2992

No 1

THE FACTORY OF HOLOPLAST LIMITED,
NEW HYPHE, KENT.

Architect: Denes Pogany, Esq., A.R.I.B.A.



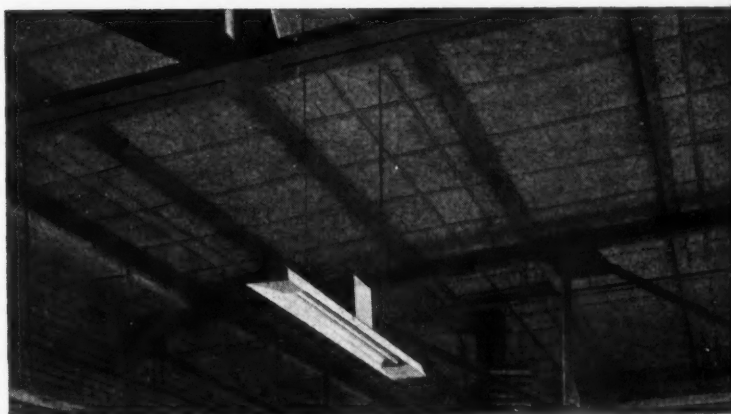
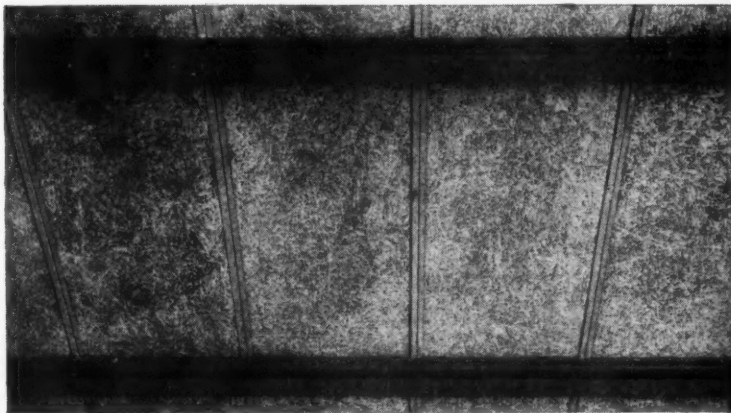
FACTORY

thermal & acoustic INSULATION

at low cost with good appearance

In this light-weight roof, MARLITH SLABS are supported over steel purlins by transverse and longitudinal "tee" pieces of pressed steel, the latter being secured to the purlins by clips. The roof finish consists of a $\frac{3}{4}$ " cement and sand screed and 2 layers of 1-ply felt. The underside of the Marlith Slabs is finished with "Snowcem"

MARLITH Wood Wool Building Slabs conform to B.S. 1105 and are made in the standard sizes of 6' 0" x 2' 0" x 1", 1 $\frac{1}{2}$ ", 2" and 3". The slabs give an excellent key for plaster or cement rendering. These light weight slabs provide a high degree of thermal and acoustic insulation when used for lining walls or roofs. Slabs of 2" or more thickness can be used as self-supporting non-loadbearing partitions



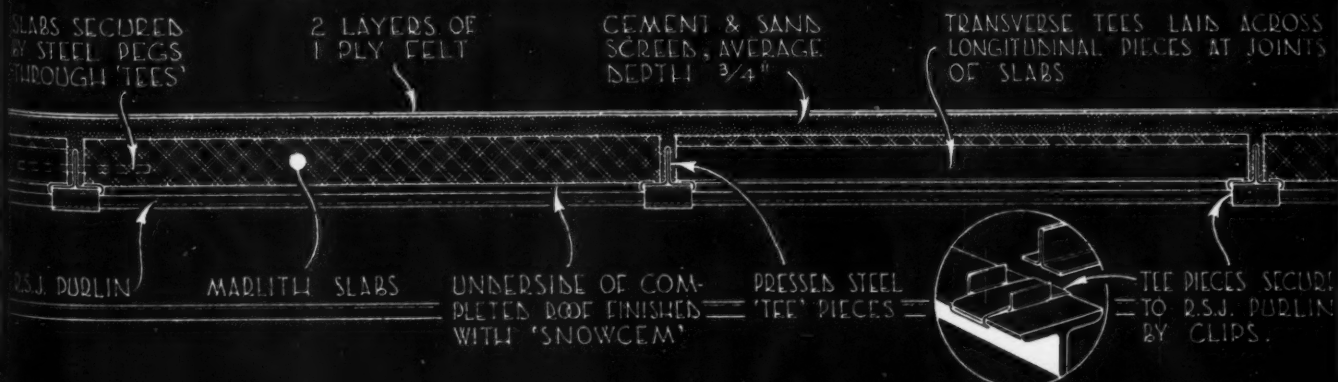
MARLITH

Wood Wool Building Slabs

THE MARLEY TILE COMPANY LTD.

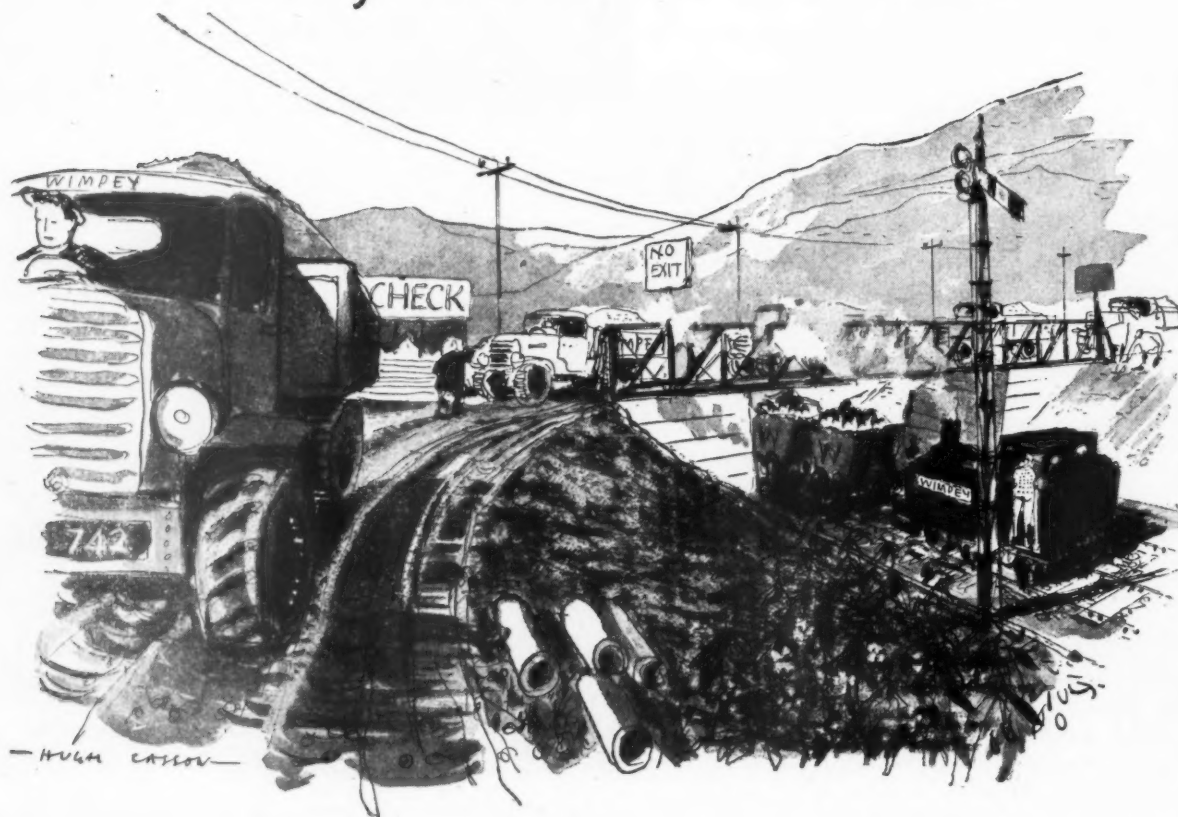
SEVENOAKS KENT. Works throughout the country

M.M.1



WIMPEYS AT WORK

The job must be fed!



“Never keep the site waiting”. That’s a Wimpey maxim. Once work starts, men, plant and materials for every stage must arrive just where they’re needed, just when they’re needed, and be there just as long as they’re needed.

This calls, not only for huge central pools of key-manpower and plant, but for enough transport to shift anything anywhere anytime. And that’s one reason why Wimpey jobs get done quickly, smoothly and at minimum cost. However far afield the job, we feed it well, and its meals are punctual.

We have about 1,000 vehicles in operation. The bulk of the fleet is in this country, from cars, tippers and ‘International’ tractors to water tenders, mobile laboratories and mobile canteens. And many of our yellow vehicles are working in Kuwait, Iraq, Egypt and Portugal.

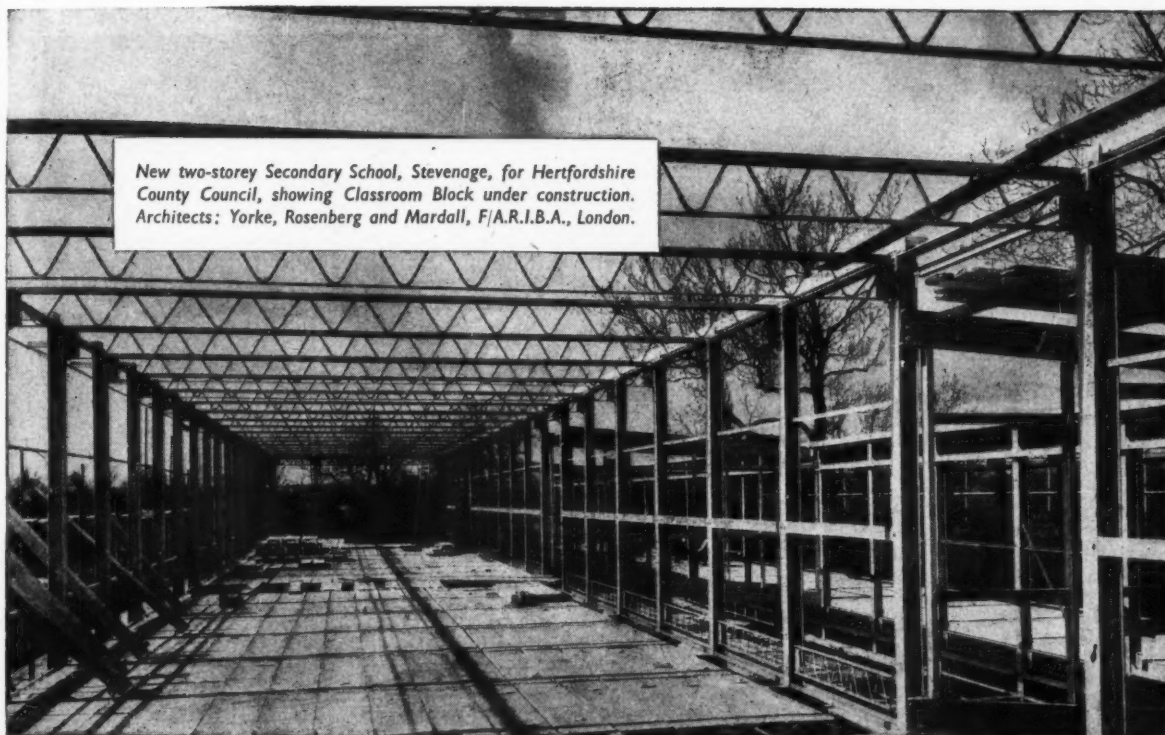
We have British regional offices at Birmingham, Cardiff, Manchester, Newcastle, Nottingham,

Edinburgh and Glasgow; and large foreign depots at Cairo, Baghdad and Singapore. And just as we have these regional offices with their special local knowledge to supervise the job on the spot, so we have repair shops all over Britain to keep our vehicles in order. This combination—of great central resources with close regional control—means speed, economy and good work.

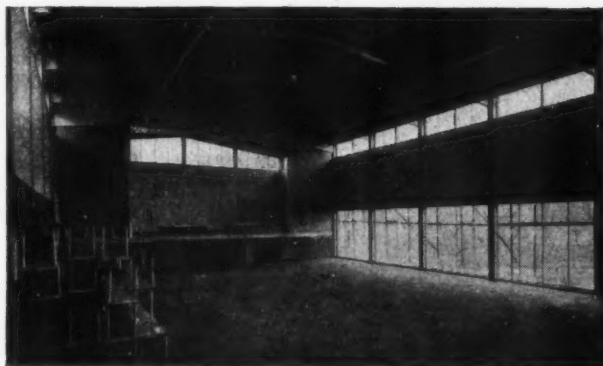
WIMPEY

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

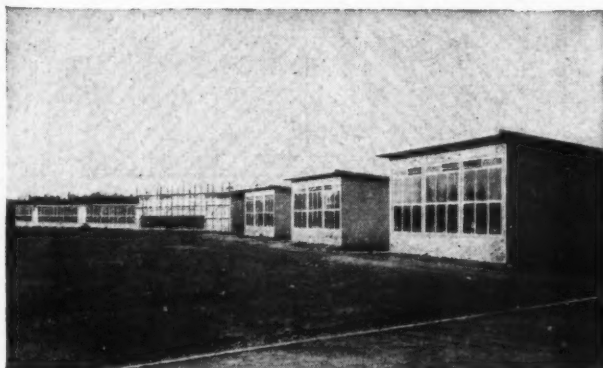
GEORGE WIMPEY AND COMPANY LIMITED, TILEHOUSE LANE, DENHAM, MIDDLESEX M.3



New two-storey Secondary School, Stevenage, for Hertfordshire County Council, showing Classroom Block under construction. Architects: Yorke, Rosenberg and Mardall, F/A.R.I.B.A., London.



New Primary School, Cheshunt, Hertfordshire, for Hertfordshire County Council, showing internal construction of Stage and Assembly Hall. County Architect: C. H. Aslin, F.R.I.B.A., M.I.Struct.E.



New Junior Mixed School, Cheshunt, Hertfordshire, for Hertfordshire County Council. General external view showing Classroom Blocks and Assembly Hall nearing completion. County Architect: C. H. Aslin, F.R.I.B.A., M.I.Struct.E.

STEEL-FRAMED SCHOOLS. "Presweld" Standard components can be supplied as complete frames or with floor and roof beams for traditional brick-built schools.

HILLS "PRESWELD" is the trade name given to a patented type of construction designed to obtain structural steel components of maximum strength with minimum weight. The components are fabricated and welded from standard hot-rolled sections into lattice members which can be fixed and suitably braced together to form a self-supporting steel framework.

Based on the 8' 3" modular grid, almost any size of building can be plotted from standard parts and the framing is suitable for various types of cladding and roof coverings. In conjunction with the framework Hills can also supply metal windows and door frames, gutters, fascias and "Hilcon" lightweight precast concrete roof, floor and wall units.

All "Presweld" components are galvanized after fabrication in Hills own plant.

Standard
HILLS
Presweld
TRADE MARK
STEEL FRAMEWORK
PATENT NO. 574559

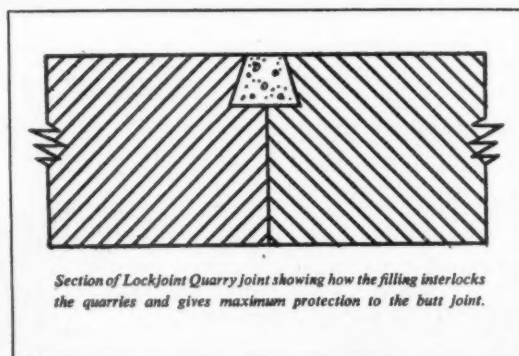
**STEEL COMPONENTS FOR
PERMANENT SCHOOL, HOUSE
AND FACTORY CONSTRUCTION**

AND LIGHT INDUSTRIAL BUILDINGS WITH "HILCON"
PRECAST CONCRETE ROOF, FLOOR AND WALL UNITS

Designed and Produced by HILLS PATENT GLAZING COMPANY LIMITED
ALBION ROAD, WEST BROMWICH. PHONE: WEST BROMWICH 1025 (7 lines). LONDON OFFICE: 125 HIGH HOLBORN, W.C.1. PHONE: HOLBORN 8005/6



Neither fire, water, vermin nor acids can affect Wheatly "TRITON" Quarry Tiles. They are economical in first cost, easy to lay without elaborate foundations, and require no maintenance. While quarries for export must be our first priority, we are doing our best to supply essential needs in the home market. For floors subject to exceptionally heavy traffic, or to the action of acids, "TRITON" Lockjoint Patent Quarries are recommended. Full particulars of their properties and uses are given in a leaflet "Acid Resisting Floors", which is freely obtainable on application. *The Lockjoint principle is illustrated in the sketch on right.*



Section of Lockjoint Quarry joint showing how the filling interlocks the quarries and gives maximum protection to the butt joint.

See our exhibit at the Building Centre, 9 Conduit Street, London, W.1.

WHEATLY AND COMPANY LIMITED

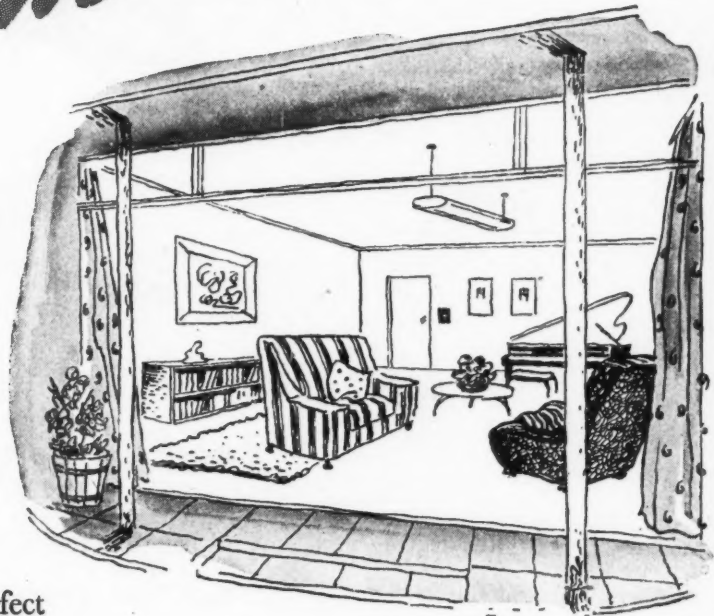
SPRINGFIELD TILERIES • TRENT VALE • STOKE-ON-TRENT

MANUFACTURERS ALSO OF SINGLE-LAP ROOFING TILES, RIDGE TILES (BLUE AND RED) AND BRIQUETTE FIREPLACES

PEACH ... A REALLY

Warm - Colour

FLUORESCENT
TUBE!



THE NEW ATLAS "PEACH" TUBE is the perfect

tube for intimate and domestic surroundings ... the tube that brings a new kind of soft and friendly fluorescent into homes and clubs, beauty and fashion salons, offices and restaurants,

THE NEW ATLAS "PEACH" TUBE
FITS ALL MAKES OF FITTINGS

Available now in 5 ft., 4 ft., 3 ft. and the new
2 ft. 40 watt. Write for further details.

etc. The new ATLAS "Peach" tube is the result of extensive research and colour tests with many types of users. It is restful to the eyes, flattering to the complexion, yet has all the economy and efficiency of ordinary fluorescent.

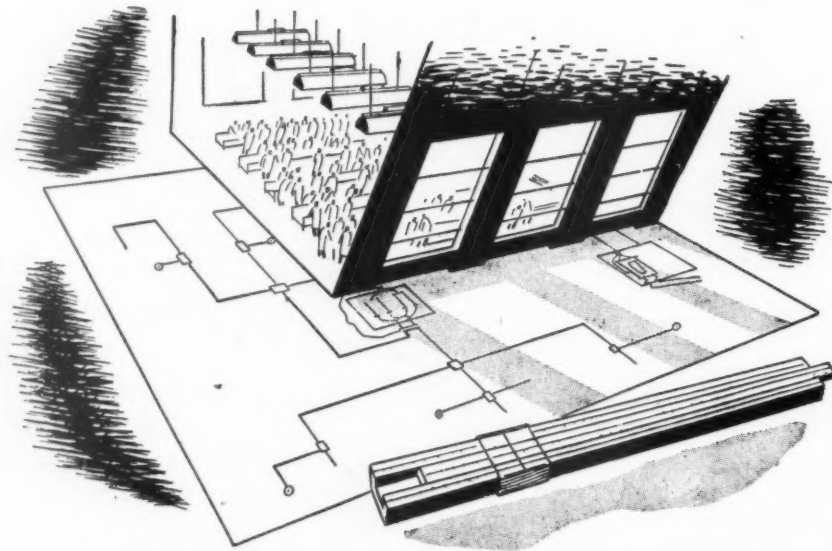
ATLAS FLUORESCENT

FOR INDUSTRIAL AND DOMESTIC LIGHTING

THORN ELECTRICAL INDUSTRIES LTD., 105-109 JUDD ST., W.C.I. TEL: EUSTON 1183
NORTHERN BRANCH: STEVENSON SQUARE, MANCHESTER, 1. TEL: CENTRAL 3185



164



Lighting the way for Industry

PLANNED lighting has an important contribution to make to the paramount need for maximum productive efficiency allied to economy of operation.

Architects are invited to draw on the specialized knowledge and experience of the Ekco-Ensign Lighting Advisory Service, whose engineers are available for discussion of recent developments in industrial and commercial lighting technique.

NOW, while daylight is still plentiful, is the time to plan efficient lighting so necessary to the success of next winter's production. An enquiry by letter or telephone to any of the following offices will be dealt with promptly and without obligation.

Ekco-Ensign

ELECTRIC LTD

LIGHTING ADVISORY SERVICE

Southern : 5 Vigo Street, London, W.1

Northern : Kent Street Works, Preston, Lancs

Western : 50 Bridge Street, Cardiff

Telephone : REGent 2601

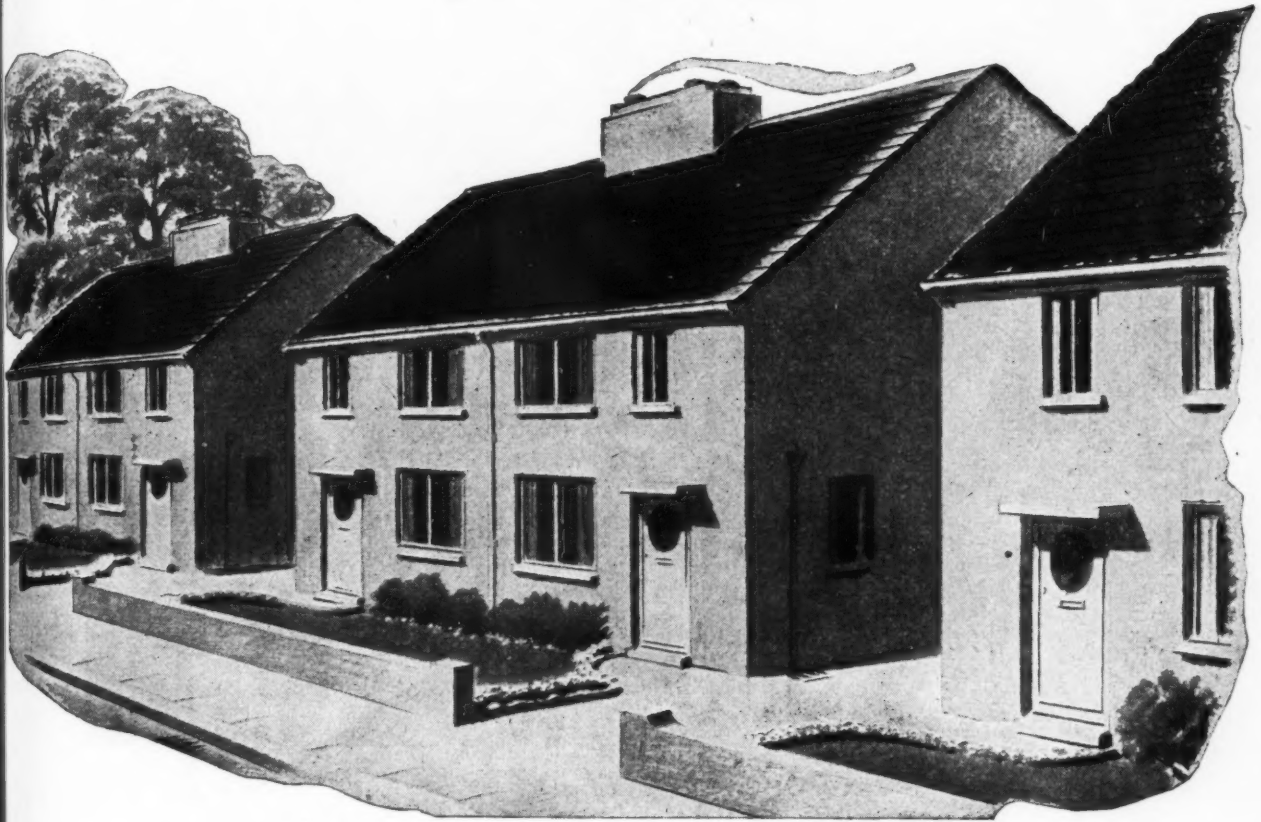
Telephone : Preston 4628

Telephone : Cardiff 5426

Which Glass would you specify?

REQUIREMENT:

A rush job, for general glazing of a hundred low-priced, semi-detached workmen's dwellings adjacent to new factory. Main object to admit light and exclude weather, without any superfluous frills. No large windows and all to be fitted with standard hinged metal casements.



SPECIFICATION: 24 oz. SHEET

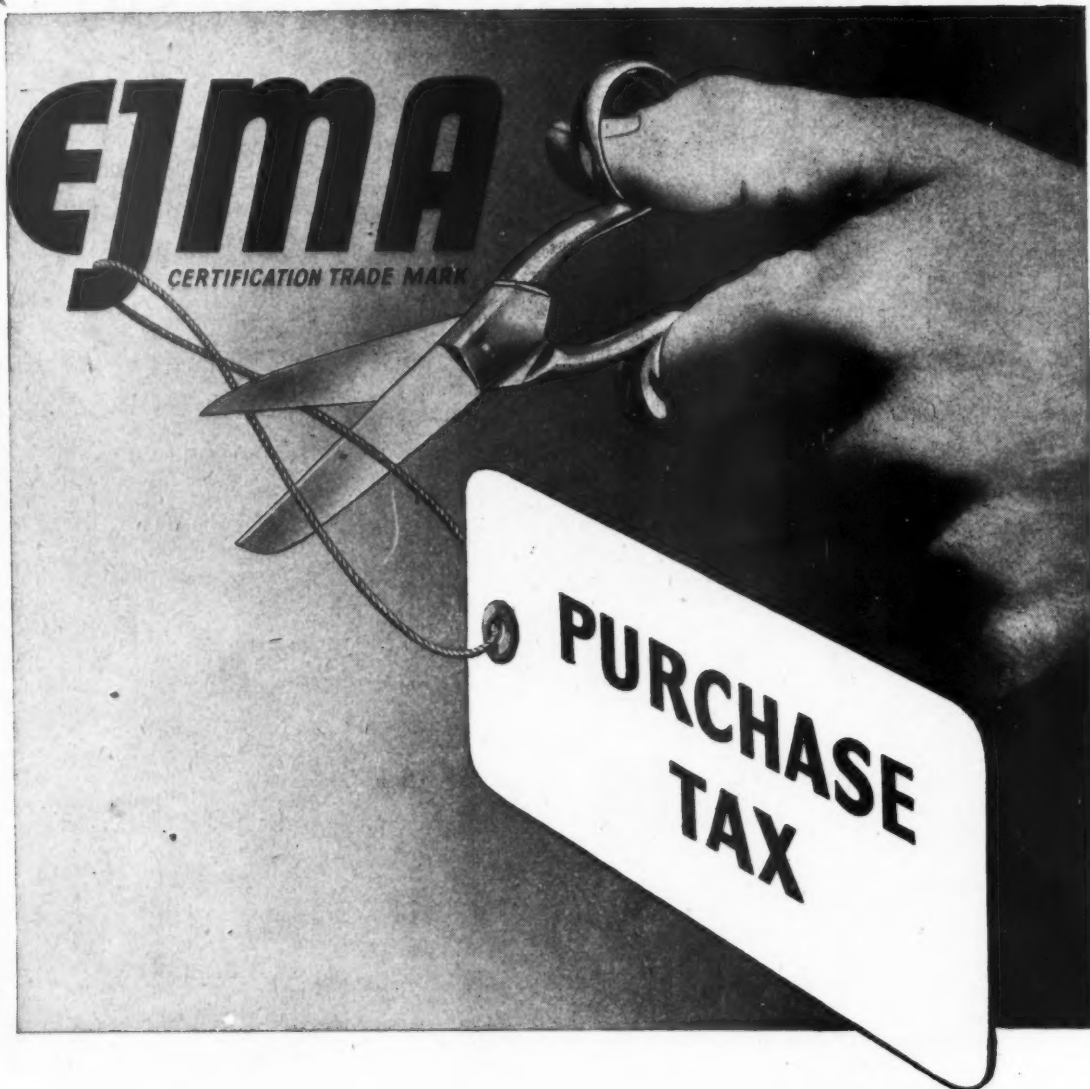
REASONS:

This being in the nature of a mass-production job, sheet cut to standard sizes was the obvious selection, bearing in mind that costs were to be kept as low as possible. As the houses were well shielded from the wind and the windows were of a small area, a thinner glass might have been used, but breakage risks from slamming was taken into consideration and the decision was made in favour of 24-ounce.



For all queries about the uses of glass in architecture, write to our Technical Department at St. Helens or pay a visit to our London showrooms at 63 Piccadilly, W.1.

PILKINGTON BROTHERS LTD. ST. HELENS, LANCs.



EJMA Kitchen Units of the types which are supplied to house builders and which are for installation in sets in new houses, may be supplied free of Purchase Tax.

This is the official ruling of the Board of Customs and Excise following a full investigation into a slight variation of the specification for EJMA Kitchen Units.

The well-known flexibility of planning of EJMA Units and their characteristically clean and efficient design will not be affected.

You may still specify EJMA Kitchen Units with complete confidence.

EJMA
CERTIFICATION TRADE MARK

**KITCHEN
UNITS**

The Trade Mark is a guarantee of quality since it may only be used by licensed producers who undertake to conform to the designs and specifications of the Association, a list of whom may be obtained from the Secretary of the Association.

THE ENGLISH JOINERY MANUFACTURERS ASSOCIATION (INCORPORATED)

SACKVILLE HOUSE • 40 PICCADILLY • LONDON W.1 • REGENT 4448

STRENGTH GIRDERS •
PARTITIONS • *with* **WEIGHT SAVING**

LIGHT RAILWAY EQUIPMENT •

SCAFFOLD TUBING • RODS •

SHUTTERING •

COLUMNS •

JOISTS

• STANCHIONS •

MOULDINGS • WIRE •

ROOF TRUSSES • ANGLES

• CONDUIT TUBING • TUBES

DURALUMIN REGD. TRADE MARK

all these - and many more

CAN BE DESIGNED AND MADE

IN **STRONG LIGHT ALUMINIUM ALLOYS**

with amazing advantages in the building industry

- WEIGHT SAVING
- EASE OF HANDLING
- LOWER TRANSPORT COSTS
- DOES NOT RUST
- WITHSTANDS ABRASION
- EARLY DELIVERY
- LOWER MAINTENANCE COSTS
- PLEASING APPEARANCE



OUR DEVELOPMENT DEPT. WILL GLADLY SUPPLY
INFORMATION TO INTERESTED PRINCIPALS

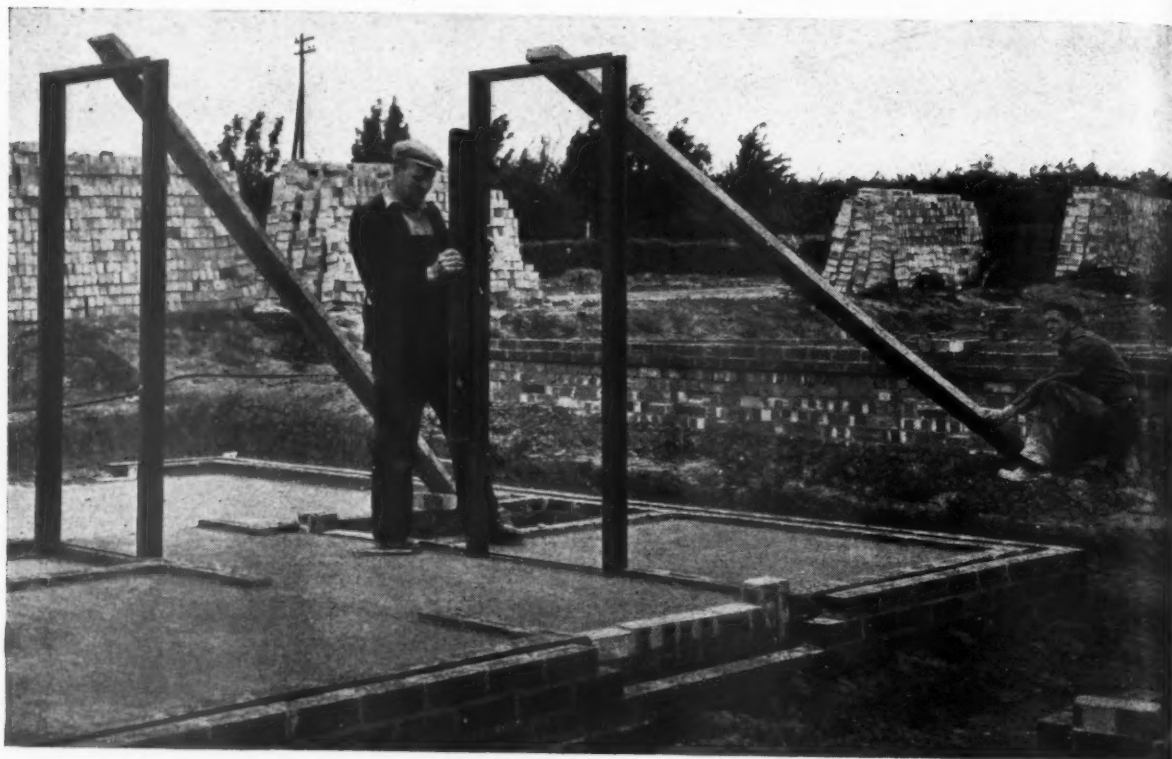
JAMES BOOTH & COMPANY, LTD.

(Pioneers of strong, light aluminium alloys in this country)

ARGYLE STREET WORKS,

NECHELLS,

BIRMINGHAM 7.



SAVE 14 CUBIC FEET
OF TIMBER PER HOUSE
BY USING



HOPE'S
STEEL
DOOR
FRAMES

Send for particulars from:

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

In con-
pro-w-
subscr

D
AU

Titles
paper
by th

BRIC
(Spons

CAM

LON
South
Museu

Displ
Applia
Condu
This c
4-mont

Gas i
of gas
laundry
and h
Centre
BGC.)

Photo
Royal
Princes
Photog
to 5 p

Exhib
Windm
Museu
Victori

Sport
and A
Games

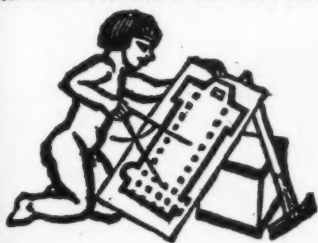
Exhib
College
Cromw
Univer
Sunday

Confe
lems.
Coloniz
cussed.
Westm

Recep
pean R
ning.
Street,

Intern
on I.A
Hall, S

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 be added to the subscription list as soon as possible. Subscription rates: by post in the U.K. or abroad, £1 15s. 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 JULY AUGUST AND SEPTEMBER

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 given in the glossary of abbreviations on the front cover.

BRIGHTON. *A Regency Exhibition.* In the Royal Pavilion, Brighton. (Sponsor, County Borough of Brighton.) UNTIL AUG. 14

CAMBRIDGE. *Town and Country Planning Summer School.* (Sponsor, T.P.I.) AUG. 23-28

LONDON. *Darkness into Daylight Exhibition.* At the Science Museum, South Kensington. (Sponsor, Science Museum.) UNTIL SEPTEMBER 30

Display of Domestic Solid Fuel Burning Appliances. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, CUJC.) This display is changed at approximately 4-monthly intervals.

PERMANENT EXHIBITION

Gas in the Design for Living. Exhibition of gas cookers, space and water heaters, laundry equipment and portable cooking and heating appliances. At the Building Centre, 9, Conduit Street, W.1. (Sponsor, BGC.)

PERMANENT EXHIBITION

Photography in Design Exhibition. At the Royal Photographic Society's House, 16, Princes Gate, S.W.7. (Sponsors, Royal Photographic Society and DIA.) 9.30 a.m. to 5 p.m. UNTIL JULY 30

Exhibition of Photographs and Models of Windmills. At the Victoria and Albert Museum, South Kensington. (Sponsor, Victoria and Albert Museum.)

UNTIL AUG. 1

Sport in Art Exhibition. At the Victoria and Albert Museum. (Sponsor, Olympic Games Exhibition Committee.)

UNTIL AUG. 14

Exhibition of the Polish University College School of Architecture. At 7, Cromwell Road, S.W.7. (Sponsor, Polish University College.) 10 a.m. to 7 p.m.; Sundays, 2 to 6 p.m. UNTIL JULY 28

Conference on Civil Engineering Problems. Papers on subjects of importance in Colonial development will be read and discussed. At the ICE, Great George Street, Westminster, S.W.1. (Sponsor, ICE.)

UNTIL JULY 23

Reception of World Study Tour on European Reconstruction and Community Planning. At the Housing Centre, 13, Suffolk Street, S.W.1. (Sponsor, HC.) JULY 27

International Exhibition and Conference on Landscape Architecture. At County Hall, S.E.1. (Sponsor, ILA.) AUG. 9-12

International Congress of Architectural Students. (Sponsor, Arch. SA.)

AUG. 24 TO SEPT. 2

Machine Tool and Engineering Exhibition. At Olympia. (Sponsor, Machine Tool Trades Association.)

AUG. 26-SEPT. 11

TCPA Dutch Tour. (Sponsor, T.C.P.A.)

FROM SEPTEMBER 11

Biology and Civil Engineering Conference. September 21. Morning: *Causes, Effect and Prevention of Soil Erosion.* Afternoon: *The Effect of Vegetation on Drainage and Floods.* September 22. Morning: *The Effect of Vegetation in Stabilizing Artificial Slopes.* Afternoon: *The Use of Vegetation to Stabilize Sand Dunes.* September 23. Morning: *The Effect of Vegetation on the Settlement of Roads and The Effect of Vegetation on The Settlement of Structures.* Afternoon: *Algal Growth and Engineering Design.* At the ICE, Great George Street, Westminster, S.W.1. (Sponsor, ICE.)

SEPT. 21-23

MAIDSTONE. J. Singleton-Green. *Concrete Troubles.* At the Maidstone Technical Institute, Tonbridge Road, Maidstone. (Sponsor, S.E. Society of Architects, Maidstone Group.) 7 p.m. OCT. 7

PRESTON. *MOW Site Plant Demonstration.* (Sponsor, MOW.)

JULY 27-29

COMPETITIONS

RIBA Prizes for Public and Secondary Schools: A total of 10 guineas in prizes is offered for: 1, The best original illustrated essay dealing with a building or group of buildings with which the competitor is personally acquainted; 2, the best sketches or scale drawings of a building or part of a building in pencil, ink or colour, maximum size 30 in. by 22 in. Assessors: H. T. Cadbury Brown, Hugh Casson, E. R. Jarrett. Further information from the Secretary, RIBA, 66, Portland Place, London, W.1. Entries by October 7.

RSI Prize Competitions: John Edward Worth Prize (£40) for an essay on *Practical Improvements of Appliances or Inventions in or about Dwelling-Houses*, and John S. Owens Prize (£15) for an essay on *Atmospheric Pollution.* Apply Secretary, Royal Sanitary Institute, 90, Buckingham Palace Road, London, S.W.1, for general conditions. Entries by December 31.

NEWS

THURSDAY, July 22, 1948
No. 2789 VOL. 108

| | |
|--|----|
| News | 79 |
| TUG Competition Winner .. | 80 |
| Round the Table: 5. Standardization in Building .. | 81 |
| Astragal's Notes and Topics .. | 85 |
| Letters from Readers .. | 87 |
| Variation in Utility Furniture .. | 88 |
| In Parliament | 88 |
| House at Hertford. Designed by F. K. Hicklin | 89 |
| Societies and Institutions .. | 92 |

Information Sheets:

| | |
|--|-----------------|
| 33.U1 Wrought Copper and Zinc Rainwater Goods to B.S. 1431: 1948 | To face page 92 |
| 32.C1 New World Gas-Heated Circulator No. C28: Details | |

| | |
|-----------------------|----|
| TUG Competition | 98 |
|-----------------------|----|

Technical Section:

| | |
|--------------------------|----|
| Information Centre | 99 |
|--------------------------|----|

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.

Any feature marked with more than two stars is very big building news indeed.

600 HOUSES FOR MINERS are to be built in Fife in 1948-49.

These houses are for men who will be employed in the expanded coalfields in the county. At a meeting in St. Andrew's House recently with Mr. Arthur Woodburn, Secretary of State for Scotland, it was agreed that Fife County Council should undertake the erection of the houses, on the understanding that these will be built in areas designated by the NCB. The actual sites within these areas will be agreed upon between the County Council and the Coal Board, and the houses will be allotted half to incoming miners and half to resident miners peeding new homes.

XIVTH OLYMPIAD 1948

Empire Pool Wembley



This building, two acres
in extent, was constructed

by

HOLLOWAY BROTHERS

(LONDON) LIMITED

BUILDING AND CIVIL ENGINEERING CONTRACTORS

MILLBANK

LONDON

(also at Nottingham and Baghdad)

From AN ARCHITECT'S Commonplace Book

THE GOTHIC ROOTS OF THE HIGHLY DEVELOPED CRAFT. [From *Mechanization Takes Command*, by S. Giedion (Oxford University Press, New York).] Strife and turmoil notwithstanding the European development had flowed on unbroken until mechanization entered upon the scene. The highly developed craft has its roots in the late Gothic period. Its rise is inseparably bound up with the revival of municipal life. The need for organized living within a community explains why in the thirteenth and fourteenth centuries city life that had dwindled more and more began to function again, and why, on both old and new cultural soil, cities were founded in numbers exceeded only by the nineteenth-century development in America. The modest timber houses of the Gothic towns, each with its similar front, and built on an equal lot, formed the birthplace of the highly developed handicraft. Only as the Gothic period was nearing its close, after the raising of the urban cathedrals, did the new burgher class set about the creation of an adequate domestic setting—the burgher interior. Down to the nineteenth century this late Gothic interior continued as a core of further development. Parallel with this, the culture of handicrafts underwent continuous refinement down to the time when mechanization finally set in.

★ The refusal by Edinburgh Corporation to sanction the REBUILDING OF THE CITY'S THEATRE ROYAL destroyed by fire in 1946 has been the subject of a public inquiry

which opened recently in the City Chambers; Mr. J. R. Philip, K.C. presided. The appellants, Edinburgh Varieties, Ltd., were represented by Mr. R. P. Morison, K.C., and Mr. J. L. Clyde, K.C., appeared on behalf of Edinburgh Corporation. Sir Frank Mears, who gave evidence, said that in his opinion the theatre could be rebuilt on its present site in Broughton Street if certain modifications were made in the city's development plan for the area. A former Edinburgh Lord Provost, Sir Henry Steele, and ex-Bailie J. R. Coltart, who gave evidence, emphasised that there was a definite demand in the city for a theatre providing Scottish variety entertainment. Sir Henry said the rebuilding should be encouraged because of the Festival. Mr. Joseph Mellick, Director of Edinburgh Varieties, Ltd., said the theatre was one of the most popular in Scotland and had a seating capacity of 1,450. He had been advised that the cost of building a new theatre would be between £200,000 and £250,000—nearly three times the cost of repairing the present building. For the Corporation, Mr. James Robertson, Chief Assistant Sanitary Inspector, said the

area in the vicinity of the theatre contained a high proportion of insanitary houses which, if times had been normal, would have been condemned several years ago. He could not forecast when the people would be removed from these houses and when redevelopment would take place. It was a matter for the local authority. Mr. D. W. Plumstead, Town Planning Officer, said it was better to consider the application in relation to the development of their city as a whole. The layout of the roads in the area was bad. They were much too narrow in relation to the height of the buildings, and generally the property was in a bad state of repair. There was a mixture of industry and commerce with residential houses, and a total absence of open spaces. The density was 400 to 600 to the acre, while they recommended not more than 100 in the densest parts. Cross-examined by Mr. Morison, witness denied that there had been no proposal for developing the area before the application had been submitted for the reconstruction of the theatre.

Mr. JAMES W. R. ADAMS has been elected President of the TPI for the year 1948-49.

The election took place at the first meeting of the newly-elected Council of the Institute. Mr. Adams will take office in November next on the expiration of the term of office of Mr. J. R. Howard Roberts, C.B.E. Mr. Adams is County Planning Officer for Kent, and is the eldest son of the late Dr. Thomas Adams, the first President of the Institute. Another son, Professor F. J. Adams, was recently elected President of the American Institute of Planners.

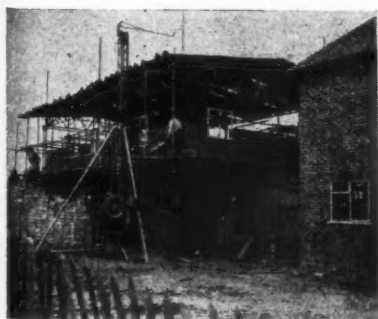
★ New members of THE COUNCIL OF INDUSTRIAL DESIGN and the Scottish Committee of the Council have been appointed.

The terms of appointment, set up in 1944, having expired, the following have been appointed to the Council: Dr. R. S. Edwards (Chairman), John Anderson, Leigh Ashton, Mrs. H. Bentwich, Sir Steven Bilsland, Noel Carrington, R. V. Darwin, Cyril Dee, J. M. Easton, Leslie Gamage, Ernest W. Goodale, William Haigh, G. W. Lacey, Sir Kenneth Lee, R. A. Maclean, Sir Francis Meynell, Major F. J. Stratton, Sir Charles B. L. Tennyson, Allan Walton, the Hon. Josiah Wedgwood, Philip G. R. Whalley, Miss Audrey Withers, Dr. W. J. Worboys.

The following have been appointed to the Scottish Committee of the CID: Sir

Steven Bilsland (Chairman), Brigadier W. C. Gordon Black, J. Douglas Hood, W. O. Hutchison, W. Johnstone, J. P. McBride, J. McMurtrie Kay, Kenneth Macdonald, Lady MacGregor of MacGregor, R. A. Maclean, R. H. Millar, A. Nairn, R. Lyon Scott, H. M. Steel. Of the new members of the CID, Mrs. H. Bentwich is Chairman of the Education Committee of the LCC. R. V. Darwin is Principal of the Royal College of Art. Cyril Dee is President of the Association of Engineering and Shipbuilding Draughtsmen and member of the firm of H.T.A., Ltd., Precision Engineers. J. M. Easton, F.R.I.B.A., is a practising architect and a member of the firm which designed the British Pavilion at the New York World's Fair, 1939, and other international exhibitions. Sir Kenneth Lee is chairman of the Tootal Broadhurst Lee Co. Ltd.; Director, General Raw Materials Control, Ministry of Supply, 1942-45; and has held other Government appointments. R. A. Maclean is a chairman of A. F. Stoddard and Co., Ltd., Renfrewshire, Carpet Manufacturers; formerly Board of Trade Regional Controller for Scotland. Miss Audrey Withers is an Editor of "Vogue."

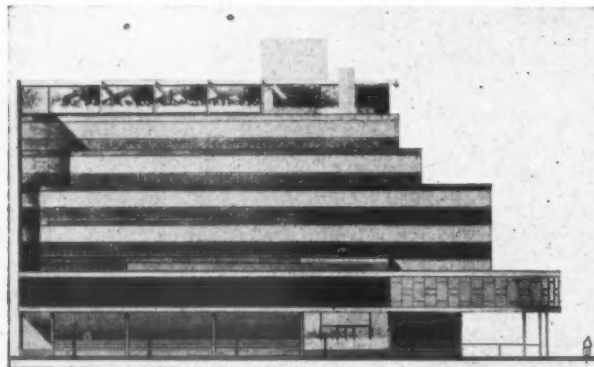
Of the new members of the Scottish Committee: Brigadier W. C. Gordon Black is a director of Michael Nairn and Co., Ltd., Linoleum Manufacturers. W. O. Hutchison is an artist, and was formerly Head of the Glasgow School of Art. W. Johnstone is a director of Joseph Johnstone, Ltd., Furniture Manufacturers, and chairman, Scottish Furniture Manufacturers' Association. J. P. McBride is a partner of A. McInnes Gardner and Partners, Architects and designers of Ships' Furnishings. Kenneth McDonald is a partner of D. MacDonald and Bros., Furnishing Retailers. R. H. Millar is a director of J. and P. Coats, Ltd. A. Nairn is a superintendent of Art, City of Glasgow. H. M. Steel is a director, Scottish C.W.S. Ltd.



Time lost in building operations, caused by bad weather, amounts every year to millions of man hours. To avoid this loss an interesting innovation has been introduced by Messrs. Warry Ltd., in their building operations at Hamsey Green, near Croydon, Surrey. A temporary roof, in corrugated asbestos, which can be raised as work proceeds has been erected over the working area. This not only allows work to continue in wet weather but also protects the interior.



Members of the London Master Builders' Association are to be encouraged to use an adaptation of the official coat of arms on their notepaper. It is a line drawing of the shield that is part of the coat of arms which was officially granted to the Association in 1924, and shows a square, plummet, compasses and mallet. The design is by Mr. H. Warren Wilson, lecturer in decoration at University College, London, who was responsible for the designing of the National Federation—L.M.B.A. stand at the Building Exhibition.



The design submitted by Mr. David du R. Aberdeen was awarded the first prize of £2,000 in the competition held by the TUC for a Memorial Building, the results of which were made known last Saturday. This building is to serve as a headquarters for the TUC, as a non-residential training college, and as memorial to trade unionists who served in the war. The assessor, Sir Percy Thomas, considered this design to be of outstanding merit, and one which would take a high place in contemporary architecture. Above and left are two of Mr. Aberdeen's elevations. Further illustrations of his design and of others in the competition are on pages 93-98. The designs submitted are on view in the Exhibition Hall of the Imperial Institute, South Kensington, until July 24.

T.U.C. Competition Winner

Mr. Denis Winston, Borough Architect of Southampton, has been offered the CHAIR OF TOWN AND COUNTRY PLANNING in the new Department being set up in SYDNEY UNIVERSITY, New South Wales.

The duties include those of Planning Advisor to the Local Government Department of the New South Wales Government and there will be the opportunity of private consultative practice. The salary is £2,000 per annum. Mr. Winston, who is 39 years of age, is a graduate of the Liverpool School of Architecture, and a Master of Arts of Harvard University, USA, where he studied city planning and landscape architecture while holding a Commonwealth Fellowship. While in the US he worked in the office of Messrs. Corbett, Harrison & MacMurray, who were then engaged on the preliminary drawings for Rockefeller Centre. On his return to England he won, in association with Messrs. Holliday and Medwin, the

Competition for the layout of the new satellite town at Kincorth near Aberdeen, the first of its kind in the UK. He was Lecturer in Architecture at Kings College, Newcastle-on-Tyne, and Senior Lecturer at the Liverpool School of Architecture, during which time he also acted as Hon. Secretary of the Liverpool Architectural Society. In 1942 Mr. Winston was appointed Chief Architect to the Northern Ireland Ministry of Home Affairs, where he was the chief technical officer responsible for health services, planning and housing throughout the province. As a member of the Planning Commission appointed by the Government under the Chairmanship of Mr. W. R. Davidge, he assisted in the preparation of the regional plan for the province and outline plans for the cities of Belfast and Londonderry. He was a member of the Northern Ireland Housing Committee, Chairman of the Amenities Committee, a member of Council of the Royal Society of Ulster Architects, and the representative of the Governor of Northern Ireland on the Architects' Registration Council of the UK.

Since 1945, Mr. Winston has been Architect to the County Borough of Southampton. Mr. Winston has served on the Official Architects' and Prizes and Scholarships'

Committees of the RIBA and on the executive of the Irish Branch of the Town Planning Institute. He is Hon. Asst. Secretary of the City and Borough Architects' Society.

A working group has been appointed to consider possible development schemes for SCOTLAND'S NATIONAL PARKS.

This has arisen from the Scottish Economic Conference's request to the Secretary of State for Scotland to call together all interests concerned. Members will be drawn from the Secretary of State's departments, the Forestry Commission, the North of Scotland Hydro-Electric Board, the Tourist Board, and two county councils.

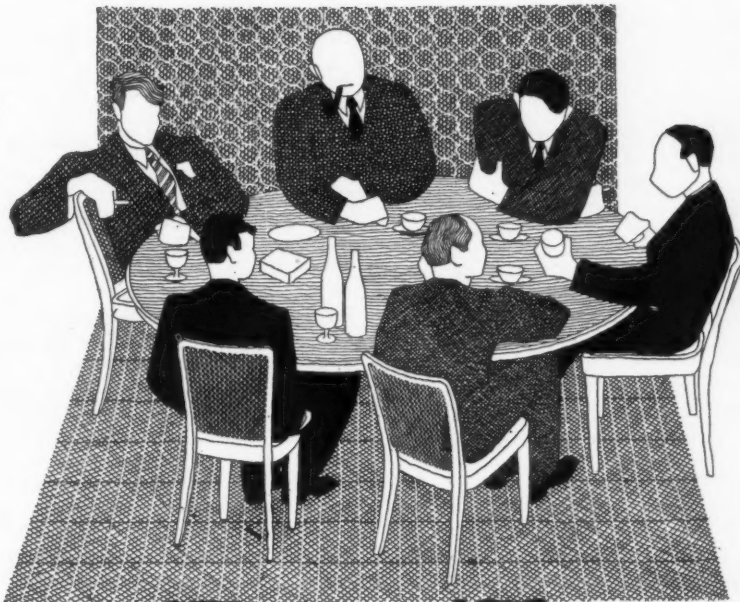
The parks recommended for Scotland are Loch Lomond-Trossachs (320 square miles); Glen Affric-Glen Cannich-Strathfarrar (260 square miles); Glen Nevis-Glencoe-Black Mount (610 square miles); the Cairngorms (180 square miles); Loch Torridon-Loch Maree-Little Loch Broom (500 square miles).

AN ARCHITECTS' NATIONAL COUNCIL was formally constituted at a recent meeting in London, of representatives of Professional Societies.

The societies represented were the Incorporated Association of Architects and Surveyors, the Institute of Registered Architects, the Faculty of Architects and Surveyors, and the Emergency Committee of Practising Architects. The Royal Institute of British Architects was not officially represented, since the Institute has decided to take no action. The immediate purpose of the Council is to devise means of assisting private architects to maintain their offices in a state of efficiency against the day when they will be required, in the public interest, to make their distinctive contribution to the rebuilding of the country. It is intended to bring to the notice of Government departments and local authorities the necessity for some close co-operation between public and private architectural offices.

The Honorary Secretary is Mr. N. Martin-Kaye, F.R.I.B.A., 43, Doughty Street, W.C.1.

ROUND THE TABLE



The Council of the RIBA has accepted the invitation of the Western Society of Architects to hold the BRITISH ARCHITECTS' CONFERENCE at either BATH or BRISTOL in 1950.

The conference will thus coincide with the centenary celebrations of the Bristol Society of Architects.

The Council has also approved a recommendation that in future three meetings of the Allied Societies' Conference should be held each year. The first meeting for the Session 1948-1949 has been fixed for Tuesday, November 9, 1948, at 11.0 a.m.; the dates of the other two meetings being left to the discretion of the Conference having regard to the advisability of co-ordinating them with meetings of the Council for the convenience of members serving on both bodies.

Work is to be resumed on the construction of the two deep-water quays at LEITH DOCKS, suspended under the capital investment reduction policy.

The scheme, which is to cost £600,000, is to be resumed on the ground that Leith has a special claim as a designated special unemployment area, although the extension of the docks at this time may not mean an immediate return. It is recognized, too, that there is a great need for milling capacity in the country, and when the docks extension is completed at Leith work can proceed on the other necessary projects. Persistent representations by Mr. J. H. Hoy, M.P. for Leith, and Parliamentary Private Secretary to the Secretary of State for Scotland, have resulted in the Minister of Transport reconsidering his decision to suspend work on the scheme.

NEWS IN BRIEF

Housing Powers for Parishes were urged at the annual meeting of the Yorkshire Parish Council Association. It was suggested that housing was not a matter solely for district and county councils.

THE last of the present series of round-table discussions which, under the chairmanship of F. R. Yerbury, have temporarily replaced the JOURNAL'S leading article during recent weeks is printed on the pages that follow. Dealing with the same sort of controversial topics as the usual leader, their aim has been to broaden the basis of discussion by creating an opportunity for engineers, building-contractors, scientists and others to meet together and exchange views with architects on the important issues that now face the building industry, in which they all have a common interest.

This week the subject under discussion is the effect, beneficial or otherwise, of standardization in building and the manufacture of building components. Those taking part include senior officers from the British Standards Institution and the Building Research Station, a manufacturer and two architects, one of whom has made a special study of the use of standard components in the design of schools. It is hoped to arrange another series of

round-table discussions later in the year, and the Editor will welcome suggestions from readers for topics to be dealt with.

5. Standardization in Building.

F. R. YERBURY: *chairman.*

P. CUTBUSH: *assistant technical director, British Standards Institution.*

BRYAN ADAMS: *manufacturer (director of Adamsez, Ltd.).*

HOWARD V. LOBB, F.R.I.B.A.: *architect in private practice.*

WILLIAM ALLEN, A.R.I.B.A.: *of the Building Research Station, Watford.*

OSWALD P. MILNE, F.R.I.B.A.: *architect in private practice.*

Chairman: We are going to talk about standardization in the building industry, which has become a very live subject since the war. A lot of work on it has been done by the Standard Committees from the Ministry of Works and the research stations, and all sorts of standards have been worked out in conjunction with manufacturers. Many people think that the movement towards standardization of parts of buildings is a beneficial thing; on the other hand, I have heard some manufacturers say that it interferes with progress in manufacture, and I have heard architects say that they have much better ideas than the people who work out these standards, and would prefer to design something quite different.

We have a number of interests represented round this table, and I would like to hear whether they think standardization, as such, is a working proposition from the point of view of those who produce the standards, whether the architect who is building finds that these standards fit in with what he really needs, and so on. Perhaps Mr. Cutbush, who has had more to do with standardization officially than almost anyone, would begin by telling us what he thinks.

Cutbush: I think one of the points we have to bear in mind above all is that the manufacture of products to be used in buildings is becoming more and more mechanised, and therefore some sort of standardization is necessary, either on the basis of a national standard—which is what I am concerned with—or a standard set by a producing firm. At BSI we are constantly getting letters from manufacturers saying, "I am going to make, or I am making, some particular product. What size

should it be; what specific requirements does the user really want? We have had this suggestion, and that suggestion, and we are having some difficulty in weighing up the various proposals that are in front of us, and we want some guidance." Now, as an Institution, the BSI does not itself suggest standards; it is nothing but a specialized technical secretariat. The ideas and results are the work of the representatives who form the committees. British standards are the result of agreement between the representatives of users, manufacturers, research organizations and so on; it is a pooling of knowledge. A standard may be the least common denominator in some instances, but there are many examples of British standards being fixed at a level above what has been customary in the past.

We also find that we fix a new standard at a particular level, and the manufacturers then start saying to users, "We make according to the British standard *plus* something," and very quickly that leads to a suggestion that the British standard itself should be revised, adding to it, as a compulsory requirement, the features added by manufacturers.

Chairman: Let us be quite clear about this. The British Standards Institution does not create standards; it acts as a mouthpiece for the consensus of opinion of various interests in a particular industry or manufacture.

Cutbush: Yes. We do not initiate any standardization on our own account. We have to have a request from some reputable organization, maybe a user, maybe a manufacturer, before we do anything at all. When we have such a request, we hold a conference and decide whether it is desirable that a standard should be prepared. That conference, as far as possible, is representative of all the users, distributors, manufacturers and research organizations concerned. If it is agreed that the preparation of a British Standard is desirable we form a technical committee to draft the standard. The draft is circulated for comment to many interests before publication.

Chairman: Let us take an actual case. Supposing Mr. Adams is a member of such a Committee, and takes part in a discussion which finally arrives at some more or less common measure of

agreement, and later Mr. Adams says, "I myself can improve on that." What does Mr. Adams do?

Cutbush: Mr. Adams improves on it, retaining as a basis the requirements of the British standard.

Chairman: But how does he? I would like to hear what Mr. Adams has to say about this himself.

Adams: I would like, if I could, to improve any design that was put before me, but we have usually been requested to produce something special for an architect, and have worked in collaboration with that architect for that particular job. It is the designs produced in this way that have set our standards. I agree with Mr. Cutbush that some form of standardization is necessary and I think, if we could standardize the centres of tap holes in our basins and the distance of the outlet of the bowl to the back wall, as is now being done, it would help a lot. But it would be a sad thing to standardize actual designs, which is a thing I hope we shall never come to.

Cutbush: It is always the endeavour of the Institution, when a standard is being employed, to avoid as far as possible limiting the designer more than is essential to ensure basic quantity or essential interchangeability. It is not always easy to do that, but our endeavour is to keep to the sort of points that Mr. Adams has raised, such as tap centres and outlet positions. We add to that certain, shall we say, fundamental requirements to ensure hygiene (such as the finish of the surface of the materials or something of that sort) but leaving the designer as free as possible aesthetically.

Chairman: During the war, when a Standards Committee was set up by the Ministry of Works, the anxiety, as far as I remember, was to make the whole idea of standardization palatable and a public exhibition of standards was held. The idea was to show that once you had got your standard size or standard performance fixed, you could play about from the design point of view as much as you liked.

Cutbush: Yes, but there are, of course, limitations. Take for instance, the metal window, where the method of production is such, as far as I understand it, that the manufacturer, in order to get economic production, has to standardize virtually the whole article.

Chairman: That is a matter the architects round this table should have views on. What about you, Mr. Lobb?

Lobb: I would like to say right away that although I do not disagree with many of Mr. Cutbush's remarks, I feel,

neverth
of sizes
by reaso
dards t
dardiza
however
instanc
talking
monger
thing i
door kn
200 des
Stand
Take t
as app
fittings
been ca
tion v
furnitu
that u
blackb
stackin
kind o
to suit
that if
the des
any qu
particu
say so
British
overwe
decide
Gener
perhap
a coup

Cutbush
overw
interes
expres
can o
standa
doing

Allen
you c
with
of th
about
the d
produ
accep
hold
the
whole
manu
has a
tary

Cutbush
oppo
Insti
like
lay
men
come
the s
our

Chai
dard
not
izati
the

nevertheless, that the standardization of sizes and materials often becomes—by reason of the form that British standards take at the moment—a standardization of taste as well. I agree, however, with standardization in many instances. Only the other day I was talking to a manufacturer of ironmongery who told me that he has something like 2,200 different patterns of door knobs and lever handles. Surely 200 designs would satisfy all demands?

Standardization can easily go too far. Take the case of the British Standard as applied to school class-rooms and fittings. I realise these standards have been carefully worked out in collaboration with educationists, architects, furniture manufacturers and so on, and that useful heights, lengths, sizes of blackboards and cupboards, ways of stacking books on shelves, and all that kind of thing, have been determined to suit particular classes. But it means that if one works to these standards, the design of the class-room is dictated; any question of changing it to suit a particular need is ruled out. If I may say so, I feel one of the defects of the British Standards Institution is the overweighting of the committees who decide standards with manufacturers. Generally, on one committee you get perhaps twenty manufacturers and only a couple of architects.

Cutbush : No BS. Committee can be overweighted in that way, because all interests have an equal opportunity to express their views and any of them can object to publication of a British standard if an adequate reason for doing so is put forward.

Allen : Another point is that supposing you did have a number of architects, with strong views about design, on one of the committees—say a committee about door knobs—who would design the door knobs that would actually be produced? Who would choose the 200 acceptable patterns? And who would hold the copyrights for the designs?—the architects, the committee as a whole, or those designers who are also manufacturers? I believe that problem has already arisen in regard to sanitary fittings designed by architects.

Cutbush : Well, first of all I would be opposed, speaking as an official of the Institution, to standardizing an object like a door knob. I think you might lay down certain standard requirements for door knobs; but, when it comes to laying down quite specifically the shape of a door knob, I doubt that our Institution would ever do it.

Chairman : Surely the purpose of standardization is primarily economic. Did not the present emphasis on standardization arise as an economic move in the early part of the war?

Cutbush : Yes, and during the war standardization certainly had the purpose of economizing materials. Many British standards were produced to limit the use of scarce materials and reduce demands on labour.

Chairman : And to make the necessary economies palatable, I think it is now being realized that we must leave the actual design—the appearance of the thing, the colour, shape and so on—entirely in the hands of the expert designer and the person who makes it.

Allen : But what about windows, where that certainly cannot be done?

Cutbush : No, but a window is a particularly awkward case as if you standardize it at all you cannot leave the designer free. Only by standardization can you obtain the benefits of large quantity production with machines designed for special operations.

Milne : Cannot we put this subject of standardization on a broader basis? In these mechanical days we must have mass production and standardization, there is no doubt about that. The idea is a very ancient one—a brick is a standardized unit; but whether it is right or wrong to standardize seems to me a question of the importance of the thing.

Broadly speaking, you may rightly standardize parts of things and things of mean uses—I do not much mind if you standardize Mr. Adams's products, for as long as a lavatory is efficient it will serve its purpose and one has no need to contemplate it for long at a time. It is good that electrical parts should be standardized, for it is merely irritating to find that the plug of your lamp will fit to one wall socket but not to another. But to have chairs and tables standardized and all to a pattern, so that wherever you go they are all alike, would be indeed depressing. For example, by standardizing windows I consider you are going too far. You are controlling the proportion and appearance of buildings as a whole. If you go further and standardize the whole house—which seems to be the ideal of some people nowadays—you will create an intolerably boring world and will be doing violence to man's spiritual nature. Man's love and desire for beauty deserves as much or more consideration than the mere concern for his physical comfort.

Just as a man has to subject his mind and body to control if he is to get the best out of his life both spiritually and physically, so we must control our machines if we are not, by their unbridled use, to do violence to our spiritual and æsthetic nature.

Chairman : Aren't you saying, Mr. Milne, more or less, that you are willing to standardize only those things that you cannot see in a building?

Milne : No, I do not mind electric switches being standardized—things that are in common use—but when it comes to chairs and things which we like to be different, it is wrong to standardize them. Human beings are not all of the same size and shape.

Cutbush : I am in general agreement with what Mr. Milne says, but there are certain things like windows which, for reason of production, you are probably forced into standardizing in some way. It is better to have something generally agreed as acceptable to users and manufacturers than for the manufacturers to go off on their own. BSI makes no attempt to standardize whole buildings or large assemblies of units.

Chairman : Yet windows are among the things that, so to speak, dominate the architect's design from the beginning.

Lobb : Fortunately the BSI does not, at present, standardize the whole house; but things are going that way because of the difficulty we have at the moment of building anything at all. We have to produce buildings as economically as possible, which means that we have to use the stuff that is commonly manufactured and therefore available at a low price. We use standard windows, standard baths, standard this and that; which really means that the whole design of the houses we produce is controlled by the British Standards Institution.

Chairman : Would you suggest that these standards interfere with the plan too?

Milne : I would say that these standards have dominated the whole design of English cottages recently.

Chairman : But have they influenced the architect as a planner? Whatever else the architect may be, he is essentially a planner. Is there a danger that in this direction standardization may cramp his style?

Lobb : I think there is. If you take the normal Council house, you have your kitchen cabinets, which are decided for you by this standard or that standard, your stainless sinks which are standardized, too, your standard gas stoves, door frames—nearly everything.

Milne : You are up against even worse difficulties than this in designing schools. There you have standardization imposed by the Ministries on your plan and on the lighting and on nearly everything. Little freedom is left to the designer.

Allen : But that is a different sort of standard. We have to distinguish between the functional and the purely dimensional standards, though I often

wonder whether the distinction is made clear to the Committees. My impression is that a Committee sometimes proceeds to standardize a set of dimensions or even an existing article without looking very closely at the function. The point arose recently in standardizing wall-ties. There are two well-known patterns, one of which is much weaker than the other and is sometimes forbidden by local authorities for that reason. But when we asked several local authorities and builders their view of the functions of ties, their answers were neither clear nor in agreement. In particular, no one seemed to have the idea that they had to act as struts as well as ties. The result was that we did some work at the BRS to find out how strong they had to be. Then it was possible to move with more confidence to a specification both in general and in particular terms.

The other side of this standardization question surely is whether the industry is prepared to organise, or can organise conveniently, to produce either to a standard pattern or to a set of standard conditions. I remember a building—a large industrial building—put up in this country by a Swiss architect immediately before the war. He invited tenders for the supply of windows from English firms and from Swiss firms and, in the end, the Swiss firms were reported to have undercut the English. Yet they offered a purpose-made product to the architect's design instead of the standard offered by the English firms. I was told by the architect's representative that this was because Swiss industry was organized to produce to a set of standards as it were, rather than to one standard pattern. I do not know whether this could be applied to industrial organizations widely, but I would like to hear Mr. Adams's view on it. In some industries probably there is one answer only, and in other industries another, but the question is to what extent is industry generally alive to that requirement of organization?

Adams : As far as our type of manufacture is concerned, we have the advantage of using a material that is very adaptable from the designer's point of view, and we can give you within reason more or less any model you require.

Allen : At a competitive price?

Adams : Yes, at a competitive price. We can design to the architect's requirements and, if the designs are practicable and simple to manufacture, I see no reason why they should not be very attractive and competitive. We generally find the form which is most suitable for our various processes of manufacture is that which is also the simplest and most pleasing in design.

Chairman : Another question I would

like to ask is this: many of the standards we have been talking about have been agreed upon by the industry and by everyone. Now, can you actually buy these standard products?

Cutbush : Yes, in nearly all cases. Sometimes you can buy nothing else; for example, there is no production of cement or of rolled steel sections today which does not comply with the British standards.

Chairman : You are talking of standard products, so far as the manufacturer is concerned. There are also standards of performance. We have already agreed about the importance of the distinction.

Lobb : Standardization of performance is most important, and the Codes of Practice being prepared in consultation with the professional institutions and by committees, comprising architects, engineers, builders and in some cases representative craftsmen, are a first class contribution to this end. As to whether any architect will have time to read all this mass of material is another matter!

Chairman : Mr. Cutbush, how do manufacturers respond to this?

Cutbush : The answer is that the Institution is strongly supported by the manufacturers, who prefer performance standards to standards of specific detail. If you take the paint industry, for example, you will find the general view is: "We will not agree to any standards for paint except those based on performance. We can then use any formulation we like so long as it answers the requirements."

Chairman : I take it Mr. Milne would have no objection to this kind of standardization?

Milne : No. That kind of standardization would help enormously, because no architect or designer can really go into the technicalities of paint. He has got either to rely on his own experience, or to try and pick an honest man to supply the paint. In fact, the whole thing nearly comes down to the people you work with. I do not believe, however, much you write things in books and lay down rules for this and that, that you make people honest; nor can you absolutely specify a performance, because when conditions vary a material may perform one thing in theory and another in practice.

Lobb : With regard to standards in paint, I think paint in particular bears out what I said earlier about the composition of the British Standards Committees. In consequence of their composition, the tendency is for the standards themselves to be reduced to the lowest common denominator. The manufacturer who has not got the tech-

nical ability to produce paint strictly in accordance with the highest laboratory standard called for, might object on the British Standards Committee to a particular specification, and after discussion—at any rate that is my experience—the standard is generally reduced to a lower level on his account.

Cutbush : I must disagree. On our Committees there are the users and the scientists from the research stations as well as manufacturers. If the standard proposed seems too low, the users or scientists will say, "That is much too low. You know it will be inadequate," with the result that a higher standard is agreed. Sometimes, it is true, manufacturers' organizations are a little afraid of their subscribers, but in the face of a certain amount of user opposition, I do not think any manufacturing organization would insist on anything too low to be satisfactory, as it spoils the reputation of the material for all makers if some makers have failures.

Allen : Mr. Milne spoke about the Ministries and other people who issue standards of performance which affect whole aspects of building design. This is admittedly the most difficult kind of standardization, and it may even be unwise to treat it as such. Yet we do not have a strong tradition in architecture at present, and one has to attempt to find ways of strengthening it where it is weak. Our experience at the Building Research Station is that this usually goes in stages. First you mix some architects with some scientists and identify your weak points precisely. Then you organize to ensure that all the essential scientific aspects of some problem are given attention. When the work has been in hand some time you find the principles emerging, and you become increasingly aware of your heightened sensitivity to examples of the scientific ideas in practice. It is then possible to begin to explain things on a wider scale, because you can link the scientific ideas to common observations—quite an important point in a visual art. Then you find yourself under pressure to codify these factors, or to put a scale on the ideas, because people now see deficiencies which previously they were not aware of, and want to ensure that these do not continue to be perpetrated.

It is at this stage that friction occurs most often, because it is very difficult to codify one aspect which is intimately associated with design and not lose one's sense of balance. This is the case especially where the study of one factor is more advanced than another. Science gives power and precision to ideas, and until it is more or less uniformly applied to the different aspects of building design, balance is likely to be topsy-turvy. This is not a good state of affairs for architecture, but it seems to be a necessary phase. Personally, I hope it will pass and reach a

point where codified ideas and functional standards will be used mainly for teaching purposes, with just the essential requirements laid down for practice.

Milne: I think the knowledge the scientist can give us is most valuable, but when he goes further and lays down laws and tells you that you must design for this or that factor, he is completely stultifying architecture as an art. I am designing some schools, but if I attempt to design according to what was laid down in the manuals during the war, I have little or no control of the appearance and aesthetics of the building. I agree that the result must be a good working machine. Let the scientist tell us all he can and then leave us free to apply the knowledge, taking all the factors of our work into account.

Chairman: Are you suggesting that the code of practice standards are for the bad architect, and not so much for the good architect?

Milne: I do not think by writing things down you can make a bad architect into a good one. By all means say: "We think it desirable to get such and such a standard of lighting in a school," but do not say: "The architect must produce 2 per cent. or 5 per cent. or whatever you like to call it, on every desk in every room," because by doing that you may be making him sacrifice other desirable qualities in a building. His real art is to find a right balance.

Allen: What I am interested in is finding where this urge to introduce a set of standards comes from. It is not concocted by the scientist, I may say. We have got enough to do at the Research Station without going out of our way to persuade people to put things into a code of practice or a mandatory set of regulations. Now, did the bureaucratic mind just emerge from nowhere or did it emerge from the existence of a lot of bad schools whose standard had to be improved somehow?

Milne: No doubt the tendency at the top is to feel that by giving instructions you can dispense your wisdom to those below. If, however, you go to the local authority, you find them saying: "Look at all the unnecessary stuff written by people at the top. We have got some sense here, why not let us have a say in the matter?" I think the bureaucrat wants to guide people in every detail instead of merely giving a framework for others to fill in.

Chairman: Surely the urge to standardize has come through economics?

Allen: I should have thought only partly. My impression is that performance in buildings has been so variable over the last fifty years, and so many mistakes have been made, that a basis for improvement has naturally been sought. Another reason is the demand

that comes from the chaps who are suffering from having their natural skill pulled in. It arises from the lack of skill in applying scientific knowledge rather than from anything inherently bad in people's work.

Milne: Your object must be to make people observe and understand what is the basis of all good architecture. The architect should know the performance of things and then have power to select what is right for the particular performance on a particular occasion. Let us have all the standardization we can of performance if it gives us better materials, but then after that do not let us forget that aesthetics—what I prefer to call the spiritual side of man—is terribly important. So many of our efforts nowadays are directed merely to the material side.

EDITOR'S POSTSCRIPT

Architects have long been scared lest the growing use—often for valid economic reasons—of standard dimensions and components should restrict their freedom to design and impoverish the art of architecture. Acceptance of the changes brought about by the factory production of building materials—of which standardization is one of the most significant—is not called in question; it is an established part of the modern architectural philosophy—indeed, some of modern architecture's most impressive effects have been obtained by exploiting the æsthetic possibilities latent in, for example, the repetition of identical units. Yet the danger exists that efficient industrial production may mistakenly come to be regarded as a desirable architectural objective, whereas in fact it is a means to an economic end and there may well be cases where deliberately uneconomic methods of production may be justified on architectural grounds. The speakers are clearly right in agreeing with the standardization of functional dimensions and equally right in their suspicion of the standardized house. The desirable objective would seem to be to devise components for standardization of a kind to make the most of modern techniques, but small enough to allow the utmost flexibility in design.



The Architects' Journal

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall 0611

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

MADGEOR OPERATION

Those of you who were disappointed to see no architect's name among the members of the Building Working Party may be encouraged to learn that an almost equally important investigation team has been recently set up with an architect at its head. This is the Research Committee, jointly sponsored by the Nuffield Provincial Hospital Trust and the University of Bristol, whose task it will be to investigate the design and functions of hospitals. Director of Research is John Madge—Cambridge and AA architect, brother of Charles Madge, who is in charge of social research for the Stevenage Development Corporation—and his team will include representatives of the medical, housing, administrative and engineering professions. Their investigations will be world-wide, but their report is to be expected within three years.

*

The time limit is wise. Everybody knows how easily research becomes an end in itself, how frequently its results are so unwieldy that they are incomprehensible, how often the facts have taken so long to collect that they are out of date before they can be used. Research indeed is often a refuge for the incompetent or a capering dance of self-justification executed to give an appearance of movement and progress where none in fact exists. (We have all met—some of us have employed—the sort of assistant who, when asked to draw out the

electrical layout of a maternity ward, presents you two or three days later with no drawing, but a Back-to-First-Principles essay on the organization of a National Medical Service.)

Happily, Mr. Madge and his sponsors are aware of these dangers, and have set themselves the job of producing, within the time limit set, information in the form in which it can be of immediate practical use. No major rebuilding of hospitals is likely within the next two years, so this intervening period could hardly be more wisely spent. There is still much to learn in this subject—even the latest monuments of hospital planning at Stockholm and Zürich have been widely criticised—and we look forward with interest to the results of this Madgeor Operation.

THE T.U.C. COMPETITION

Before the war the announcement of the result of an important competition used to be a regular occasion in the architectural world. Lately it is an excitement we have been without, except for the sad fiasco of the Crystal Palace competition a couple of years ago. So going along to the Imperial Institute to see the designs submitted for the new TUC headquarters was quite like old times.

The results are given, I understand, and a number of the designs illustrated, elsewhere in this issue. My own impression—the result of a quick tour of the exhibits—is that Mr. Aberdeen was a clear winner, both on grounds of lucidity and flexibility of plan and of elevational character. Many readers will know him already as the consulting architect for the great Brabazon aircraft hangar now nearing completion at Bristol. I didn't find the second or third designs impressive, though they were clearly competent enough. Several of the others showed considerably more sensibility and ideas, though no doubt a thorough study of their plans would have disclosed faults.

Other comments: no complaints this time, I think, about prejudice on the part of the assessor, Sir Percy Thomas, who has made a brave award; too many meaningless architectural clichés around, that I thought the war might

have exterminated; a restricted site that allowed little originality of plan form, but put all the more value on real planning ability; the complete absence of the kind of academic design one used to value before the war at least for its scholarship—instead the play-safe competitor seems now to go in for a much less attractive kind of standard commercial-modern.

Astragal's prize for originality—and real sensibility of a rather eccentric kind—goes to Raymond Erith's essay in the Victorian, which he seems intent on getting recognized as a regular historical style. I suppose we shall all feel the same soon.

1951 ARCHITECT

There are not many architects in these days who, when they take on an important new job, know for a certainty (a) that it is actually going to be built, and (b) that it is going to be built by a given date. But this is the happy situation in which Hugh Casson finds himself. He has just accepted the position of Director of the Architecture Section of the 1951 Exhibition.

Casson will be directly responsible to Gerald Barry, the Director-General, and will of course work in with the Advisory Council on Architecture,



An example of applied art not included in the end-of-term exhibition of students' work. A carving from a stick of black-board chalk by a student of the Polytechnic School of Architecture.

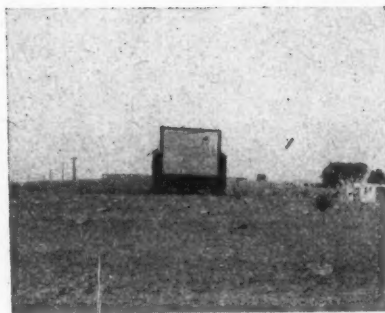
Town-Planning and Building Research whose names I gave a few weeks ago. He takes up his appointment on October 1. Nearly three years may seem plenty of time in which to get an exhibition ready, but when that period has been whittled down by the time taken up by preliminaries at the beginning and the time needed for manufacture and installation at the end, I suspect it will leave Casson with a pretty busy 1949.

He is a splendid choice for the job, being designer and ideas-man at the same time. Other architects, according to temperament, will mix their congratulations with envy at the opportunities he will have and commiseration over all the snags he will certainly have to surmount if he is to make the most of them.

NEW BUCKS GUIDE

All good guide books distil a personal flavour—you could reconstruct Dr. Baedeker from any one of his volumes as easily as an archaeologist reconstructs a dinosaur from a shin-bone—but since the disappearance of the admirable "Shell" guides, this essential ingredient has too often been forgotten by publishers (the Paul Elek series—recently enriched by "Sussex" and "The Isle of Wight"—being a notable exception). All the more welcome then to Piper and Betjeman's Buckinghamshire, first of the new Murray architectural county guides. In the introduction the authors state that though they have visited every parish and entered every church in the county, they have tried to illustrate and describe only those features which seem to them either Beautiful or else particularly expressive of the Variety of Character of Buckinghamshire.

Remembering that Mr. Betjeman once wrote an article in *The Architectural Review* on "How to Like Everything," you will not expect to find him or his colleague narrowly confined by such self-imposed limitations. Here in fact are some 160 photographs—most of them specially taken—illustrating everything from Shardeloes to Chermayeff, from Hartwell Church to Marlow Bridge, from Barry's Cliveden to Comper's church furniture, and you can please yourself as to which heading they come under.



These two photographs—sent to us by a Mr. Holt—illustrate the exterior (left) and the “interior” of a Drive-In Cinema recently built near Toronto. Patrons link themselves up first to the sound-distributors provided at each car stand, and so long as you’ve cleaned your windscreen lately the lights ahead are “Forever Amber.”

Since this is primarily an architectural guide, there is *no* information on buses, hotels, whereabouts of golf courses, and suchlike, but here is a good map, an informative and friendly gazetteer (in which the name of Sir A. W. Blomfield recurs like the tolling of some sinister old bell). The printing and layout is direct, the production handsome. A minor criticism is that a guide “designed to accompany the age of motor travel and the return of the bicycle” should surely not have been made—as this one has been—too large to fit either a coat pocket or a dashboard recess . . . and at 15s. it’s expensive. Lots of pennies, in fact, for this guide.

OUTPUT IN THE INDUSTRY

Although the incentives scheme has only been in operation since last November, there are signs that it is working reasonably well. Speaking at the Employers’ Torquay meeting, Mr. F. M. Sleeman, the President, said that operatives were in some instances earning a bonus of 25 per cent. of their basic rate, and that output was definitely up, while the cost of administering bonus schemes had turned out to be fairly low.

As I suggested last week, costs in the building industry are high, and one of the main reasons for this is that the output per man is barely half what it was in 1939. Incentives may or may not turn out to be a permanent feature of the industry, but some linking of output and pay seems desirable, and has not proved to be unpopular with the operatives. No doubt the Working Party will have some suggestions to make.

NO DAKS TO TREVELYAN

Congratulations to Simpson’s (Piccadilly), Ltd.—always the best dressed windows in town—for their enterprise hiring painter Julian Trevelyan to design their window displays this month. No congratulations, alas, to Trevelyan, who has treated the merchandise with all the masterly skill he learned as a camouflage officer during the war.

As an admirer of Mr. Trevelyan’s paintings I hope he will be allowed another shot, and that Messrs. Simpson’s who, you will remember, employed Moholy Nagy as display consultant when they first opened, will continue their experiment with other painters as well. Let all painters be warned, however, that window dressing is nothing like as easy as it looks, and any artist who (like most architects) thinks that originality and taste are the keys to every door, should be advised before taking on this sort of job, to take lessons in how to fold and pin a shirt properly.

THE OLD STORY

There is nothing like a local paper—except perhaps a Cabinet Minister—for frank speaking. Mulling through recent issues of the *Walthamstow Guardian*, for instance, I find reports of the Deputy Town Clerk “Crossing swords with a solicitor over an application to build a sectional garage,” an account of a midnight scrap between “two fashionably-dressed women, one of them described as a corner-stayer,” and a tremendous flow of rude correspondence about a scheme to establish a communal garden in a housing estate.

The project—familiar enough to planners, almost indeed a cliché—was to re-design a central area now bounded by back garden fences as a communal garden. This was to be enlarged by lopping off the last sections of some of the existing gardens, and then to be laid out to the winning design of a competition jointly sponsored by the estate developers, Messrs. Warners, and the S.W. Essex Technical College’s School of Architecture. The surrounding tenants, however, are firmly in opposition. They object to losing bits of their gardens, then anticipate constant noise from the children in the communal garden, and they resent not having been consulted.

Once again the familiar set-up (remember Stevenage?). Good intentions and sound principles negated, I suspect, by insufficient preparing of the way. Get the people concerned in at the start of these things, make them feel part of the project, and usually they will get behind it and push it along. Impose it from without, however gently, and one night you will get things painted on your door.

ASTRAGAL

LETTERS

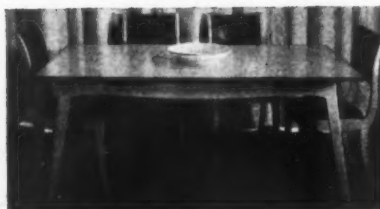
Percy J. Waldram, F.R.I.C.S.

Natural Lighting of School Classrooms

SIR.—May I draw attention to the great significance of the illustration to the article by Mr. Godfrey, of the BRS, on School Lighting on p. 529 of your issue of June 20, advocating the use of venetian blinds to “control brightness contrasts.”

Before the war natural lighting of school class rooms had been standardized, both in this country and abroad, for some 30 years at the simple criterion of the daylight factor (0.5%) invariably found on the back desks of standard class rooms, about 7 metres deep, when lit by large high windows practically unobstructed. The eyesight of young children was known to deteriorate over the school years, and they were called upon to endure the highly unnatural contrast of the printed and written page for many hours every day. No complaint is, however, on record by any school medical officer of any insufficiency in the standard natural lighting. During the war, school lighting came under view by a BRS committee. The published list does not disclose any medical or ophthalmic qualifications

VARIATION IN UTILITY FURNITURE



The stringent specifications for utility furniture gave British designers a whole set of new problems. The result in most cases had a very good effect upon contemporary design, which, within the utility range was no longer able to rely for its effect upon richness of decoration and materials, but turned instead to simple shapes, colours and textures. The photographs on this page show furniture designed within utility specifications by Dennis Lennon for his own use and made in Norway by Albert Setersdal. The top photograph is of a dressing table. The middle section opens to give a recess for toilet articles, and has a mirror on its inner face. There are drawers at either end. Below, left, a fabric covered padded armchair; right, a dining table. All are constructed in birch and birch veneer, and have a gaiety and freedom of design closely akin to that of the best Scandinavian work, which would lend themselves very well to large scale production in the utility range.

held by any of its members, but their report [Post-War Buildings Studies No. 12, The Lighting of Buildings, H.M.S.O.] shows that they had no hesitation in recommending a tenfold increase in all ordinary class rooms in post-war schools, with more for fine work. In the following year the Statutory Regulations of the Minister of Education [Regulations Prescribing Standards for School Premises, S.R.G.O., 1945, No. 345, H.M.S.O.] reduced the recommended increase for

ordinary class rooms by 60% and disregarded the higher increases for drawing and needlework. School architects, however, soon found that drastically reduced increases rendered multi-storey schools impossible, and thus involved everywhere the sprawl, excessive corridors and costly heating of single storey top lit school buildings. The effect on the official estimates, already huge, of the cost of the new schools required by the raising of the school leaving age was,

of course, calamitous; but what was possibly worse was the probability that in all new schools already built the excessive intensities officially required may be seriously injuring the eyes of young children. It is therefore with no small relief that we learn that the BRS is alive to the danger of too much as well as too little daylight.

EDGWARE. PERCY J. WALDRAM.

In Parliament

Save for a characteristically robust contribution from the Minister of Health, Mr. Aneurin Bevan, last week's housing debate in the Commons, was on the whole, a rather mild and restrained affair, devoid of any bitter controversy. There was a factual, quietly delivered speech from Mr. Walter Elliot (Con., Scottish Universities), who opened the debate for the Opposition. He said that a reduction of building costs would never be brought about by committees and commissions, and urged the Minister to double, or even treble, the amount of private building at present allowed.

Mr. J. Edwards, Parliamentary Secretary, Ministry of Health, intervening in the discussion for the Government, spoke of the target of 750,000 houses which was the previous Government's estimate of the number required in 1945 to enable each family who wanted a separate house to have one. That target, said Mr. Edwards, would be hit this autumn, but it was of no significance to the present Government. It took no account of the increase in needs over the last three years.

This led Mr. Elliot to enquire what target the Minister believed he would hit by the General Election. What problem would have been solved? Mr. Edwards refused to be drawn. He would not, he replied, be lured into discussion of hypothetical targets. The scale on which house-building could continue must depend on conditions of national policy and on our economic resources. At present they intended to have a volume of house-building of the order of 180,000, but these matters must be kept under review.

A powerful plea for the good design of houses was made by Lady Megan Lloyd-George (Lib., Anglesey), who said that it was not necessarily more expensive to build a charming, well-designed house than to erect some of the "ornamental horrors" which abundantly littered our countryside.

Mr. David Renton (Lib. Nat.—Huntingdon), spoke of the "frustration" of local authorities who had labour and materials available but were still refused permission to build. Mr. G. Hicks (Lab.—Woolwich E.), urged the Minister to expand the housing programme at the earliest possible moment. Commander T. D. Galbraith (Con.—Pollok), winding up for the Opposition, declared that the Government had fallen far short of the promises and hopes held out at the General Election. Mr. Bevan's policy had been a costly and dubious experiment.

Mr. Bevan poured scorn on the Opposition who, he continued, had no consistent housing policy. If there was a general election next week the people would not know how the Conservative party stood in this important matter of housing.

"A more disgraceful exhibition of political bankruptcy has never been seen!" he exclaimed, amid loud cheers from his supporters.

Permanent new houses were now being completed at the rate of over 20,000 a month, and the vast majority of them were to let. Housing prices had risen less than the price of any other finished product. The wholesale index had gone up since 1945 by over 30 per cent, and housing prices had gone up by 13 per cent.

The Opposition's move to reduce the Ministry of Health vote was defeated, on a division, by 303 votes to 131.

H

Top, from below, fr



HOUSE AT HERTFORD

DESIGNED BY F. K. HICKLIN

*Top, from the east;
below, from the west.*



GENERAL.—This house was designed by the architect for his own occupation, and has a maximum floor area of 1,000 sq. ft.

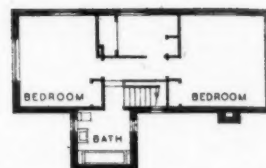
SITE.—The site has a frontage of 50 ft. with the east boundary widening considerably towards the rear of the site. A spinney grows along most of this boundary. The depth of the site is 200 ft. There is a gradual slope to the south-east.

PLAN.—The house is planned to provide a living-dining room and a large kitchen with an eating recess. The living room measures 22 ft. 6 in. by 12 ft. 6 in. To economise on space in the entrance hall, the staircase is in the dining end of the living room. The first floor contains two bedrooms and a small nursery. The bathroom is over the cloakroom off the entrance hall to concentrate plumbing and drainage. All the living rooms are sited

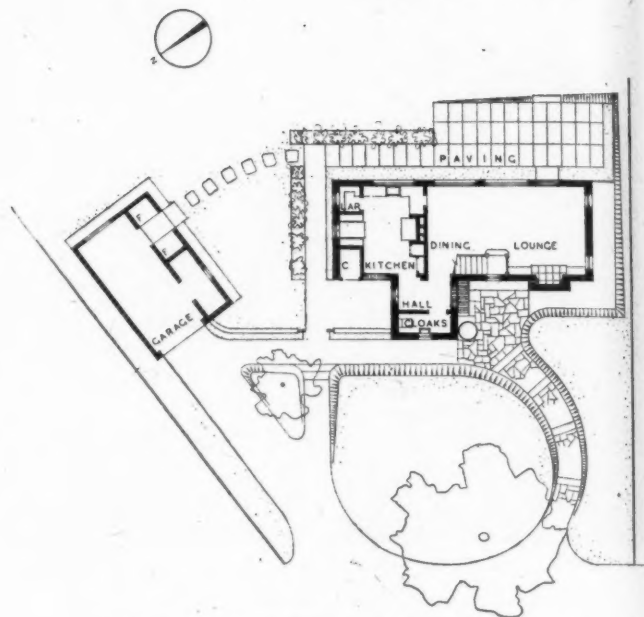
with a south-east aspect and view over open country

CONSTRUCTION.—The external walls are 11 in. cavity and are left unplastered on the ground floor. Some of the walls have a raked-out joint. The internal walls are $4\frac{1}{2}$ in. brick. The floors are tongue and grooved boards laid on $\frac{1}{2}$ in. fibre board which is supported by exposed timber joists. Partition walls on the first floor are 2 in. breeze block plastered. The roof is of 2 ft. copper panels insulated by 1 in. thick fibre board. Prefabricated trussed rafters, designed by the T.D.A., were used at 2 ft. centres.

INTERNAL FINISH.—Unplastered brick on the ground floor. The exposed joists are painted. The wood for stairs and shelves is Columbian pine finished with an eggshell varnish. Internal doors are painted a stone colour with a gloss finish on the ground floor and a cambridge blue on the first floor.



FIRST FLOOR PLAN



SITE AND GROUND FLOOR PLAN [Scale: $\frac{1}{24}$ "=1' 0"]

The living room.



The co-
coloured
cupboard
painted
dining
in untr

SERV
with an
provide
open s
room.

The ge
C. Roo
contra



Top, left, the dining area, and right, the archway under the stairs leading to the hall. Below, the fireplace.

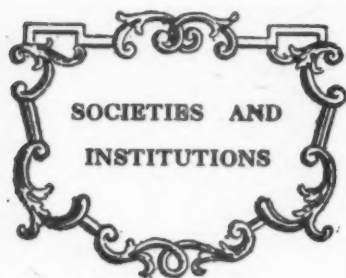
The composition block floor is coloured a light oak. The fitted cupboards in the kitchen are painted a cambridge blue. In the dining area the table and seats are in untreated Columbian pine.

SERVICES.—The kitchen is fitted with an "Aga" cooker which also provides all hot water. There is an open solid fuel fire in the living room.

The general contractor was Messrs. C. Rook, Bros. For list of sub-contractors see page 102.



D E S I G N E D B Y F . K . H I C K L I N



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.

TPI

R. Gardner-Medwin

June 4. A paper read at the Twenty-second Annual Country Meeting of the TPI, held at Edinburgh, on SCOTLAND'S PLANNING PROBLEMS.

R. Gardner-Medwin: South of the border I have seen maps marking Scotland as Region Eleven. Those of you who are from the other side have perhaps been long enough here already to see that this label, even as a technical definition, will never do for Scotland. Yet in the planner's eye—even in the Scottish planner's eye—Scotland is a good example of the complete regional complex. It has geographic and racial entity; a conflict of industrial and agricultural activities not incapable of being resolved; and an area small enough to be studied, planned and administered as a whole.

The boundary between England and Scotland is a natural geographic boundary, almost as the regional planner would have drawn it—with one exception. The natural county town of Berwickshire, Berwick-on-Tweed, lies unaccountably on the English side. However, there is no great danger that this geographic error will lead to a revival of border strife.

THE SCOTTISH REGIONS

For administrative purposes, we divide Scotland up into three planning regions: the south-west, the east and the north—or Highlands and Islands. These regions, however, are intimately related as parts of a Greater Region: Scotland. The south-west and east are bound together by the great industrial belt which stretches from the Firth of Clyde to the Firth of Forth, and by the coalfields ranging from the counties of Renfrew to Fife, from Ayr to East Lothian. The Highlands and Islands are in a sense a distinct unit, with character-

istic features and difficulties all their own; but depopulation in the Highlands and congestion in the industrial belt are complementary problems, the one reacting on the other to such an extent that neither can be solved separately.

THE CHANGING POPULATION

To understand Scotland's planning problems one must first understand the distribution and movement of population. The book produced by the Scottish Council of Social Service, "Scotland's Changing Population,"* gives the best summary of the population problem. The population distribution map of Scotland shows the extraordinary concentration of population in the industrial belt—particularly in Glasgow and the Clyde Valley. In the highland county of Sutherland there are seven people to each square mile. In industrial Renfrew county there are 1,400 or 200 times as many.

Those of you who have explored the back courts and climbed the stairs of a Glasgow tenement will know the meaning of 700 persons to the acre in terms of human degradation. Glasgow and the smaller burghs of the Clyde Basin have a more serious re-housing problem than any group of industrial towns in England and Wales, although only one of them, Clydebank, has suffered any serious war damage. What makes the problem really acute is that a very high proportion of tenements and miners' rows have only two rooms, sometimes only one room, and a great many have no sanitary facilities of their own. Those of you who are interested in housing should read the illustrated article on Glasgow's housing conditions by Dr. Bradbury, the city's Director of Housing, in the January (1948) number of the *RIBA Journal*.

THE CLYDE VALLEY PLAN

Congestion—not only of people but of industry—was one of the big problems which the authors of the Clyde Valley Regional Plan had to face. The illustrated report of the plan will be published before the end of this year. What the Greater London Plan is to England the Clyde Valley Plan is to Scotland, and, of course, decentralisation is the keynote in both. The Report points out that the central urban areas have now reached saturation point, and while making recommendation for the movement of population away from these areas, it emphasizes that only through a national policy of decentralisation can the inward drift to the industrial belt be checked.

The Report maintains that decentralization should be encouraged in three ways: (i) by settling new industries in some of the existing burghs in the region, expanding in a direction away from the main urban centres; (ii) by building four new towns in the region; (iii) by encouraging the growth of industry in other parts of Scotland in accordance with an all-Scotland plan to check the over-balance of population in the industrial belt.

One of the most important proposals is the greenbelt, planned for "separation and re-integration of communities which are in imminent danger of fusion." The greenbelt system differs from the London one in that it is an agricultural reservation between the built-up areas and the surrounding moor and coast lands. It provides for food and milk supply (some of the best farming land in Scotland surrounds Glasgow), for playing fields and for access to regional parks and recreation centres on the coastal and moorland fringe.

HIGHLANDS AND ISLANDS

Some of you may ask us (as we have been asked before) why we bother about depopulation from the Highlands. Why do we not accept it as inevitable and concentrate

on putting our towns to rights? It must be said at once that our concern for the Highlands and Islands, proud of them as we are, is no romantic "back-to-the-land" movement. Certainly there is a desire to attempt social rather than economic planning for the crofters, wherever crofting promises to be practicable for another generation or more. But there is much more to be done. Hydro-electric power is on the way. There are great potentialities. Already things are beginning to happen in the Highlands without the help of electric power: forestry developments; schemes for growing and canning fruit; reclamation of bracken and peat lands; research into the use of peat for marketable fuel, for fertilizer, for wax extraction, or even as aggregate for concrete; joint agricultural and forestry schemes for developing food and milk production in the glens by the planting of shelter belts. How much more can be achieved with electricity! Not only can power and light be brought to farms and homes, but sawmills can be efficiently worked, new rural industries established, freezing units installed to help the fishermen. It is sometimes forgotten, too—even in the south of Scotland—that the Highlands are not all inaccessible, mist-laden, snow-bound glens. There are friendly, well-tamed areas, too, with rich soils. For instance, in the area around Inverness burgh and Cromarty Firth the climate is milder than in any part of Scotland; there is more sun, less rain and no fog. When we can build enough houses, some of the more conventional industries may well be encouraged to settle in these parts. But we must be careful in this. Industrial settlements must be viewed as part of a plan for the rehabilitation of the Highlands as a whole—otherwise we may drain the fields and forests of labour already scarce. With the help of the Highland Advisory Panel and the County Councils, our Department has recently organised a survey of industrial and housing possibilities at the two extremities of the Great Glen; but this may turn out to be a pilot survey for a much more complete study.

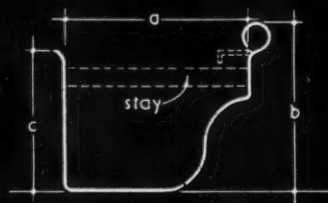
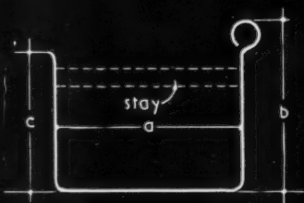
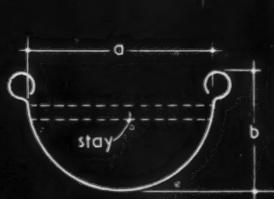
THE CENTRAL AND SOUTH-EASTERN REGION

Sir Frank Mears was working out a plan for this Central and South-East Region while Sir Patrick Abercrombie and Robert Matthew were engrossed in the Clyde Valley. Sir Frank has done much to show what intelligent planning might mean for the agricultural community. He has taught us to lay special stress on rural planning in Scotland, while we are in danger of losing essential workers from the land. He constantly reminds us of the alarming population statistics, which show that the rich lands of the Border counties will be as seriously depleted of rural population as the Highlands in another generation. Edinburgh and the industrial centres of the East are drawing their population from the farm lands of the Lowlands as Glasgow is drawing hers from the Highlands.

The Mears Report will probably leave the printer about the same time as the Clyde Valley Report. The influx of mining and industrial workers into the Forth basin makes a vigorous rural planning policy in this region all the more urgent. Coal production in the East is to be stepped up from about 17 million to 23 million tons. In many Scottish mining communities there is one miner to every five—sometimes to less than five—of the population. In the new developments we shall have to aim at 1 in 8 at least, assuming the right kind of balancing industries. On this reckoning, there will be an increase of at least 200,000 people in the eastern coalfield during the next few decades. In the Lothians, where the combination of subsidence and agricultural need makes the siting of a new town exceptionally difficult, the Mears plan suggests linking together two or three existing burghs or large villages with a comparatively small new central unit, making a "constellation" of communities.

* "Scotland's Changing Population," published for the Scottish Council by the National Council of Social Services, London. Price 3s. 6d.

The Architects' Journal Library of Information Sheets 85. Editor: Cotterell Butler, A.R.I.B.A.



SECTIONS THRO' HALF-ROUND RECTANGULAR AND OGEE GUTTERS.



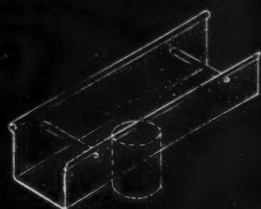
ALTERNATIVE ROLLS FOR EDGES OF GUTTERS.

| TYPE | SIZE | a | 3" | 4" | 4 1/2" | 5" |
|-------------------------------|---------------------|---|--------|--------|--------|--------|
| half-round | depth | b | 1 7/8" | 2 1/2" | 2 3/4" | 3" |
| | depth (beaded only) | b | 2 3/4" | 3 3/8" | 3 3/8" | 4 1/4" |
| ogee (square or beaded front) | depth | c | 2 3/8" | 3" | 3 1/4" | 3 1/2" |
| | depth | b | 2 3/8" | 3 3/8" | 3 3/8" | 4 1/4" |
| rectangular | depth | b | 2 3/8" | 3 3/8" | 3 3/8" | 4 1/4" |
| | depth | c | 2" | 3" | 3 1/4" | 3 1/2" |

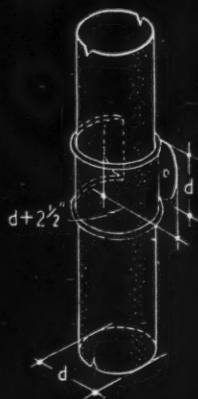
DIMENSIONS OF GUTTERS.



half-round

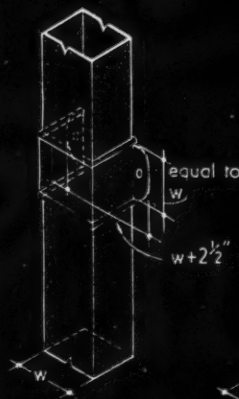


rectangular



cylindrical pattern

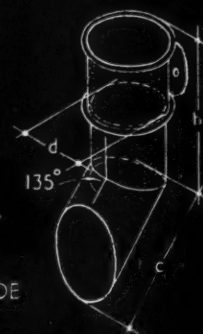
RAINWATER-PIPES.



rectangular pattern



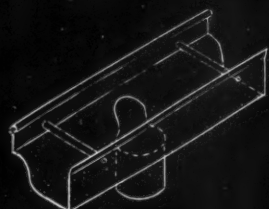
OFFSET.



SHOE

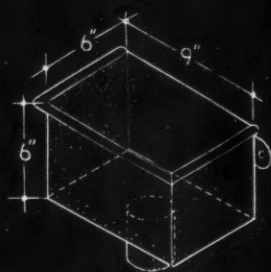
square 90°
obtuse 135°

ELBOW.



ogee

NOZZLES.



RAINWATER HEAD.

| SIZES | cylindrical | d | 2" | 2 1/2" | 3" | 4" |
|-----------------|-------------------------|---|--------|------------|--------|------------|
| | rectangular (w greater) | | - | 2 1/2 x 2" | - | 3 1/2 x 3" |
| SHOES | b | | 7 1/2" | 8" | 8 1/2" | 9 1/2" |
| | c | | 4 1/2" | 5" | 5 1/2" | 7 1/2" |
| ELBOWS (square) | b | | 3" | 4" | 4" | 6" |
| ELBOWS (obtuse) | b | | 3" | 4" | 4" | 6" |
| OFFSETS | b | | 5" | 5" | 5" | 5" |

DIMENSIONS OF PIPE FITTINGS.

WROUGHT COPPER AND ZINC RAINWATER GOODS TO B.S. 1431: 1948.

Compiled from information supplied by Copper Development Association and Zinc Development Association.

33.U1 WROUGHT COPPER AND ZINC RAINWATER GOODS TO B.S. 1431 : 1948

This Sheet describes wrought non-ferrous rainwater goods in copper or zinc conforming to B.S. 1431 : 1948. At the time of publication of this Sheet the Standard has not been published, but in due course reference should be made to it for full information.

Gutters

Sizes : In the case of length, sizes are taken overall and are 6 ft., 7 ft. and 8 ft. Widths are measured internally and are 3 in., 4 in., 4½ in. and 5 in.

Shape and Construction : There are three alternative standard sections, half-round, rectangular and ogee as illustrated. Stays are soldered to the gutter at not more than 1 ft. 3 in. centres and may be of tube or rod, or an integral part of a supporting bracket. In all cases the stay must be placed in such a position as to interfere as little as possible with the flow of water.

Fittings : These comprise outlets, stop ends and square angles (internal and external), the stop end being a flat section of metal of the appropriate shape with the top edge folded back on itself.

Joints : These are lapped for at least 1½ in. in the direction of flow and soldered.

Fixing : Supports are necessary at centres not greater than 2 ft. 6 in. and coinciding with alternate stays. Gutters of the ogee and rectangular pattern may be fixed by screws inserted through alternate stays.

Expansion : In large buildings continuous lengths of gutter should not exceed 50 ft.; where this is unavoidable expansion joints must be provided.

Pipes

Sizes : Cylindrical pattern—nominal internal diameters of 2 in., 2½ in., 3 in. and 4 in.; rectangular pattern—nominal internal sizes of 2½ in. wide by 2 in. deep and 3½ in. wide by 3 in. deep. Overall lengths are 6 ft., 7 ft. and 8 ft.

Fittings : These comprise offsets having a projection of 6 in., 9 in., 12 in. or 15 in., elbows with an angle of 90° or 135°, and shoes, all as illustrated.

Joints : These are of the spigot and socket type providing a slip joint of at least 2 in.

Fixing : Pipes and shoes are provided at the inlet end with socket and ears to the dimensions shown. Offsets have sockets only on the inlet end. Wood screws into wall plugs are used to fix pipes to the building face. Hardwood distance pieces behind the ears may be used to keep pipes clear of the wall.

Heads

Rainwater heads may be of a rectangular pattern as shown; other types are obtainable by arrangement.

Material

This should be copper complying with the requirements for "half-hard" quality in B.S. 899 : 1940, or rolled zinc conforming to part one of B.S. 849 : 1939. Fixing brackets and screws for copper should be of hard copper or copper alloy and for zinc rainwater goods galvanised mild steel.

Finish

Painting of copper or zinc is not necessary to prevent corrosion. If painting is required for decorative purposes it should be carried out after the material has weathered.

Further Information

The Copper and Zinc Development Associations are available to answer questions and to advise on technical problems dealing with this subject generally. Publications are available on request.

Compiled from information supplied by :

Copper Development Association.

Address : Kendals Hall, Radlett, Herts.
Telephone : Radlett 5616.

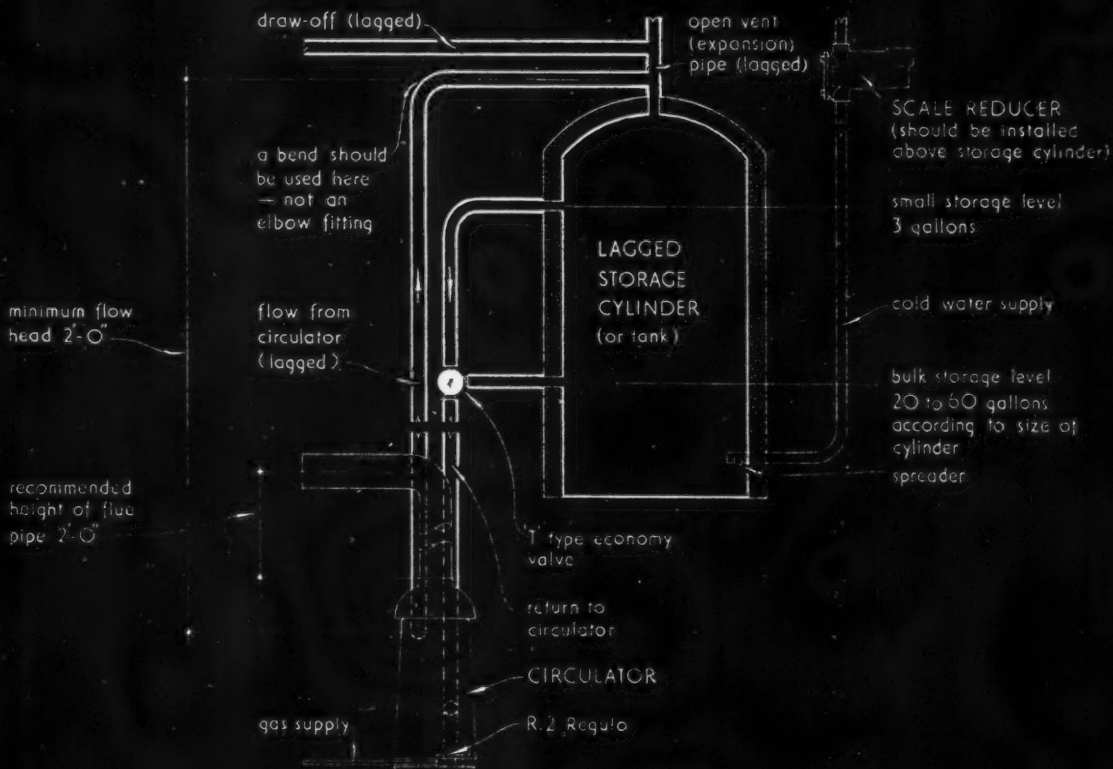
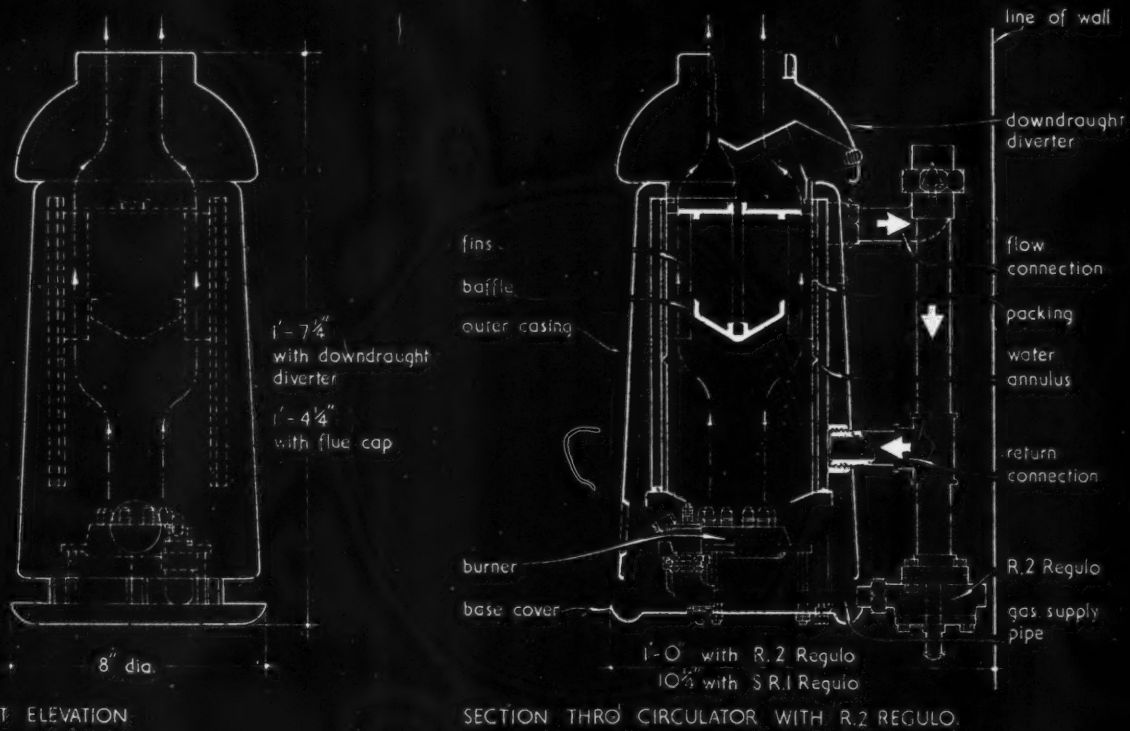
Zinc Development Association.

Address : Lincoln House, Turl Street, Oxford.
Telephone : Oxford 48088.

A
V
T

WATER HEATING UNITS | GAS

The Architects' Journal Library of Information Sheets 86. Editor: Cotterell Butler, A.R.I.B.A.

32.C1**32.C1**

32.C1 · NEW WORLD · GAS-HEATED CIRCULATOR No. C28 : DETAILS

This Sheet describes the New World Circulator. The drawings give details of the circulator and show its connections to a storage cylinder ; typical applications are illustrated on Sheet 32.C2. The appliance is designed for connection to the domestic hot water supply system and may be installed either (a) as the sole means of providing hot water, or (b) as an auxiliary to the existing solid fuel boiler. It is suitable for all types of town water using a cold water feed cistern, the maximum head permissible being 50 ft.

Characteristics

Output : 10,500 B.Th.U./hour,
(approximately 13 gal./hour raised through
80° F.)

Input : 14,000 B.Th.U./hour,
(28 cu. ft./hour of 500 C.V. gas.)

Components

Automatic cut-off gas valve : This is a safety device which cuts off the gas to the burner should the flames be extinguished through any unforeseen cause.

Heat exchanger : Patented Radaloy heat and corrosion-resisting steel construction.

Water unit : Heavy gauge sheet copper with brazed joints.

Burner : Cast iron body fitted with Bray jets No. 266.

Downdraught diverter : Supplied integral with the heater with socket for 3 in. internal diameter flue.

Economy valve : This operates in two positions and controls the amount of water heated. The first position maintains a supply of about 3 gallons of hot water ; the second ensures bulk quantities for baths, etc. The valve is supplied at extra cost.

R.2 Regulo : This is a thermostat fitted to the back of the circulator which cuts down the gas supply as the water becomes heated.

S.R.1 Regulo : This is supplied as an alternative to the R.2 Regulo especially where available space is restricted. It shuts off the gas supply when the water is heated, and is fitted in either the top or the side of the storage cylinder. An economy valve should always be fitted with the S.R.1 Regulo.

Scale reducer : In hard water districts a scale reducer embodying an active reagent cartridge is available to reduce scale formation. The cartridge should be renewed every 6 to 12 months depending on the character and quantity of water used.

Finish

White vitreous enamelled outer case. Visible fittings brass, bronze lacquer finish.

Installation

Position : The circulator should be fixed in a position near to the hot water storage (a wall bracket is obtainable if required) leaving a clearance of 6 in. under the base cover. The position should be well ventilated, free from draught, and should provide a circulation head of not less than about 2 ft.

Gas : The circulator is provided with a union to take $\frac{1}{2}$ in. B.S.P. gas pipe. A $\frac{1}{2}$ in. gas tap should be fitted in the supply pipe near the circulator, and, in districts where wide variations of gas pressure are known to occur, a constant pressure gas governor of 60 cu. ft./hour capacity should be included.

Water : From household cistern supply. Maximum head of water 50 ft. Connections are $\frac{1}{2}$ in. B.S.P. female, for both flow and return.

Flue

The circulator should be fitted with a flue when installed in a room of 1,000 cu. ft. capacity or less. For permanently ventilated spaces of larger capacity only in exceptional circumstances need a flue be connected. All flues should be provided with efficient terminals, see B.S. Code of Practice 331.104: 1947—Flues for Gas Appliances.

Compiled from information supplied by :

Radiation Ltd.

Address : 7 and 8, Stratford Place, London, W.1.
Telephone : Mayfair 6462.

TH
A S

GENERAL
led to the
administra
the TUC
modation
staff, the
training o
desire for
unionists v
and as civ
the last v
the Labo
agreed tha
tenancy o
ing. Cong
should be
ing which
pated exp
SITE.—A
sites the
decided u
25,000 so
Street, a
building,
£150,000.
PLAN.—
required a
the Memo
bers, com
reference
conference
tained tra
and lectur
ASSESSO
Percy Th
that the
petition
He consi
planning
level, but
dull and u
failed in t
ship of th
cloakroom
hall.
He award
David D
prize of £
C. Israel,
to Sir Joh
and Part
In additi
the follow
commend
£25 each
Charles
Uren & F
D. Dex
son, and
C. Lovet
Philip H
ham Gall
John Gre
Gollins,

THE T.U.C. COMPETITION

A SELECTION OF THE PREMIATED DESIGNS

GENERAL.—Three requirements led to the proposal to erect a new administrative headquarters for the TUC: the need for accommodation for the administrative staff, the establishment of a TUC training college, and lastly the desire for a memorial to trade unionists who in the armed forces and as civilians, played a part in the last war. At the request of the Labour Party, the TUC agreed that they should be given a tenancy of part of the new building. Congress agreed that £500,000 should be raised to provide a building which would allow for anticipated expansion.

SITE.—After examining many sites the TUC General Council decided upon a cleared site of 25,000 sq. ft. in Great Russell Street, adjacent to the YWCA building, and costing nearly £150,000.

PLAN.—The competition terms required a main entrance hall, to be the Memorial Hall, council chambers, committee rooms, offices, a reference library, a canteen and a conference hall. Also a self-contained training college with library and lecture room.

ASSESSOR'S REPORT. — Sir Percy Thomas, the assessor, said that the decision to hold a competition had been fully justified. He considered the standard of planning to be on a fairly high level, but many of the elevations dull and unsuitable. Many designs failed in the planning and relationship of the conference hall, foyer, cloakrooms and the main entrance hall.

He awarded first prize of £2,000 to David Du R. Aberdeen, second prize of £1,000 to E. D. Lyons and C. Israel, and third prize of £500 to Sir John Brown, A. E. Henson and Partners.

In addition to the prize winners, the following architects were highly commended and awarded prizes of £25 each:

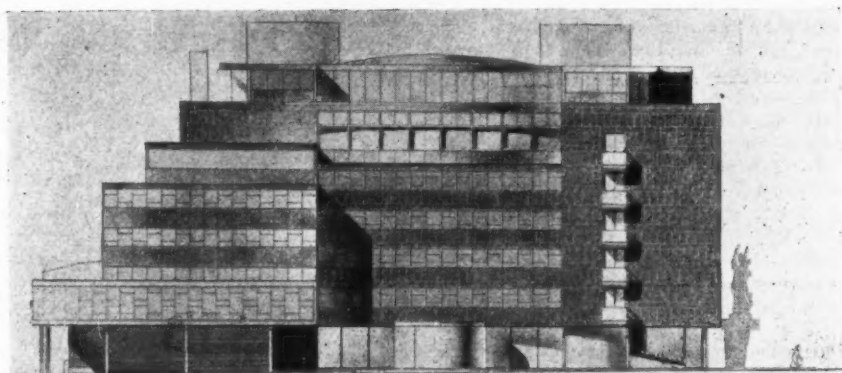
Charles Pike, of Slater, Moberley, Uren & Pike.

D. Dex Harrison, Norman Harrison, and Ernest Seel.

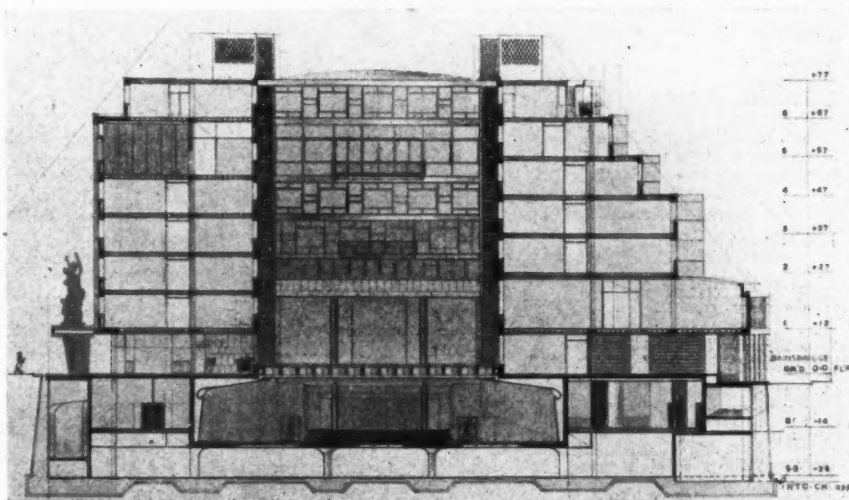
C. Lovett Gill.

Philip H. P. Bennett and W. Bonham Galloway.

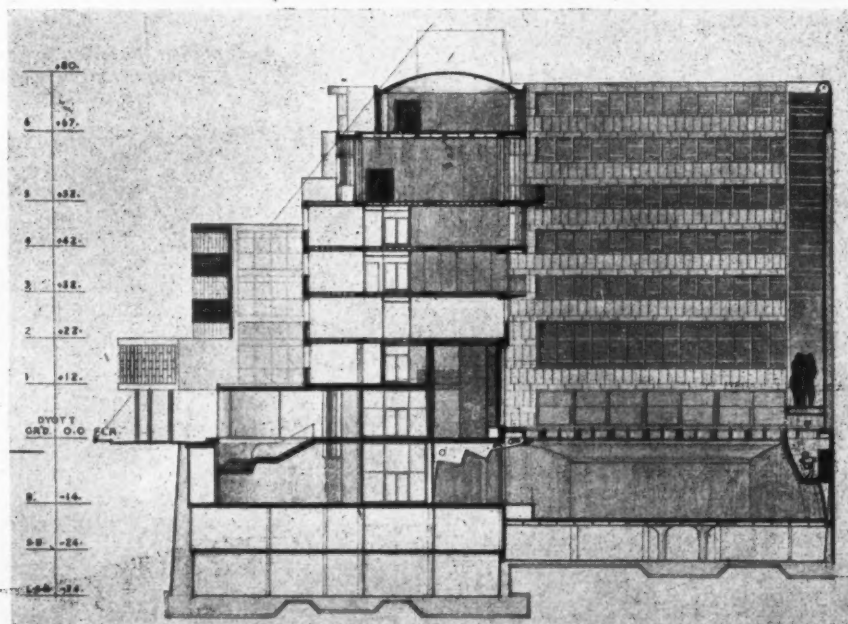
John Grey and F. E. E. Atkinson. Gollins, Melvin and Partners.



SIDE ELEVATION OF THE WINNING DESIGN



ABOVE AND BELOW: SECTIONS OF THE WINNING DESIGN



FIRST PRIZE: DAVID ABERDEEN

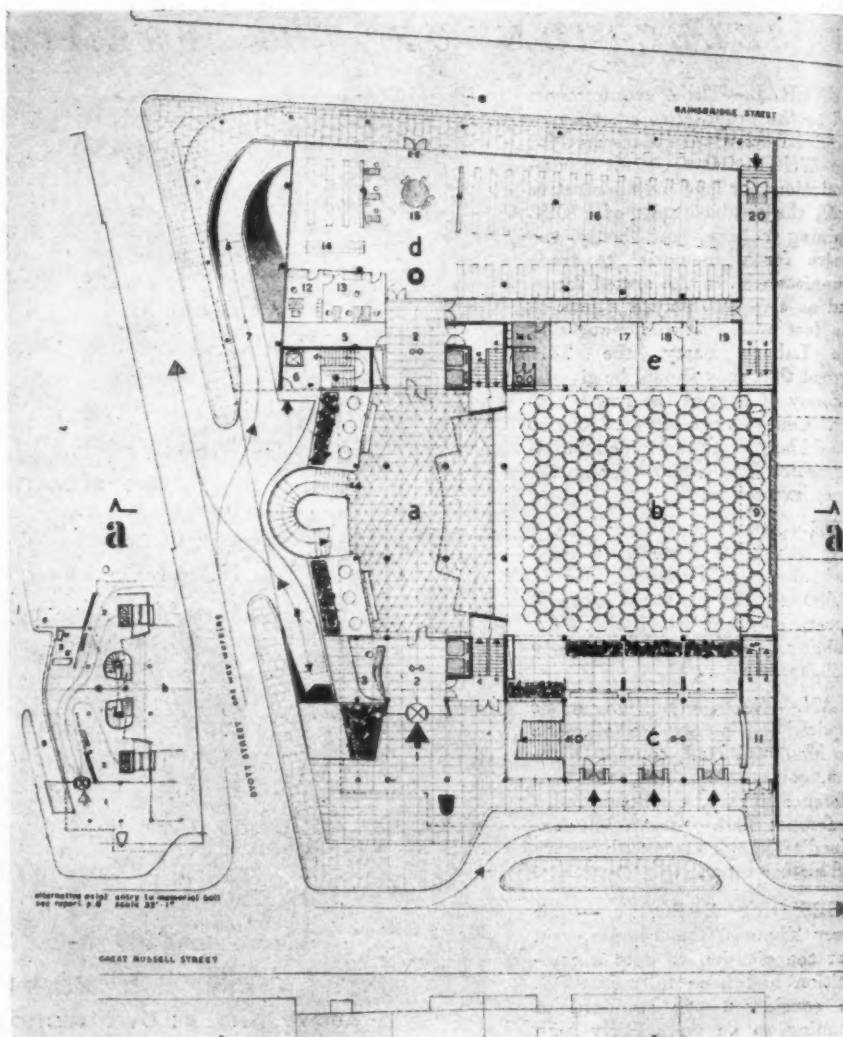
THE T.U.C. MEMORIAL BUILDING COMPETITION

The winner planned his building on three sides of a court. The fourth side consists of a memorial wall built of polished green marble and glass against the light well of the YWCA building. The construction is of reinforced concrete. The Board Room roof is of shell concrete. Walls are a $3\frac{1}{2}$ in. reinforced concrete apron from window cill to window head, providing stiffening for the 5 in. \times 10 in. mullion ribs which are at 3 ft. $10\frac{1}{2}$ in. centres. External facing, $1\frac{1}{2}$ in. polished Cornish granite slabs. Windows are of aluminium alloy.

Further illustrations of this design are on page 80.

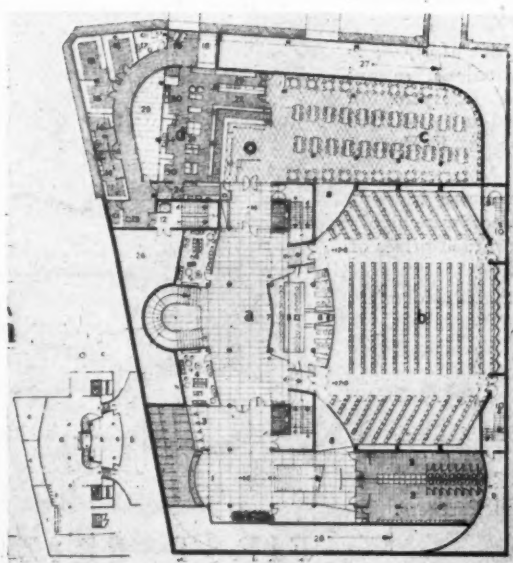
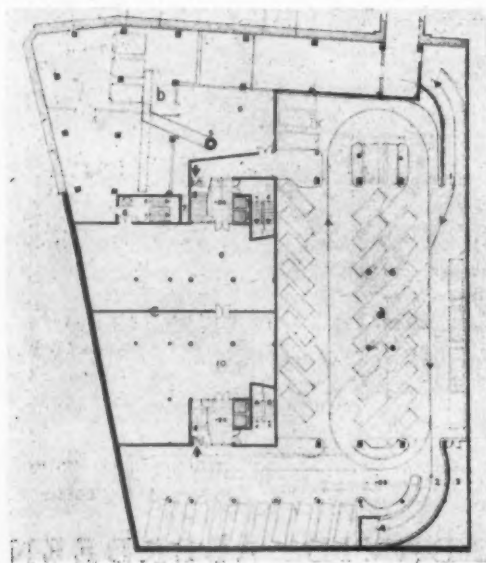
GROUND FLOOR PLAN

- a. Entrance Hall.
 - 1. Portico.
 - 2. Lifts and stair halls.
 - 3. Enquiries.
 - 4. Stair to conference hall lower foyer.
 - 5. Telephone exchange.
 - 6. Service stair and goods lift.
 - 7. "In" ramp down to garage.
 - 8. "Out" ramp down to garage.
- b. Conference Hall Roof.
 - 9. Memorial wall.
- c. Conference Hall Street Foyer.
 - 10. Main stair to lower foyer.
 - 11. Display.
- d. Joint Library (TUC and LP).
 - 12. Librarian.
 - 13. Assistants.
 - 14. Index.
 - 15. Reading tables.
 - 16. Stack.
- e. Training College Administration.
 - 17. General office.
 - 18. Secretary.
 - 19. Principal.
 - 20. Night entrance and exit and caretaker's entrance.



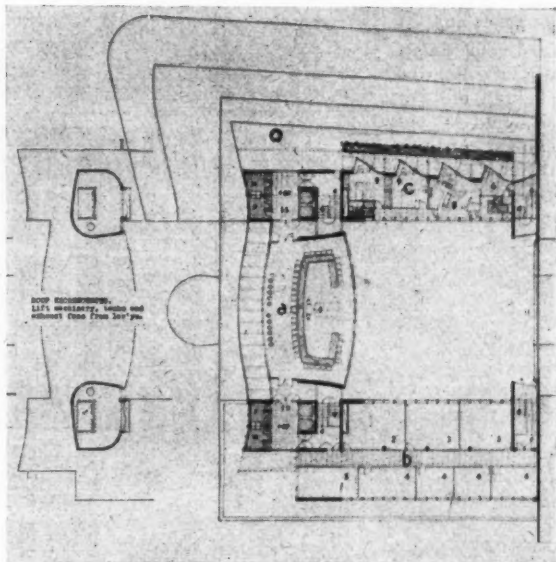
GROUND FLOOR

The small plan on the left, above, is an alternative entry to the Memorial Hall, and is read in conjunction with the basement plan below.

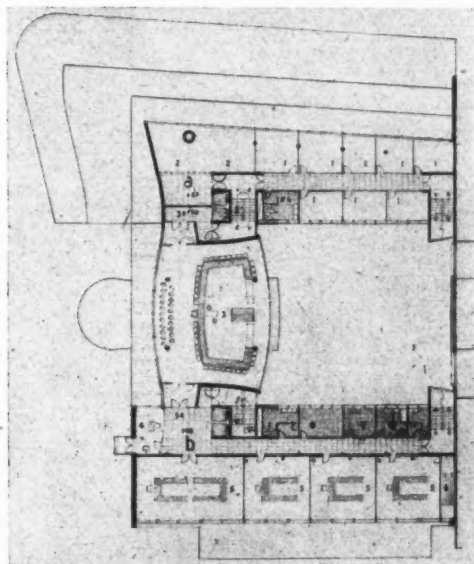


Sub-basement, extreme left, and left, the basement.

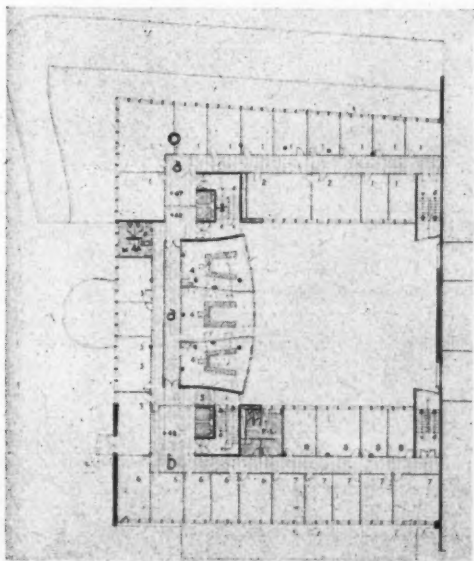
N



2



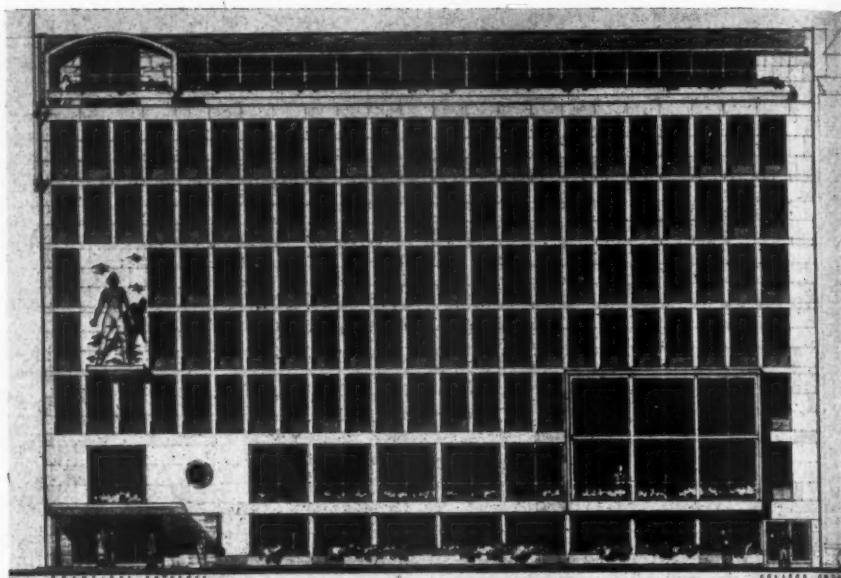
*Second floor,
extreme left,
and left the
fifth floor.*



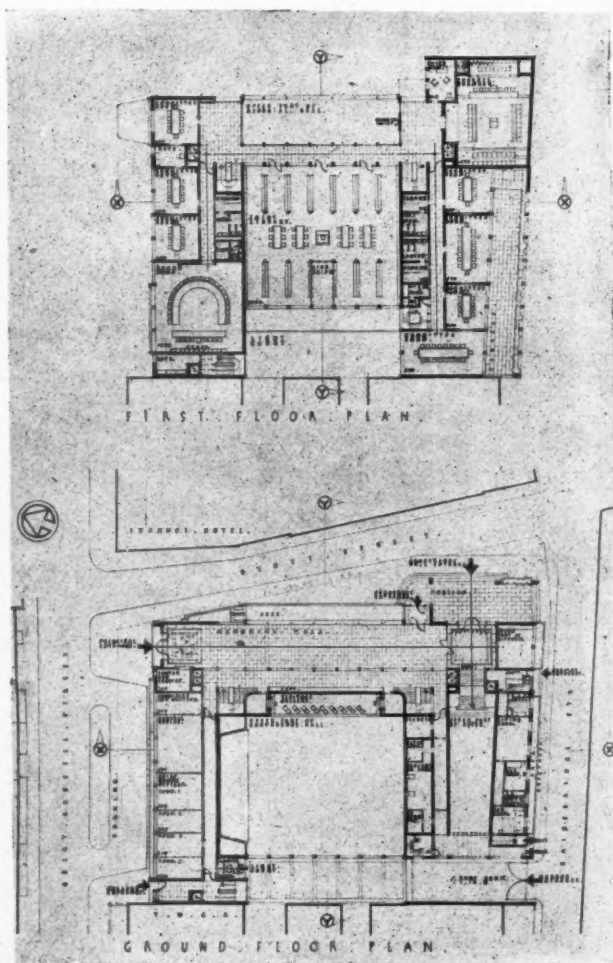
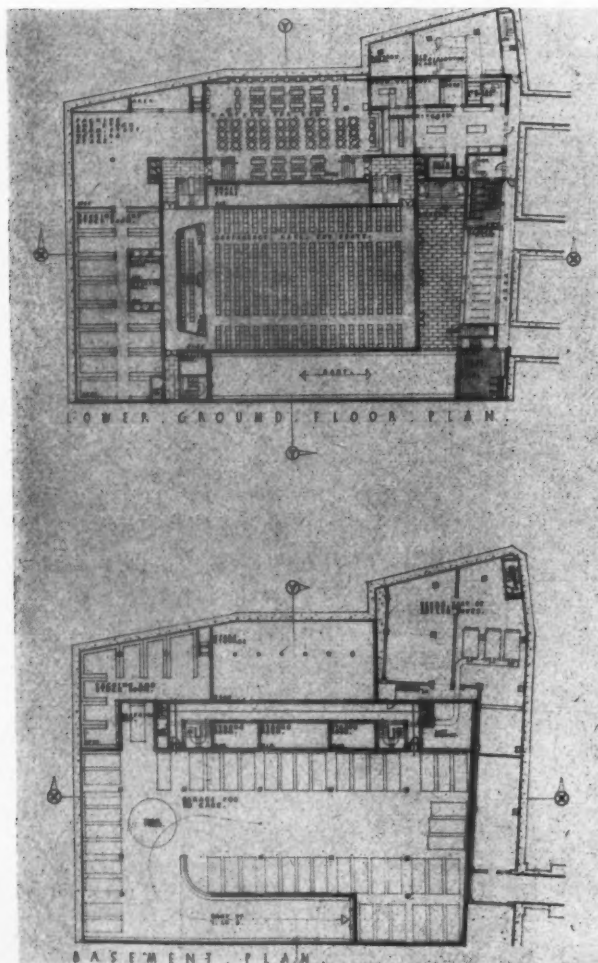
First floor, extreme left, and left, the fourth floor.

T.U.C. COMPETITION: SECOND PRIZE.

The second prize of £1,000 was awarded to E. D. Lyons and C. Israel. The assessor described the design as being of very considerable merit, and a very practical and straightforward solution of the problem. The disposition of the various units is well arranged and the elevations are simple and dignified.



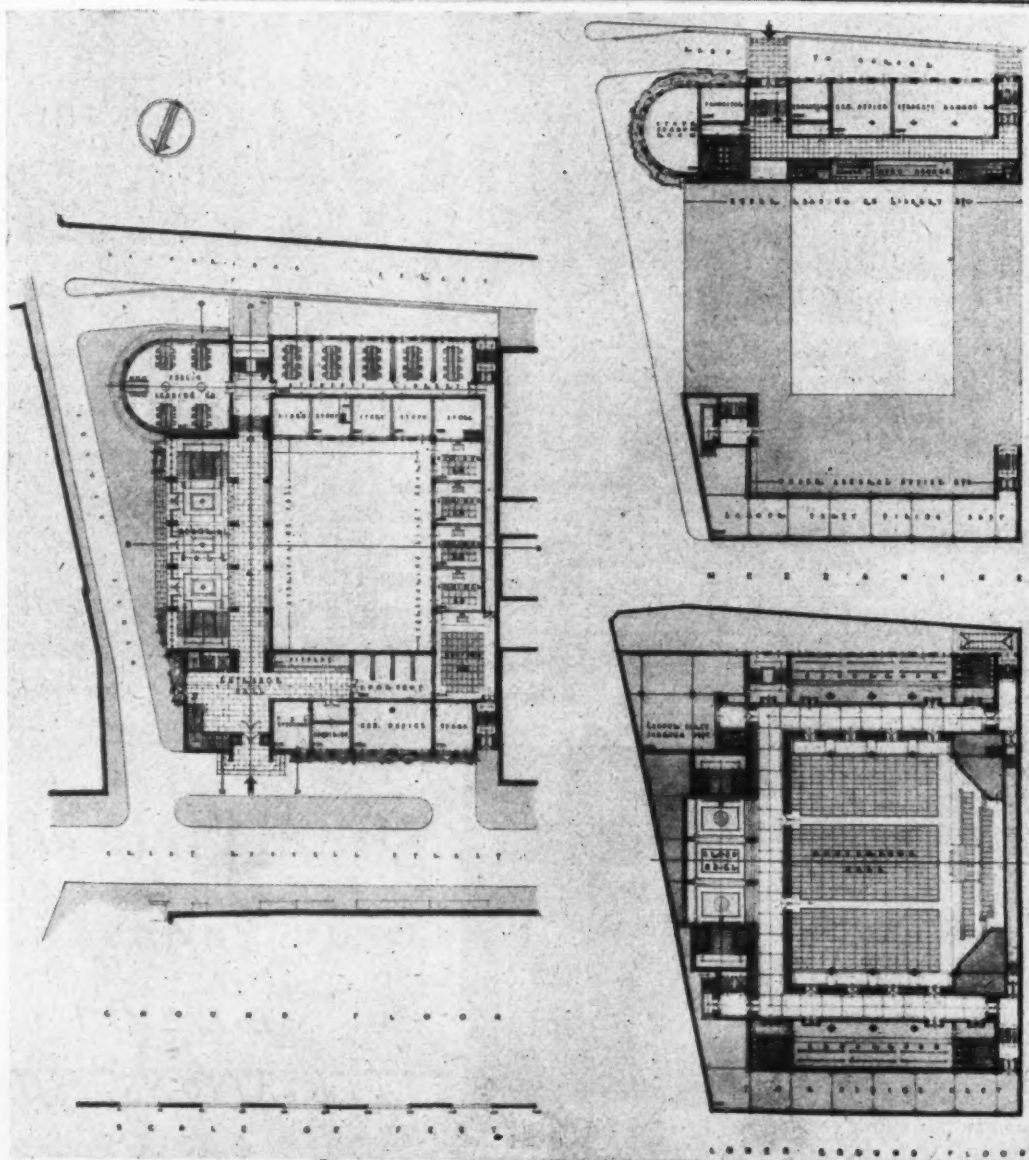
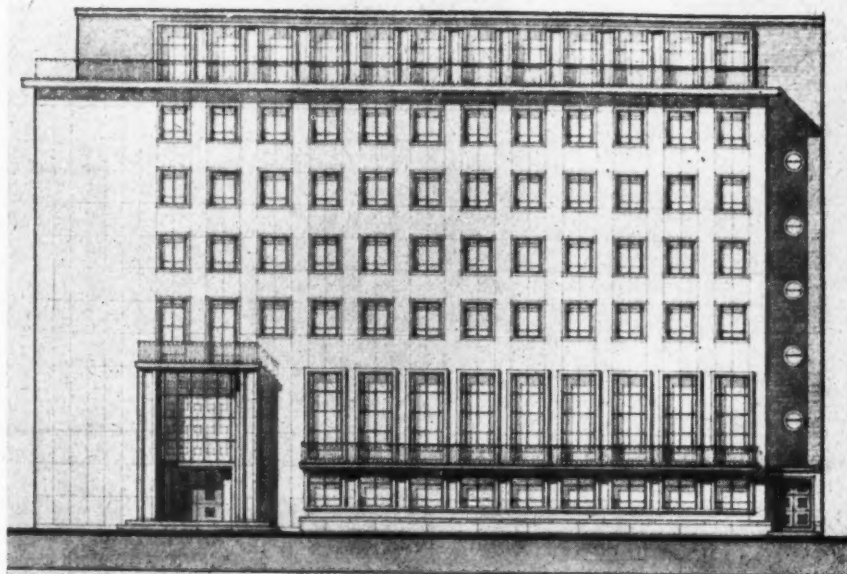
SECOND PRIZE: E. D. LYONS AND C. ISRAEL



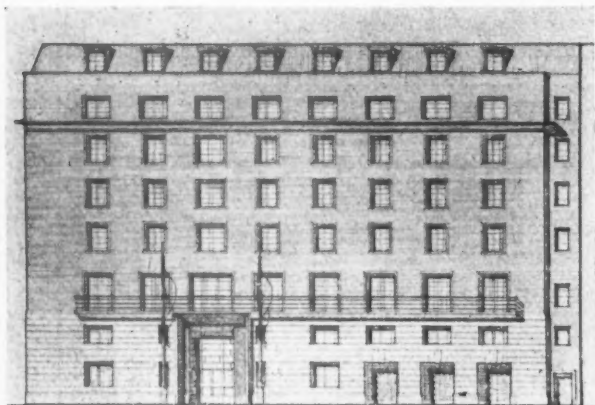
T. U. C. COMPETITION: THIRD PRIZE.

The third prize of £600 was awarded to Sir John Brown, A. E. Henson and Partners. The assessor said that in these plans the entrance hall and conference hall were well planned but the office accommodation was not quite as good as in the first two schemes.

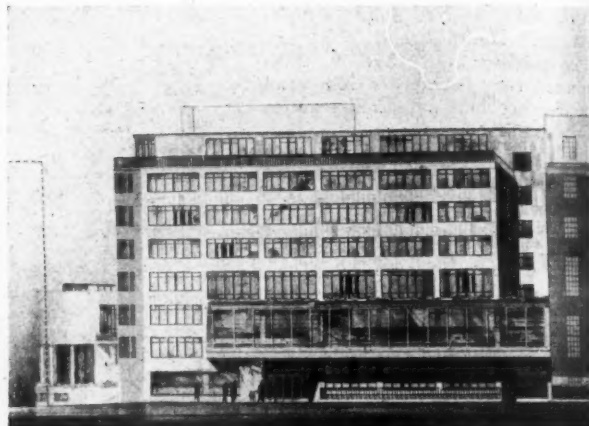
THIRD PRIZE: SIR JOHN BROWN, A. E. HENSON AND PARTNERS



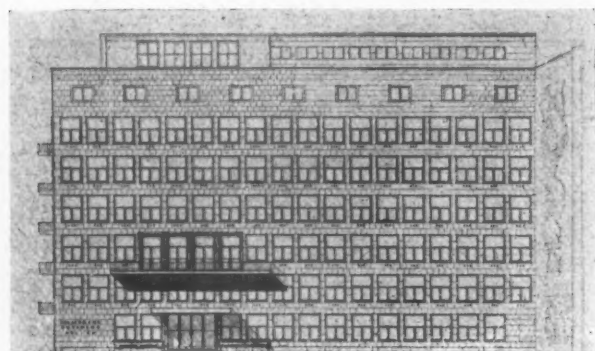
THE T.U.C. MEMORIAL BUILDING COMPETITION



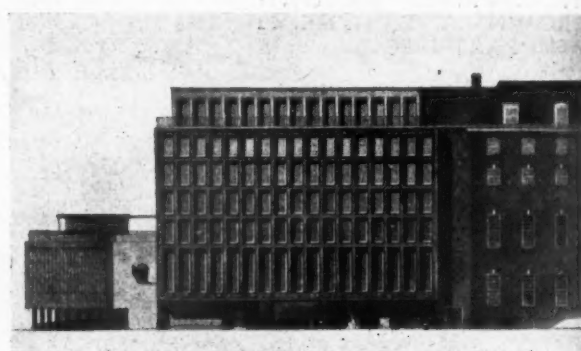
A highly commended design by Gollins, Melvin and Partners.



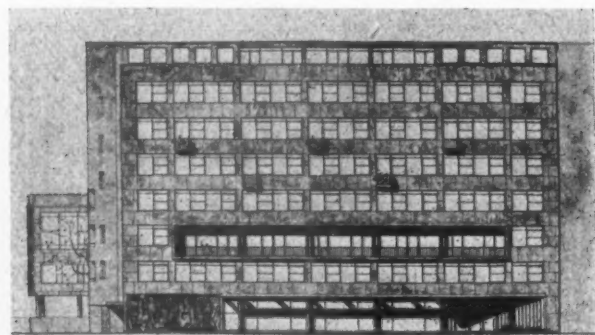
Design by H. A. Johnson and William Crabtree.



Design by George Grenfell Baines.



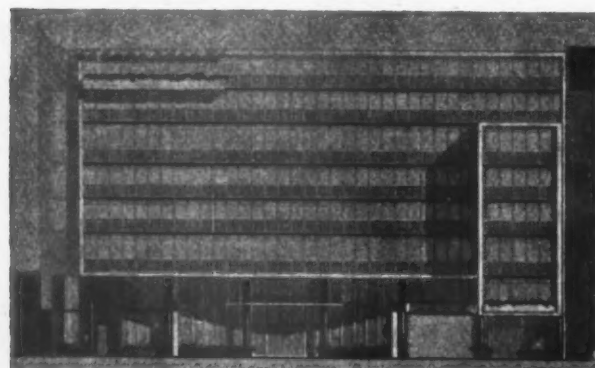
A highly commended design by Harrison and Seel.



Design by F. R. S. Yorke, E. Rosenberg and C. S. Mardall.



Design by Fello Atkinson, Oliver Cox and Michael Ventris.



Design by Louis Erdi.

A SELECTION OF
ELEVATIONS SUBMITTED

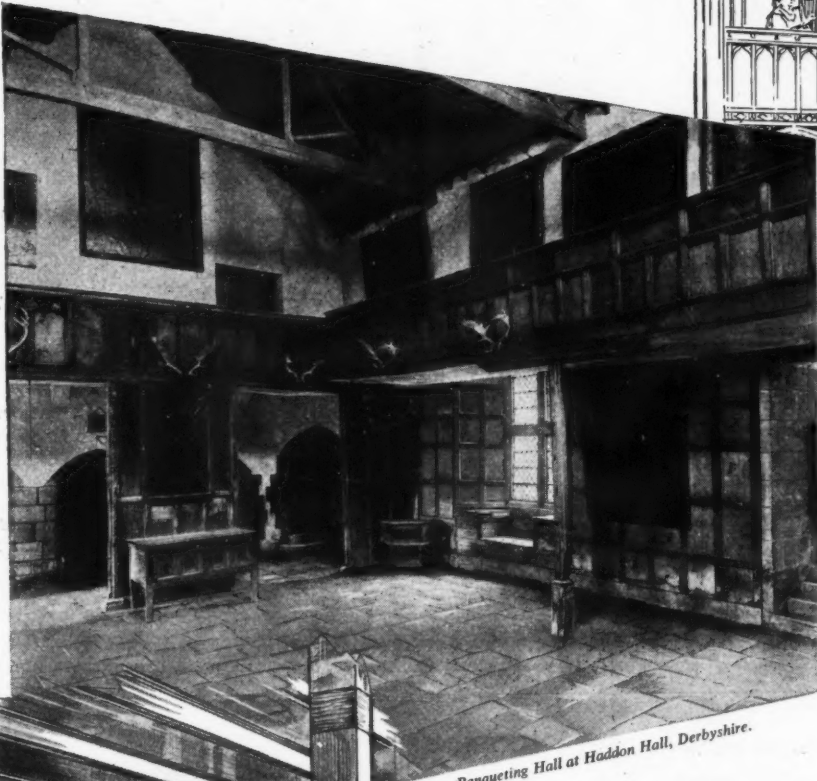
1

W

13
TELE
SHOP
SHOP

467

In a changing world...



Banqueting Hall at Haddon Hall, Derbyshire.

Timber endures

The permanent beauty and utility of timber is enshrined in ancient monuments everywhere. Haddon Hall, for instance, with its open timber roof, panelled screen and minstrel gallery excites admiration of 14th century craftsmanship and emphasizes the unique suitability of the material. For similar reasons the modern architect, craftsman and designer prefer timber. They enjoy not only a far greater range of hardwoods and veneers but a wide variety of plywoods—water resistant, flat, shaped or metal faced—prepared for their use with all the advantages of modern kiln drying, fireproofing, etc. to meet the exacting demands of modern tastes and requirements.

WILLIAM MALLINSON & SONS LTD

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

130-150 HACKNEY ROAD • LONDON • E 2

TELEPHONES (Private Exchange)
SHOREDITCH 8888 (3 lines)
SHOREDITCH 8811 (5 lines)

TELEGRAMS & CABLES
ALMONER
LONDON



No. 10 of a series by Semtex Limited.

SEMASTIC DECORATIVE TILES IN HOSPITALS

HOSPITAL floors must fulfil certain specified conditions not easily realised in practice—it was difficult to combine in one material all the qualities demanded by Hospital managements, medical and nursing staffs.

The new Semastic Decorative Tile now readily available, has enabled architects to design floors that not only meet these special requirements, but set an entirely new standard in the technique of flooring.

HYGIENE

The very low absorption factor of these tiles, and the ease with which they can be cleaned, make SEMASTIC DECORATIVE TILES eminently suitable for hospitals and nursing homes. They will not "dust up" with prolonged use.

CHEERFULNESS

A variety of cheerful colours in plain or marbled finishes gives the designer exceptional scope in providing floor surfaces of pleasing and dignified character.

WARMTH

SEMASTIC DECORATIVE TILES have a very low thermal conductivity, spelling warmth and comfort for patients and staff alike.



Out-Patients' Department of Luton & Dunstable Hospital.

QUIETNESS

They are very much less noisy than the hard floors formerly in general use in hospitals.

COMFORT

SEMASTIC DECORATIVE TILES are warm-textured yet have just the right degree of hardness—they do not tire the feet.

SAFETY

Properly maintained, they are absolutely safe to walk on—even with sticks or crutches.

TOUGHNESS

Their durability enables them to stand up to the heavy duty imposed on hospital floors.

EASE OF MAINTENANCE

Unightly patches caused through accidental damage or excessive wear can be repaired easily and cheaply. New tiles quickly "marry" with their surroundings.

★ These tiles are available for installation now by trained Semtex craftsmen and by those of our Approved Contractors.

SEMTEX LIMITED (A DUNLOP COMPANY)

Branches at: ABERDEEN · BELFAST · BIRMINGHAM
BRISTOL · CARDIFF · GLASGOW · HULL · LEEDS
LIVERPOOL · LONDON · MANCHESTER · NEWCASTLE
SOUTHAMPTON · READING, BERKS.

Semtex Departments of Dunlop Overseas Companies operate in Sweden, Denmark, Holland, Belgium, France, South Africa, India and Australia; Shipping Services A/S Oslo, represent Semtex Limited in Norway.

SEMTEX LIMITED, 185-187-189 FINCHLEY ROAD, LONDON, N.W.3

Telephone: Maida Vale 6070.

Telegrams: Semtex, Haver, London.

Contracting work with Semastic Decorative Tiles is also undertaken by the following Approved Contractors:

J. A. Hewetson & Co., Ltd., HULL

Hollis Bros. & Co., Ltd., LONDON, HULL, and LEICESTER.

Horsley Smith & Co. (Hayes), Ltd., HAYES, Middx.

The Limmer & Trinidad Lake Asphalt Co., Ltd., LONDON and branches throughout the U.K.

The Penmaenmawr & Trinidad Lake Asphalt Co., Ltd., LIVERPOOL.

The Western Trinidad Lake Asphalt Co., Ltd., CARDIFF

INFORMATION CENTRE • INFORMATION SHEETS
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

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban and Rural. 5 PLANNING: Public Utilities. 6 PLANNING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN: Building Types. 11 MATERIALS: General. 12 MATERIALS: Metal. 13 MATERIALS: Timber. 14 MATERIALS: Concrete. 15 MATERIALS: Applied Finishes, Treatments. 16 MATERIALS: Miscellaneous. 17 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.

3.11 planning: regional and national BIRMINGHAM & BLACK COUNTRY SURVEY

Conurbation: A Planning Survey of Birmingham and the Black Country. West Midland Group. (Architectural Press, 1948. 30s.)

Important and most comprehensive survey of England's largest continuous built-up area outside London, comprising 270 square miles and inhabited by 2,150,000 people. Analysis of main physical, economic and industrial factors with recommendations for redevelopment. Admirably presented and fully illustrated.

A foreword by Lewis Mumford draws attention to the difficulties inherent in surveying "the complex of towns, boroughs, urban spores, submerged villages and open land which make up a conurbation." By combining "statistical analysis" with "shrewd observation" the West Midland Group have overcome these difficulties and "have put together the essential facts upon which future planning policy must be based." Mumford stresses, however, the need for a social and cultural survey of the area which the group was not able to carry out, "for without it neither the neighbourhood unit nor the conurbation as a whole can be adequately planned."

A historical sketch describes the growth of the manufacturing industries, revealing that many of the present problems of the area, such as bad housing and the haphazard location of factories are the result either of limited private planning in the past or of no planning at all.

A study of the physical background of the region describing position, the major links

of the district and its geology, is followed by a detailed investigation into local government structure within the area showing the need for reorganisation in order to provide efficient machinery for administration and detailed planning. In the Group's opinion this can be most effectively brought about by the creation of a limited number of large all-purpose authorities of county borough status which together would cover the whole conurbation.

The survey of communications within the region covers railways, roads, waterways, and air transport, resulting in certain suggestions for improvements.

A detailed analysis of population trends leads the Group to the recommendation that the population of the region should be allowed to continue to grow, but only to the extent that will arise through the natural balance of births and deaths. No net emigration from the conurbation should be encouraged, and every effort should be made to prevent increase occurring through net immigration. Within the present area two million people can be housed at a reasonable density of twenty persons to an acre with a good measure of open space and undeveloped land retained. Any increase would mean an encroachment on surrounding agricultural areas.

An extensive housing survey shows that approximately 128,000 dwellings were necessary in 1947 to accommodate new families and to replace bomb-damaged houses and slum dwellings. In addition, a further 95,000 slum-borderline houses should be demolished and replaced by new buildings. The number of slum and slum-borderline houses which should be replaced amounts to about a third of all the houses.

Two very comprehensive chapters of the report are devoted to an analysis of industry and factory buildings within the region. Conclusions arising from this investigation refer to the need for diversification of employment by extending existing stable industries. Maintenance of high employment does not require the introduction of completely new industries into the area, but industries should be redistributed in order to make up for the relative decline in certain industries such as, for instance, coal mining. There should be no further entry into the conurbation of large, self-contained factories, and, in particular, the setting-up of new industries and factories not closely linked with other regional industries and factories should be discouraged. The factory survey, involving interesting aspects of survey technique, shows the need for extensive "factory slum clearance schemes." Recognised standards for new factory buildings should be established. The conversion of existing buildings to manufacturing purposes should be controlled. Steps should be taken to maintain sufficient open space in new industrial areas and to ensure the appropriate siting of these areas.

Another important planning aspect investigated deals with surface utilization. Survey results show that an area of 56 per cent. of the total is not built-up or used for industry, and thus represents a major factor in the planning of the whole area. More than one-tenth is derelict land which has been spoiled by extractive industry and by industrial waste.

A chapter on land classification around the conurbation gives an assessment of the

agricultural values of the land which may be in danger of misuse unless its potentialities are fully recognized.

The report concludes with the Group's redevelopment proposals. The solution of the general planning problem lies in the creation of a more rational pattern of urban development and open spaces. The surface utilization survey shows that there is no essential problem of congestion in the region as a whole and that, therefore, re-planning should consist of tidying-up by regrouping the areas of development. The group envisages a pattern of urban settlements, with each settlement isolated from its neighbours and set in green, open land, from which all development other than for agriculture or amenity is banned. Urban development should be grouped around existing social and industrial centres, with the amount of permitted development clearly defined in relation to specific needs and to the general plan for the area. Congested centres of existing cities should be re-developed in order to make room for social, cultural and commercial facilities. The deficiency of open spaces in towns should be remedied to provide for ample play, sports and recreation areas. Larger urban areas should be split by green wedges and strips of parkland penetrating from the inter-urban green belts to the centres of the towns. Schemes for the rehabilitation of derelict land as open space should be started as soon as possible. The report contains a scheme for such development prepared by G. A. Jellicoe. Another scheme prepared by Thomas Sharp provides for area redevelopment in connection with smallholdings. Development in the countryside outside the conurbation should be based on a planned nucleated development in a rural setting.

13.22 materials: timber STRESS-GRADING

Stress-Grading Timber. H. E. Desch. (Building, May, 1948.)

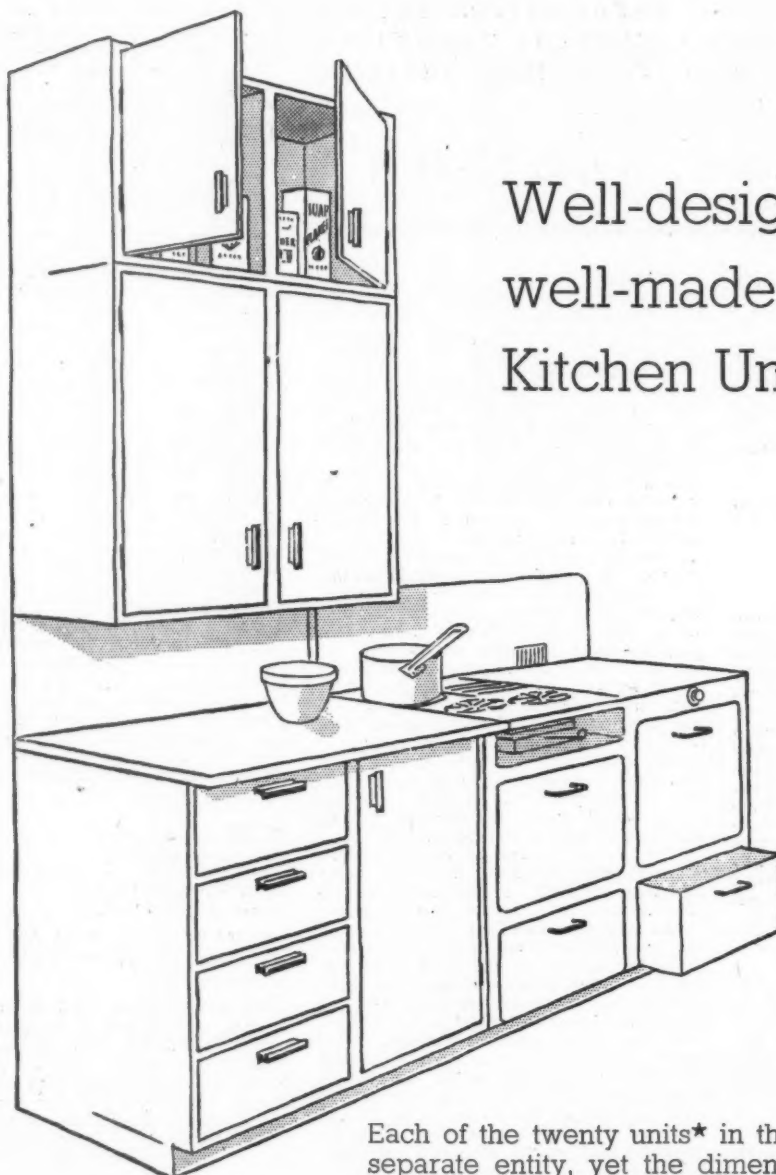
An outline of the theory and possibilities of the practical application of stress-grading to timber.

The author writes that although stress-grading was studied at least twenty years ago at the F.P.R.L. little use has been made of it in this country until the present time when the need for extreme economy has had to be exercised in the use of timber and certain architects and contractors have taken it upon themselves to study and make use of this method of calculating the strength of timber. However, in America, although stress-graded timber is not commonly used in smaller buildings, the use of the different grades is well understood by engineers for larger structures.

The saving of timber is not the only function stress-grading can provide: by understanding the nature of timber it can in many cases be used to replace steel and reinforced concrete. This latter use may seem paradoxical at the present time, but Mr. Reece of the TDA has pointed out that timber can be imported at little more than a quarter of the cost which steel can fetch when it is exported by us.

It is suggested that Sweden would be prepared to export timber in exchange for coal and that there is the possibility of developing our own tropical forests. Of the latter the author suggests that as many timbers cannot be marketed as separate timbers or grouped as commercial types—they might be converted into thin board and then built up into laminated timber with suitable adhesives and marketed as a uniform material of a calculated working stress.

The author concludes the article with a clear outline of the theory of stress-grading although he admits that the study is as yet in its infancy, and that many modifications may have to be made to suit the timber available.



Well-designed, well-made Kitchen Units

★
To supplement this range Sadds have designed a special sink unit to take a standard size stainless steel sink with single or double draining boards. Write for complete catalogue of kitchen units.

Each of the twenty units★ in the EJMA range is a separate entity, yet the dimensions are carefully related so that any number can be combined together in a limitless variety of ways to make the best use of the space available.

Made by precision methods from selected materials these units maintain the high standard of quality for which Sadd's joinery is well-known.

The selection illustrated is specified by the Ministry of Health for Airey Houses. Joinery and Kitchen Units for these houses are one of our specialities.

EJMA is the certification trade mark of the English Joinery Manufacturers Association.

JOHN SADD & SONS LTD.

STATION ROAD WHARF

MALDON

MALDON 131 (6 lines)

ESSEX

LONDON OFFICE: ALDWYCH HOUSE, W.C.2

CHAncery 7214

20.74
PREST

Pre-stre
(Engine

First
this co
Nunn
at Fish
effectiv
is the
bridge
span an
ago by

The
the om
which
of floo
hump-b

The n
concret
of the
of abo
vented

The ca
over a
crete

6,000
was ap
hydrau

of 2.0
bottom

to pre
under

later g

20.7
AGRI

Agricu
Develo

Stand

compo

suitabl

and an

change

The

has de

posed

trusses

purlin

gated

than s

timber

conjur

Stand

20.74 construction : complete structures PRESTRESSED R.C. BRIDGE

Pre-stressed cast-in-situ Concrete Bridge. (Engineering, June 25, 1948, pp. 608-9.)

First in situ prestressed concrete bridge in this country.

Nunn's Bridge, over the Hob Hole drain at Fishtoft, near Boston, Lincs., with an effective span of 74 ft. and depth of 50 in., is the first pre-stressed cast in situ road bridge in this country. It replaces a three span arched brick structure, built 140 years ago by Rennie.

The advantages of the new structure are the omission of the two intermediate piers, which formed an obstruction to the passage of flood water, and the elimination of a hump-back in the road.

The new bridge is supported on reinforced concrete walls sitting on precast piles. Each of the five main beams contains 12 cables of about 1 in. diameter, which were prevented from bond by means of sheaths. The cables consist of 12 high tensile wires over a bobbied wire core. When the concrete reached the specified strength of 6,000 lb./sq. in., a tension of nearly 26 tons was applied to each cable by means of a hydraulic jack. An initial compressive stress of 2,000 lb./sq. in. was induced in the bottom flange of the beams, which is enough to prevent tensile stresses in the concrete under the design load. The cables were later grouted under pressure.

20.75 construction : complete structures AGRICULTURAL BUILDINGS

Agricultural Buildings in Timber. (Timber Development Associated Ltd.)

Standard purlins, trusses, posts and other components designed for mass production suitable for buildings of 18 ft. or 33 ft. width and any required length. Components interchangeable.

The Timber Development Association Ltd. has designed standard farm buildings composed of interchangeable units. The main trusses are at 15-ft. centres. The trussed purlins designed to carry standard corrugated asbestos sheeting are lighter and stiffer than solid purlins and save 40 per cent. of timber. They can be used equally well in conjunction with steel trusses.

The unit truss is of 18-ft. span. Two of these trusses turned over on their backs with a hanger and tie bar added form a 33-ft. span truss. The components fit together with bolted connections.

For buildings with open sides, timber posts of 8, 12 or 16 ft. height and eaves beams have also been designed. The posts and trusses are connected by simple gusset plates.

23.66 heating and ventilation CONFERENCE REPORT

Fuel and the Future. Proceedings of 1946 Fuel Conference. (HMSO. 1948. 3s. 6d.)

Full report of Sections G and H of the Fuel Conference held in 1946. Although much delayed this publication does not cease to have some value and it provides a useful compendium of information, mainly on domestic heating and district heating. 211 pp.

25.54 water supply and sanitation DRAINAGE

Drainage Below Ground. Draft BS C. of P. 301: 1948. (British Standards Institution. 2s.)

General aspects of design, lay-out and construction for housing schemes, schools and the like. Sewers limited to 12 in. diameter.

This is a main code in the general building series. Sub-codes have already been issued in draft form as follows:—

- 301.100 Sewers and drains up to 12 in. diameter.
- 301.101 Excavation for drainage work.
- 301.102 Sewer connections.
- 301.103 Concreting of sewers and drains to 12 in. diameter.
- 301.104 Manholes.

The present Code deals first with requirements in the way of information, notice to authorities and type and content of drawings. Under design consideration general principles are outlined, and a close study suggests that a good many drains as at present installed might be capable of improvement. It is interesting to note that manholes in drains are not suggested at bends unless the bend is more than 45 deg., that low-level fresh air inlets are regarded with

suspicion, and that intercepting traps at site boundaries should be avoided "unless local bye-laws require them." There is some useful guidance about allowance for flow rates and the rates to be expected in various pipe sizes at common gradients. The rather common practice of getting over a difficulty in gradients by using a larger pipe size is condemned.

There is also a section on drain testing, with recommendations for length and severity of the test.

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.1, and the advertisers listed will be asked to supply information direct.

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal."

.....

.....

.....

.....

.....

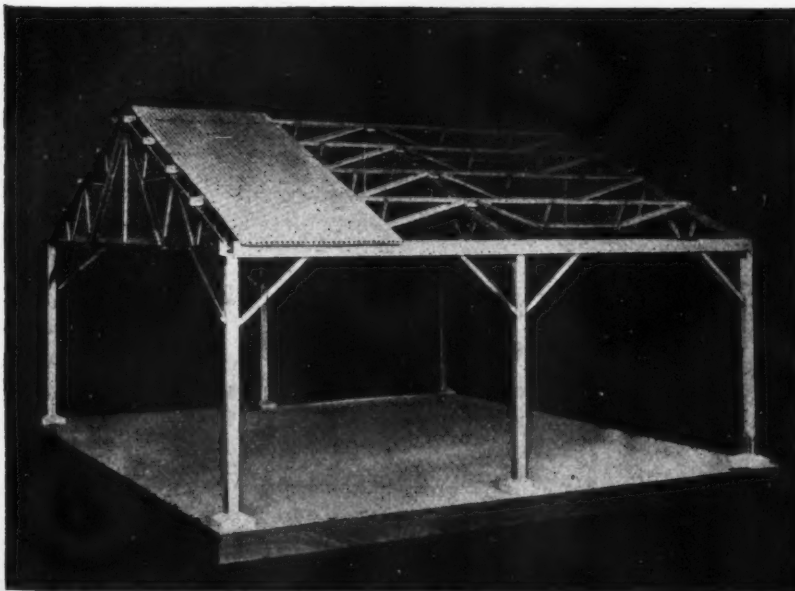
.....

Please ask manufacturers to send further particulars to:—

NAME.....

ADDRESS.....

A.J.22.7.48



Standard building units for agriculture. See 20.75.

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.1.

QUESTIONS AND ANSWERS

2951 HOSPITAL BEDS

Q I am designing a hospital for tubercular patients, and I should be glad to know what space is allowed for each patient?

A The area required for a bed for a tubercular patient is as follows:—

General ward: Adults, 80 sq. ft.; children, 70 sq. ft.

Private ward: Adults, 100 sq. ft.; children, 90 sq. ft.

Announcements

The Coal Utilization Joint Council has moved its offices from 54, Victoria Street, Westminster, S.W.1., to 13, Grosvenor Gardens, Westminster, S.W.1. The Council's new telephone number is Victoria 1534.

Much building activity by Dunlop was disclosed to the shareholders by the chairman, Sir George Beharrell, at the annual general meeting. Sites for new factories have been acquired in Australia and Canada. In this country larger laboratories are being provided; a new subsidiary has taken over a Stoke-on-Trent factory to make rubber toys; the wheel factories at Foleshill have been re-equipped, yielding a record output; part of the blitzed clothing factory at Edmonton will, it is hoped, be occupied before the end of the year; and new cotton factories are being opened at Dunfermline and Birkenhead. In Germany, production is again being carried on at a profit, and, since the Speke ordnance factory was converted 2½ years ago, production is now more than £9,000,000 worth of goods a year.

Messrs. Elliott, Cox & Partners, of 172, Buckingham Palace Road, S.W.1 (of which firm the partners are Mr. Frank Cox, F.R.I.B.A., Mr. S. T. G. Elliott, F.R.I.C.S., Mr. W. T. Roxburgh, A.R.I.C.S., Mr. E. Holmes, L.R.I.B.A., and Mr. A. V. J. Kirkham, F.R.I.B.A.), have taken into partnership Mr. M. R. Dumville, A.R.I.B.A., with effect from July 1, 1948, the style and address of the firm being unchanged. With effect from the same date Mr. M. R. Dumville has closed his practice at 15, Elizabeth Street, S.W.1.

Mr. Julian Leathart, F.R.I.B.A., has taken Mr. John P. Tingay, A.R.I.B.A., A.A.HONS.DIP., into partnership. They will practise under the style of Leathart and Tingay, Chartered Architects, at 49, Welbeck Street, London, W.1. (Welbeck 0555.)

Mr. P. W. Edwards, A.R.I.B.A., A.M.T.P.I.,

surviving partner of the firm of Walter Rudman & Edwards, Chartered Architects, 32, Market Place, Chippenham, has taken Mr. D. A. S. Webster, M.A., A.R.I.B.A., A.M.T.P.I., into partnership. The name of the firm has been changed to Edwards & Webster. The practice is being continued at the same address.

Mr. J. D. Tetlow, B.A.R.C.H., A.R.I.B.A., A.M.T.P.I., formerly of the staff of the Ministry of Town and Country Planning, London Region, has now taken up his appointment as Area Planning Officer, Eastern Area, Staffordshire County Council. His address is Quarry Lodge, Tamworth Road, Lichfield.

The increased rubber cable, domestic appliance and lamp business received in Scotland by Johnson and Phillips, Ltd., and its subsidiaries, British National Electrics, Ltd., and Aurora Lamps Ltd., has necessitated enlarged premises for their Glasgow Branch and the opening of a new branch in Edinburgh. The Glasgow Office has moved to 106, Hope Street, C.2, leaving the whole of the Bothwell Street premises as a store. All correspondence should be addressed to Hope Street. The telephone number for both premises will continue to be Central 4976/8. The new Edinburgh Branch will be opened at the end of July to enable the same stock facilities and quick delivery to be given in East Scotland as in the Glasgow area. It will be under the Managership of Mr. Bruce Russell, and a J. & P. Contract Engineer will be attached to the Branch. The address will be 3, Forth Street, telephone number Bypass 3392, and telegraphic address "Selbac," Edinburgh.

The Central Land Board, in an announcement, says that from July 1, claims may be made on the £300,000,000 fund for loss of development value, and that development charges, which now become payable can be assessed. Claims must be in by the end

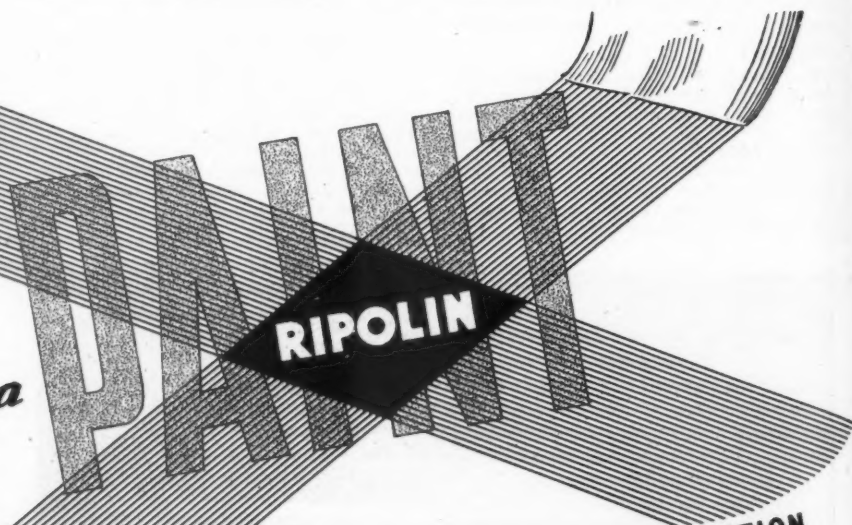
of March, or in exceptional circumstances by the end of June, 1949. The Board can contribute towards professional fees of qualified surveyors employed by claimants. Owners of property who wish to develop it, which includes using it for a different and more valuable purpose, may be liable to development charge, and should apply to the Board for determination of the charge. The Board will assess the application within a month after permission to develop has been given by the local planning authority. Listing some of the things a property-owner may do without the Board exacting a charge, the Board states a house may be enlarged up to 10 per cent. of its existing size. It may be rebuilt so long as it is used as a dwelling-house, and is not made more than 10 per cent. (or 1,750 cubic feet) larger. Within this tolerance he can add a garage. A farmer may enlarge or put up any farm buildings.

Messrs. Daniel Watney, Eiloart, Inman & Nunn have taken into partnership Mr. H. A. J. Darlow, A.R.I.B.A., and Mr. G. W. Mathews, M.A., A.R.I.C.S. The firm will continue to practise under its present name.

Buildings Illustrated

Dwelling House at 105, Queens Road, Hertford, Herts. (Pages 89-91.) Architect, F. K. Hicklin, A.R.I.B.A. General Contractor, Messrs. C. Rook, Bros. Sub-contractors: Bricks, Messrs. Dunbrick, Ltd.; Special Roofings, Broderick Insulated Copper Roofing; Patent Flooring, Messrs. Granwood Flooring Co.; Cooking and Hot Water Supply, Aga Cooker; Electric Wiring and Light Fixtures, Northmet Power Co.; Kitchen Fittings, George Hammer & Co. Ltd.

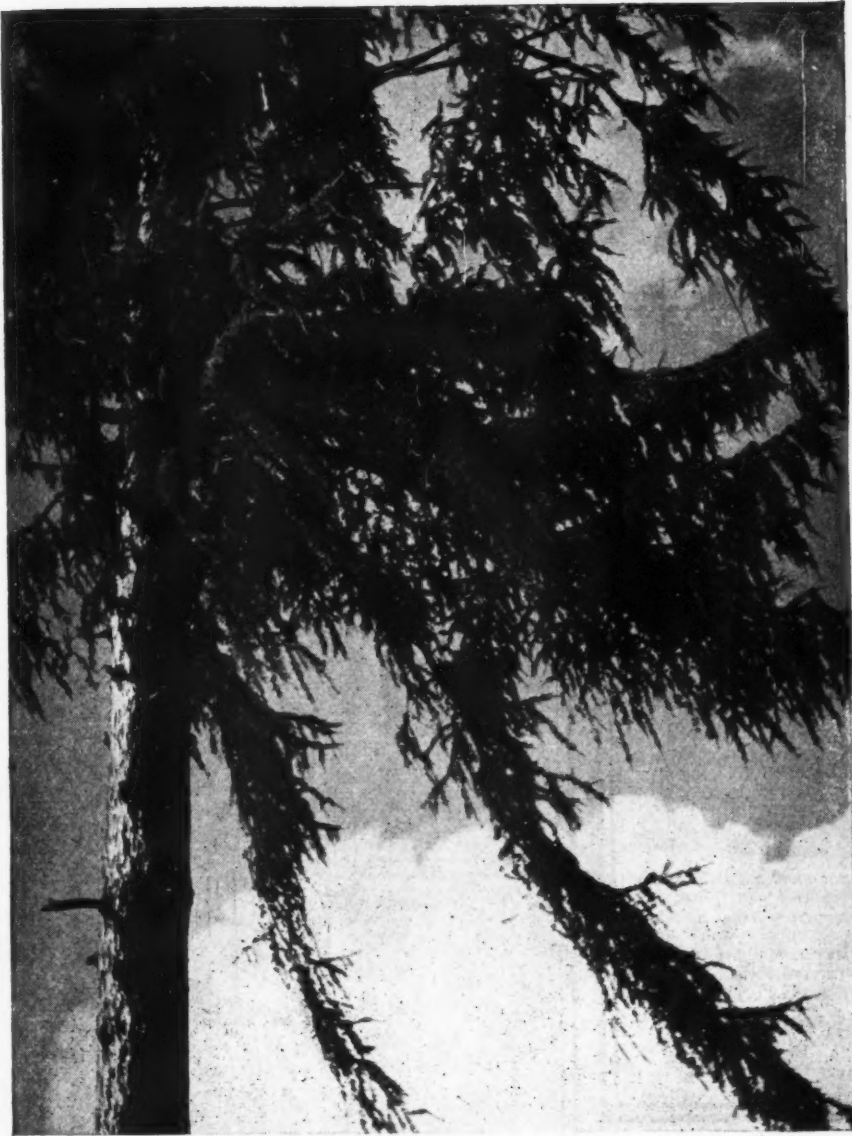
More than just a



IT IS A SAFEGUARD AGAINST DEPRECIATION
Ripolin surfaces are renowned for their durability and enhance the value of any building. Ripolin provide a complete range of paints for interior and exterior use. Our advisory staff is available to architects for the preparation of specifications.

RIPOLIN LIMITED
9 DRURY LANE, LONDON W.C.2

LONDON • PARIS • AMSTERDAM • CLEVELAND • TORONTO • ZURICH • BILBAO



... Fine timber is
regrettably scarce these
days, but we manage
to find it still —
and produce work of
which the Industry
can well be proud.

The
**Midland Woodworking
Company Ltd**

MELTON MOWBRAY

Craftsmen in Domestic Joinery

VERSIL all-purpose structural insulation



Photograph above shows glass silk insulation fixed to special battens with ceiling boards secured to steel floor joists in a pre-fabricated construction. Sketch alongside shows a similar application in which additional battens provide means of securing glass silk mattresses and ceiling board.

VERSIL glass silk is not the cheapest form of structural insulation, but it possesses unusual advantages, many of which are exclusive to the spun glass from which it is constructed. The insulation of walls, ceilings and floors demands a material that is strong, flexible, easy to handle, and simple to instal. Versil structural insulation fulfils every one of these conditions.

It is also an inorganic material, proof against time, fire resisting, non-moisture absorbent, odourless, providing no sustenance for insects or vermin.

VERSIL blankets are light and resilient, constructed from continuously drawn glass fibres, built up into many layers which, properly fitted, cannot sag or settle. Flexibility enables it to fit into recesses and tuck round

obstructions: it is now supplied in 25 yard rolls in various widths, totally enclosed in special water-proof covering and machine stitched lengthways for added strength.

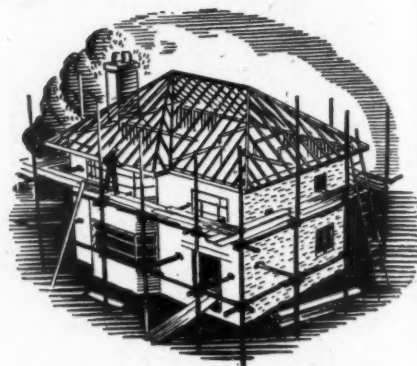
Versil Structural Insulation is in accordance with the recommendations in M.O.H. circular 170/46 for the insulation of dwelling houses. Samples and information on request. Apply to Versil Ltd., Rayner Mills, Liversedge, Yorks.



CPW

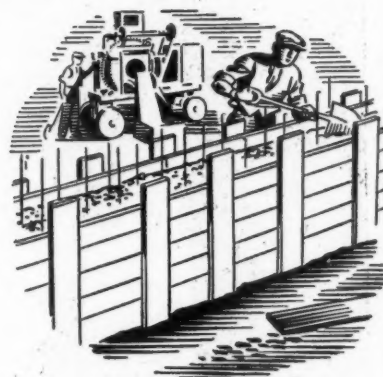
WHETHER FOR

HOUSES



OR FOR

**INDUSTRIAL
CONSTRUCTION**



TIMBER

FOR CARCASING
SHUTTERING AND
HEAVY CONSTRUCTION

**BUILDING MATERIALS
PLYWOODS
INSULATING BOARDS**

BULLDOG TIMBER CONNECTORS



TIMBER IMPORTERS AND BUILDERS' MERCHANTS
ASTOR HOUSE, ALDWYCH, LONDON, W.C.2
Telephone: HOLborn 6071-2-3

HEAD OFFICE: NORTHAMPTON

Branches at Cambridge, Chatteris, Cromer, Eastleigh, Lymington, Newbury, Northampton, Peterborough, Rugby, Southampton, Sutton Bridge (Lincs.)

BIF

2-13 MAY
1949



BRITISH INDUSTRIES FAIR LONDON & BIRMINGHAM

INTENDING EXHIBITORS
should apply for space by
9th August, 1948.

Manufacturers who have not received
an application form should apply
at once:

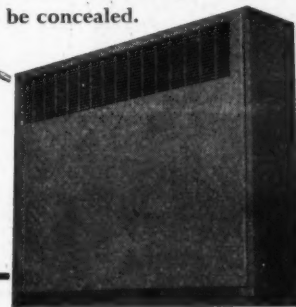
for the London Section to
EXPORT PROMOTION DEPARTMENT,
BOARD OF TRADE,
27 OLD QUEEN STREET,
LONDON, S.W.1

or for the
Engineering & Hardware Section to
BIRMINGHAM CHAMBER OF COMMERCE, INC
95 NEW STREET,
BIRMINGHAM 2.



And the Gallery goes on growing

Private owners, public corporations,
industrial users — their names are added
every day to the ever growing gallery of
satisfied Vectair users throughout the world.
For sheer efficiency of heat output few types
of heating can equal the Vectair. Of pleasing
appearance and excellent finish, they grace
a home, give dignity to an office and
yet, if the decorative scheme demands,
may be concealed.

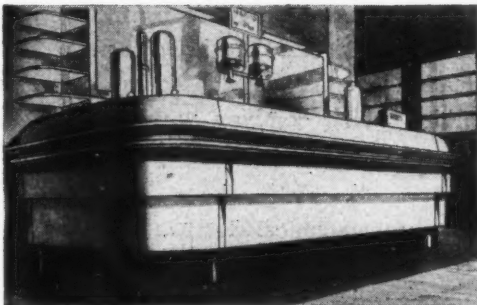


BRITISH TRANE CO. LTD

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

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

Service Counters for CAFES, SNACK BARS CANTEENS & RESTAURANTS



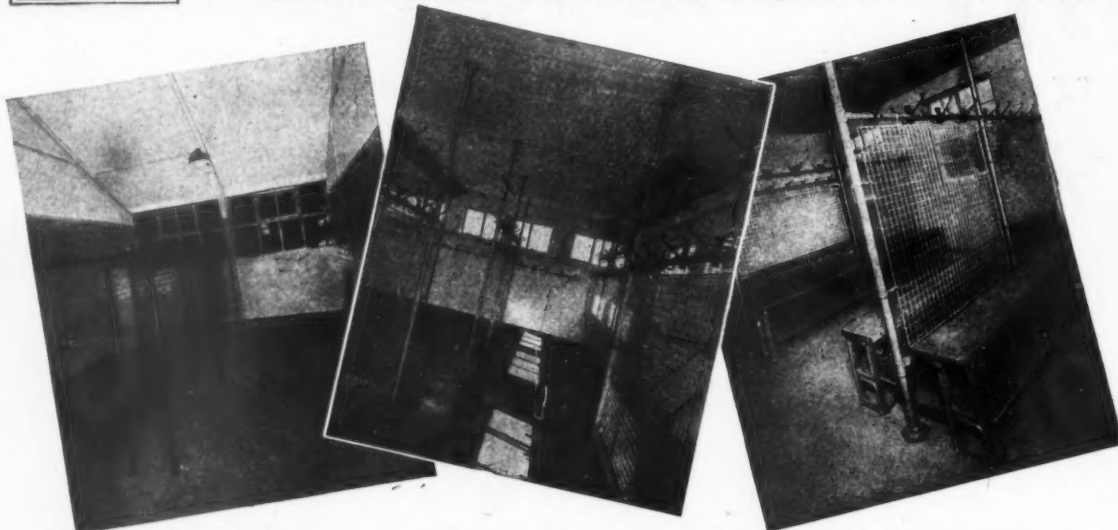
Counters made by Henderson are ideal for small
establishments because they are light, easily handled,
and adaptable to any size or shape. Finished in stove
enamel to match your colour scheme, stainless steel,
and with counter tops of non-staining heat-proof plastic.
No permits are required.

Henderson

THE HENDERSON SAFETY TANK CO. LTD
ELSTREE WAY, ELSTREE, HERTS • Phone: ELSTREE 1758 (3 lines)

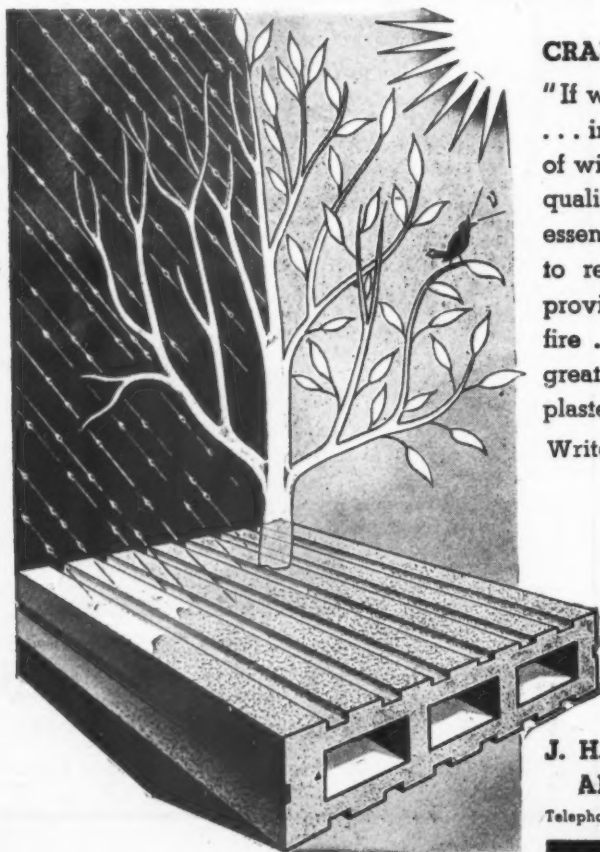


CLOAKROOM EQUIPMENT LIMITED IS CONCERNED SOLELY WITH THE MANUFACTURE, FABRICATION AND ERECTION OF CLOAKROOM AND CLOTHING STORAGE FACILITIES AND ALLIED EQUIPMENT FOR ALL PURPOSES.



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.



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 . . . to 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.

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

Telephone: HOLborn 6949 (14 lines)

Telegrams: Brickwork, Estrand, London

CONCRETE FLOORS

old or new are rendered permanently **100% non-dusting** by one treatment only with

WATCO CONCRETE HARDENER



Watco Concrete Hardener also increases resistance to wear, damp, acid, and oil, and adds years to the life of the floor. It is not a surface coating but a solution which penetrates deep into the surface layer of the floor, filling the pores and locking down the surface particles. We claim the treatment will last as long as the floor. Floors treated overnight are ready for use next day.

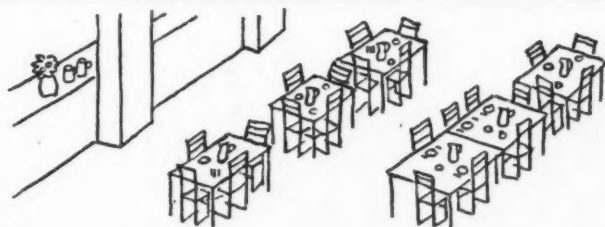
Explanatory Price List post free on request

OTHER WATCO PRODUCTS

WATCO CONCRETE FLOOR PAINT
An economical and effective floor finish in a variety of colours.
WATCO TERRAZZO DRESSING
An effective stain preventive medium.
"GRANALA"
Cement waterproofer and hardener for mass concrete and cement rendering.
WATCO WOOD FLOOR PRESERVER
Toughens the surface, minimises splintering, expansion and contraction.
WATCO TIMBER GUARD
For protection of building timbers against Wood Borers.

WATCO LIMITED 56 BUCKINGHAM GATE SW1

Telephone: VICTORIA 0623



HERE'S THE CANTEEN WHERE THEY DANCE AS WELL—



—DOUBLE PROBLEM SOLVED BY PEL

Chairs and tables that are easily moved into position for a meal, are quickly stacked and stored in next to no space and stand up to constant hard usage, providing the maximum of comfort and good looks. Pel Nesting Furniture has been designed to satisfy all these needs. The high quality steel used means that all unnecessary weight is eliminated without sacrifice of strength. Inevitably there's a priority list, but let us know your needs and we will tell you how soon we can help.



Patent No. 344159 Models: Chair R.P.6. Table N.T.2

PEL

**N E S T I N G
C H A I R S
& T A B L E S**

A PRODUCT



Made by **PEL LTD • OLDBURY • BIRMINGHAM**

London Office: 15 Henrietta Place, W.1

BELLS AND TOWER CLOCKS



Mt. LEBANON, PITTSBURGH, U.S.A.
Auto-swinging bell 1947

**RINGING PEALS CHIMES
CARILLONS**

also all types of
TOWER CLOCKS

Dials from 2 feet 6 in. dia. up to the largest size made

GILLETT & JOHNSTON LTD.

CROYDON, SURREY

Founders of Famous Bells

Tel.: Thornton Heath 3221 (5 lines)



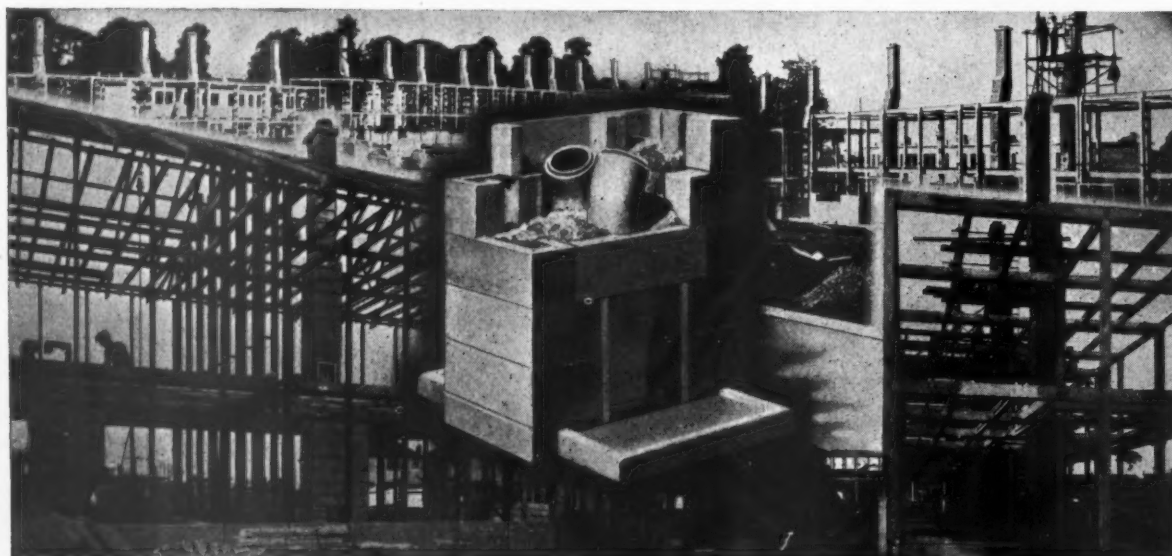
Using Steam or Hot Water.



UNIT AND
PLENUM TYPE

AIR HEATERS

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



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.
TELEPHONE: PRIMROSE 7161/2



'BULLDOG'
TIMBER CONNECTORS
ARE SIMPLE TO
USE

1 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.

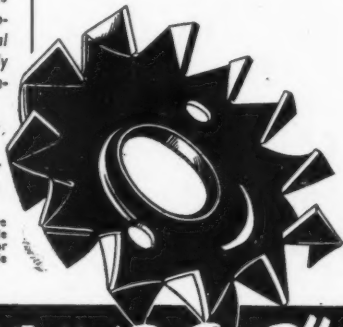
3 The members are then drawn together by means of the bolt until the projecting teeth of the metal plates are completely embedded in each contacting timber surface.

The 'Bulldog' 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 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.

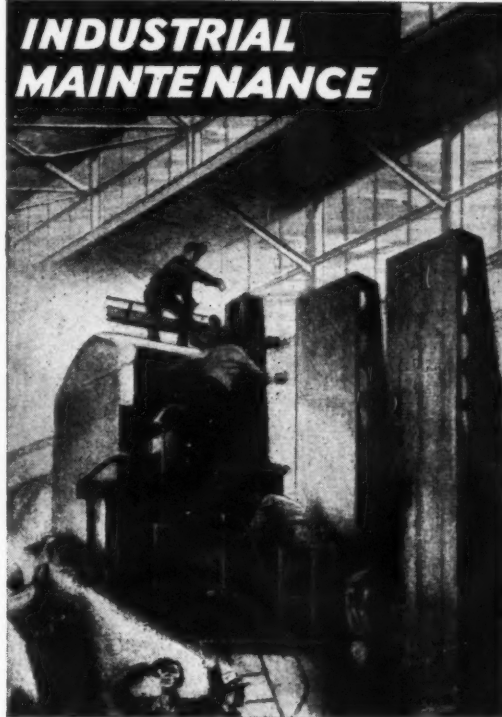
'Bulldog' connectors put timber construction on a sound engineering basis and the consequent increase in efficiency results in an amazing saving of timber, time and material.

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.

"BULLDOG"
TIMBER CONNECTORS
W. F. HOLLWAY & BROTHER, LIMITED,
42, GRAFTON STREET, LIVERPOOL 2.



If all else fails . . .

The Architect finds that TRETOL CHLORINATED RUBBER PAINT provides the necessary protection against acids, alkalis chemical fumes and sea-water attack. Available in attractive colours.

TRETOL LTD., 12-14 North End Road, London, N.W.11

Tel.: Speedwell 4621 (5 lines)

TRETOL
CHLORINATED
RUBBER PAINT

WOODS OF COLCHESTER

SERIES 1 Aerofoil FANS

AXIAL FLOW



- Air Deliveries up to 35,000 C.F.M.
- Pressures up to 1½ inches Static pressure
- Driving motors designed specifically for fan duties and manufactured by Woods of Colchester
- Non-overloading
- Very compact design
- 9 sizes; 6 inches to 48 inches diameter

★ Write for Catalogue AF47

WOODS OF COLCHESTER LTD
An Associate Company of THE GENERAL ELECTRIC CO. LTD. of England

BRAISWICK WORKS, COLCHESTER
London Office: 46 Kingsway, London, W.C.2
Branches at: Birmingham, Cardiff, Glasgow, Manchester, Newcastle-on-Tyne

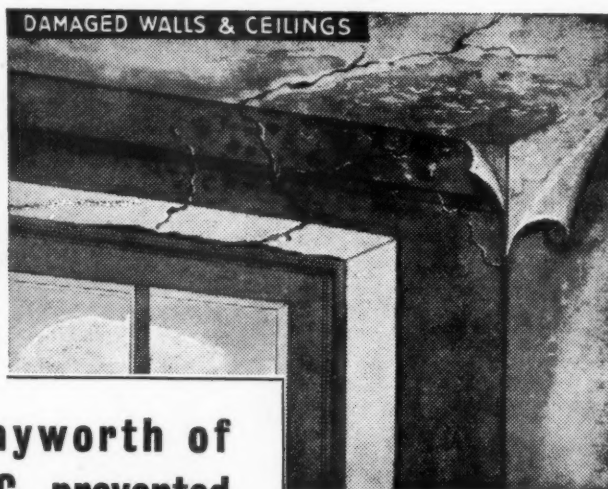
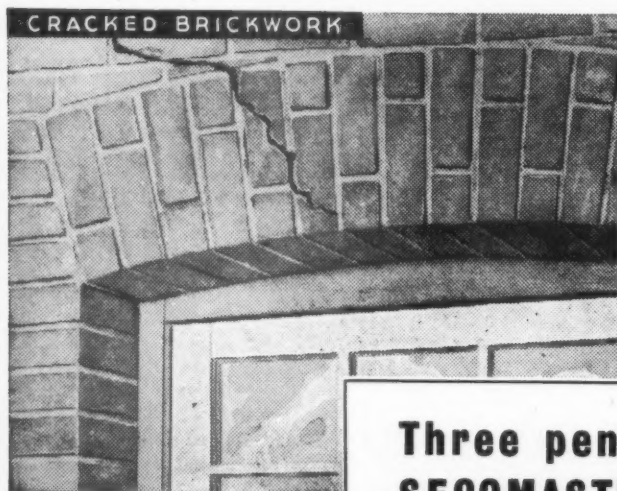


INSULITE

the Wood-Fibre Insulating Board

More than 30 years
MANUFACTURING EXPERIENCE
of
WOOD-FIBRE INSULATING BOARD
and
HARDBOARD

INSULITE PRODUCTS CORPORATION LTD
10, HOBART PLACE, LONDON, S.W.1. SLOane 0428



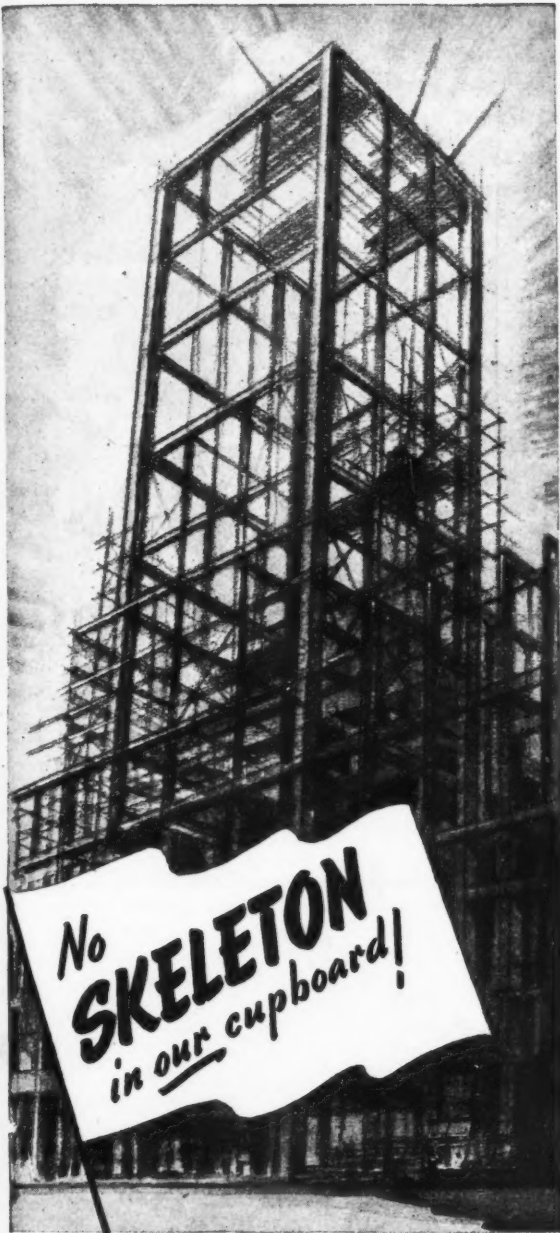
**Three pennyworth of
SECOMASTIC prevented
further deterioration**

With SECOMASTIC it takes but a few minutes to make an everlasting perfectly weatherproof seal that will take up expansion and contraction, remain flexible and never crack, crumble or fall out. There is nothing to equal SECOMASTIC for permanent repairs — seals window frames — corrugated roofs — fractured brickwork — precast concrete — renderings — rooflights — gutters — expansion joints — cracked tiles — sheds.



WRITE FOR
FURTHER
PARTICULARS
TO : —
"SALES
DEPT."

SECOMASTIC LTD., 25 UPPER BROOK STREET, PARK LANE, LONDON, W.1 • Tel.: MAYfair 9080



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
LIMITED
INCORPORATING RUSSELL EDWARDS & J. E. STEVENSONS
PRESTON LANCs

SI

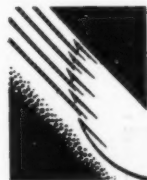
To stue SPAROVVES



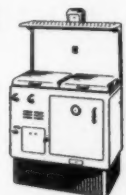
Take good Ale a pottle, or after the quantities more or less by your discretion, and set it over the fire to boyle, and put in your sparovves and scum the broth, then put therein Onions, Perceley, Time, Rosemary chopped small, Pepper and Saffron with Cloves and Mace a few. And make fippets as you do with this and lay the Sparovves upon with the said broth, and in the seething put in a piece of sweet butter and Vergious if need be.

From: 'A Booke of Cookry' 1584

It looks to be an interesting dish, but not easy in the making nowadays, when cooking sparrows are a little difficult to come by and good ale is quite impossible. Compensation comes in the ease of cooking what we have. Our Eagle Ranges serve us well and when the new ones are plentiful as sparrows on the trees, we shall forget the austerity of our dishes in the pleasure of cooking them.



EAGLE
Advance
RANGE



EAGLE RANGE & GRATE CO. LTD.
Product of Radiation Ltd

Aston, Birmingham. 6

SPON

SPONS' ARCHITECTS' & BUILDERS' POCKET PRICE BOOK.

74th Edition 1948.

This standard Price Book is now returned to circulation revised, enlarged and entirely reset under the Editorship of Davis, Belfield and Everest, Chartered Surveyors.

F^{cap} 8vo. 460 pp. 15s. net.

Contents: Estimating, Directions, Rates of Wages and Working Rules, Market Prices of Materials, Labour and Material Constants, Plant, Prices for Measured Work, Approximate Estimating, Standard Price Lists, Stop Press, INDEX.

SPONS' ARCHITECTURAL SERIES.

Edited by A. M. Chitty, M.A., F.R.I.B.A., M.T.P.I.

AN INTRODUCTION TO STANDARDS IN BUILDING.

By D. Dex Harrison, A.R.I.B.A., A.M.T.P.I.

Demy 8vo. 84 pp. 18 Illus. 8s. 6d. net.

COSTING FOR BUILDERS.

By W. Townsend, F.A.S.I., F.R.S.A., and L. Townsend, F.C.C.S., F.R.S.A.

Demy 8vo. 76 pp. 18 Illus. 7s. 6d. net.

FLOOR FINISHES.

By Penelope Whiting, A.R.I.B.A.

Demy 8vo. 80 pp. 23 Illus. 7s. 6d. net.

57, Haymarket, London, S.W.1

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

"EVERLASTO"



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

BRITAIN'S SUPER SASH CORD

- ★ Weatherproofed by special process at no extra cost
- ★ Non Stretch
- ★ Rot Proof
- ★ Long Life
- ★ Durable
- ★ Low Cost



Registered Trade Mark No. 519412

Specified by Housing Directors, Architects, and Builders

Waterproof and Rot Proof

SASH CORD



ENDLESS CORD
STRONG • DURABLE
Ask for details and prices

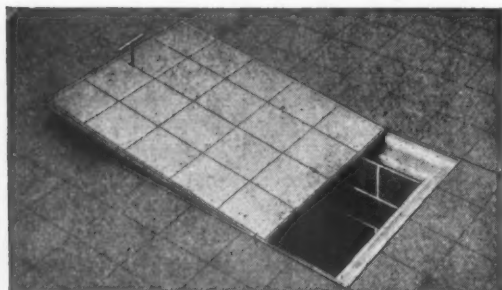
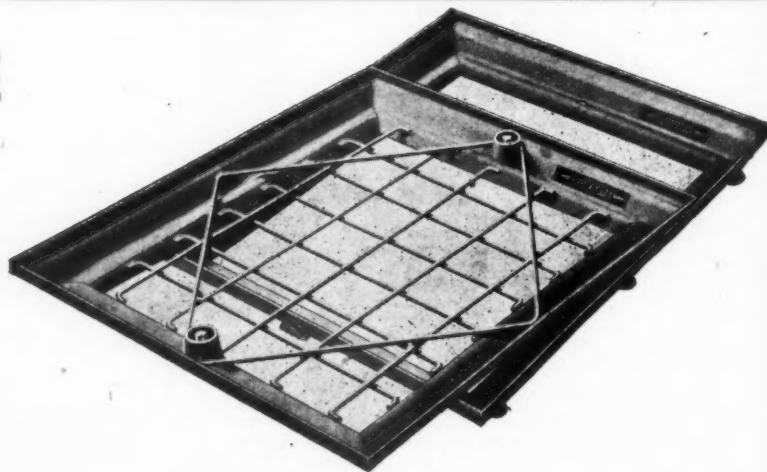
Also Ideal for Colour Poles, Aerial Poles, Inside Clothes Airer Rails, etc.

Made in all lengths
Write for details

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

THE INVISIBLE MANhole cover

—or almost invisible for when a 'Broadstel' Cover is placed in position in floor or paving and filled in to surface with tiles, wood-blocks, terazzo, asphalt, etc., to match the surroundings, the cover becomes an integral part of the job and is scarcely discernible. The ready means of access is there, but only the thinnest metal line marks the spot.



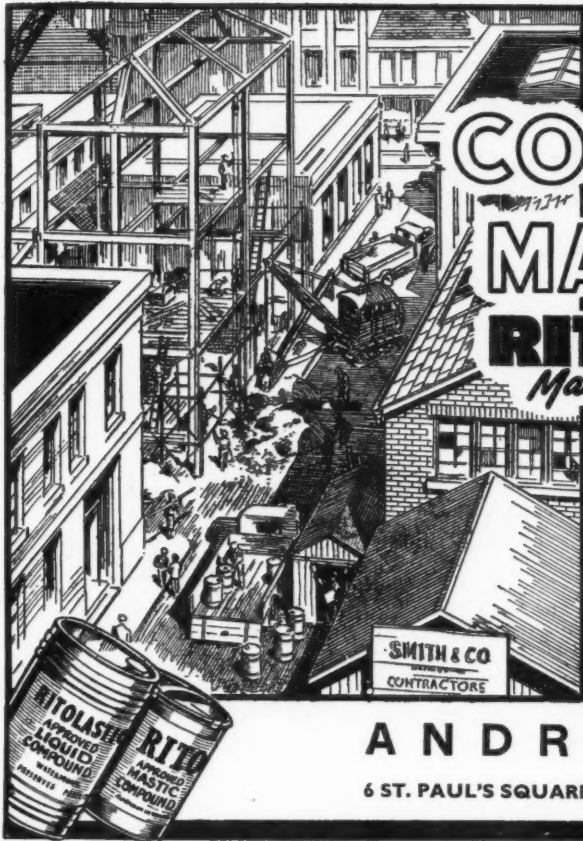
The 'BROADSTEL' COVER

Designed for fitting on site to match the surroundings. Stronger than cast iron and highly resistant to impact. Wide range of sizes in locking, non-locking, and rubber-sealed patterns, all reinforced to stand specific loading. Officially approved by Ministry of Works and Ministry of Health. Thousands in use throughout the country.

BROADS
MANUFACTURING CO. LTD.

For further particulars please write for illustrated folder.

4 SOUTH WHARF, PADDINGTON, LONDON, W.2 Tel.: PAD. 9091 (15 Lines)



BUILDING CONSTRUCTION AND MAINTENANCE

WITH
RITO AND
Mastic
RITOLASTIC
Liquid
"At the vital points"

The approved bituminous compounds for permanently jointing, sealing, damp coursing, resurfacing, waterproofing and preserving all types of ROOFS STEELWORK and CONCRETE FOUNDATIONS.

**WATER REPELLANT
ACID RESISTANT**

**ANTI-CORROSIVE
PRESERVATIVE**

(Specify:—RITOLASTIC AL Grade, the triple-purpose liquid compound with ALUMINIUM FINISH when light reflection is a consideration).

The services of Technical Representatives are available in all parts of the country without obligation. Write, requesting a call, to:— "House Construction and Maintenance Department."

A N D R E W M A X W E L L
(The Liverpool Bitax Co. Limited)

6 ST. PAUL'S SQUARE, LIVERPOOL, 3. 'Phone: Central 1783-4-5. 'Grams: ALKALINE



HOT AIR WHERE YOU DON'T WANT IT...

FOR HOT AIR WHERE
YOU DO WANT IT...

VOLEX


REGISTERED TRADE MARK

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



VULCANITE ROOFING

for
EVERY TYPE
of ROOF.....

Original patentees of Bituminous built up roofs

VULCANITE

TRIDENT WORKS · WIGAN *Ltd*
GLASGOW · LONDON · BELFAST

1" wood wool slabs carried on light gauge steel tees.



*Preventing
Heat Losses with*
WOOD WOOL
BUILDING SLABS

50% SAVING ON FUEL Wood Wool Building Slabs have exceptionally high thermal insulating properties. Structural insulation of walls and roofs with wood wool slabs may save as much as half the cost of heating a building. This can apply also to the capital cost of heating equipment.

In addition they have unique advantages for modern building technique: structural strength, ease of working, speed of erection. They can be used for free-standing, non-load-bearing internal partitions and when plastered provide a valuable degree of sound insulation.

Wood Wool Slabs are fire-resistant, rot-proof and vermin-proof and will take any suitable surfacing, plaster, rendering or bitumen.

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

WW31

- GYPKLITH** . . Gyproc Products Ltd.,
Westfield, Upper Singlewell Road,
Gravesend. Tel: Gravesend 4251.
- MARLITH** . . The Marley Tile Co., Ltd.,
London Rd., Riverhead, Sevenoaks,
Kent. Tel: Sevenoaks 2251.
- THERMACOUST** Thermacoust Ltd.,
39, Victoria Street, London, S.W.1.
Tel: Abbey 2738.
- LITHALUN** . . Lithalun Products Ltd.,
Pontalun, Bridgend, Glam.
Tel: Bridgend 213.
- SUPALITH** . . Supalith Ltd.,
Alpha Works, Havelock Road, Southall,
Middx. Tel: Southall 2821.

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 1161

There's a **SANTON**
Electric Water-heater
for EVERY purpose

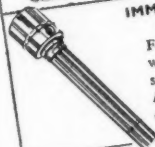
DOMESTIC

THERMAL STORAGE TYPE
Self-contained units, with
Thermostat Control which main-
tain a constant supply of hot
water. Pressure, Non-pressure,
and Cistern Types. 1½ to 100
Gallons. .75 kW to 6 kW.



IMMERSION TYPE

With or without circulator tubes.
For insertion into existing hot-
water systems. Hand or Thermo-
static Control. 1 kW to 4 kW.
Also .25 kW and .5 kW single-
element "anti-freezers."



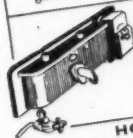
QUICK-SERVICE TYPE

Self-contained unlagged units
for rapid heating of water as
and when required. Single or
multi-point supply. 2 to 15
gallons 1.5 kW to 4 kW.



INSTANTANEOUS GEYSERS

Provide an immediate and con-
tinuous flow of hot water. Com-
pact, simple and efficient. 5 kW
to 18 kW. Ideal for ambulance
rooms.



HOUSE-SERVICE UNITS

Highly finished Iron-clad for control of main
electric supply or cooker, water heater, wash
boiler, kettle, etc.

OR INDUSTRIAL

WATER

Immersion heaters. Hand or Thermostatic
Control. 1 kW to 6 kW. Copper element sheaths
12 inches to 42 inches long.

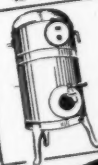
OIL

Immersion type. Temperatures up to or above
220° F. 1 kW to 4 kW. Steel Element sheaths.
Hand or Thermostatic Control. 12 inches to 42
inches long.

CHEMICALS

Immersion type with all immersed parts coated
suitably for protection against Acids, Alkalis or
Corrosive Fluids. 1 kW to 4 kW. 12 inches to
42 inches long.

**CANTEEN BOILERS AND
HEATERS**



Automatic or dispense types.
2 Gallon to 60 Gallon. Hand or
Thermostatic Control. 1.5 kW
to 16 kW. For Canteens,
Restaurants, Hotels, and catering
purposes.

Apply for
FREE DATA SHEETS
giving details of individual
SANTON products

NEWPORT
SANTON
MON (ENG)

TRADE MARK "SANTON"

12364

CLASSIFIED ADVERTISEMENTS

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

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

None of the vacancies in these columns relate to a man between the age of 18 and 50, inclusive, or a woman between the age of 18 and 40, inclusive, unless he or she is exempted 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, 10s.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: EMPLOYMENT REGISTER, WREN PARK, WETSLAFORD, Tel: Uplands 0935. 991

LONDON COUNTY COUNCIL.
HOUSING AND VALUATION DEPARTMENT.
ARCHITECTURAL ASSISTANTS. Applications are invited for positions of Architectural Assistant, at salaries of up to £580 a year. Commencing salaries will be determined according to qualifications and experience, and qualified candidates will be eligible for appointment to the permanent staff of the Department on the occurrence of vacancies. Engagement will involve Superannuation contributions at the rate of 6 per cent. of salary.

Successful candidates will be required to undertake the design, layout, and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's division. Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required). Canvassing disqualifies. (670) 1032

COUNTY BOROUGH OF EAST HAM.
BOROUGH ENGINEER'S DEPARTMENT. Applications are invited for the undermentioned appointments:—

SENIOR ENGINEERING ASSISTANT—STRUCTURAL. Grade A.P.T., VI. Salary, £625-£690.

SENIOR ARCHITECTURAL ASSISTANT. Grade A.P.T., VI. Salary, £625-£690.

ARCHITECTURAL ASSISTANT. Grade A.P.T., III. Salary, £480-£525.

ENGINEERING ASSISTANT. Grade A.P.T., III. Salary, £480-£525.

CHIEF QUANTITY SURVEYOR. Grade A.P.T., VII. Salary, £665-£740.

SENIOR ASSISTANT PLANNING OFFICER. Grade A.P.T., V. Salary, £550-£600.

BUILDING INSPECTOR. Grade A.P.T., V. Salary, £550-£600.

The above salaries are inclusive of the London allowance. Salaries in excess of the minima of the grades may be paid, according to the qualifications and experience of successful candidates. The Council have in course of preparation a large and varied programme of interesting works, which it is anticipated will not be affected by the proposed reductions in capital expenditure.

Housing accommodation is not provided, but the Council will be prepared to consider applications for subsistence allowances in appropriate cases from persons appointed who may be unable to obtain suitable accommodation.

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Friday, the 6th August, 1948) may be obtained from the undersigned.

Canvassing in any form will disqualify.

H. A. EDWARDS, Town Clerk.

Town Hall, East Ham, E.6. 1275

LYMM URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a Temporary Architectural Assistant, in the Engineer and Surveyor's Department.

Candidates must be qualified Architects, and are required to have experience in the preparation of Schemes for new houses, and the supervision of works in progress.

The salary will be according to the National Joint Council Scheme of Conditions of Service, Grades III to (Va), being fixed according to qualifications and experience.

Applications should give particulars of qualifications, present and past appointments, and full details of experience, accompanied by copies of two recent testimonials. They should be addressed to the undersigned in sealed envelopes, endorsed "Architectural Assistant," to be received not later than Monday, 2nd August, 1948.

Canvassing, directly or indirectly, will be a disqualification, and relationship to a Member or Senior Officer of the Council must be disclosed.

T. ASHCROFT, Clerk to the Council.

Council Offices, Lymm, Warrington. 1260

10th July, 1948.

OXFORDSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ONE QUANTITY SURVEYOR. Grade VI. £555-£660 (consolidated salary).

(b) ONE ASSISTANT ARCHITECT. Grade V. £520-£570 (consolidated salary).

(c) ONE ASSISTANT ARCHITECT. Grade IV. £480-£525 (consolidated salary).

(d) ONE BUILDING SURVEYOR. Grade IV. £480-£525 (consolidated salary).

Candidates for (a) must be qualified members of the R.I.C.S.

Candidates for (b) and (c) should be qualified Architects and members of the R.I.B.A., and preference will be given to those with experience in the work of a County Council.

Candidates for (d) must be members of the R.I.C.S., and preference will be given to those with experience in the preparation of specifications and supervision of building works.

The candidate appointed will be required to own and drive a car, for which an allowance on the Council's scale will be made.

Applications, stating age, qualifications and experience, with one recent testimonial and the names and addresses of two persons to whom reference can be made, are to be sent to the County Architect, 3, Becket Street, Oxford, not later than the 6th August, 1948.

The appointments, which are subject to a medical examination, are on the established staff, and determinable by one month's notice on either side.

F. G. SCOTT, Clerk of the Council. 1266

COUNTY BOROUGH OF BARROW-IN-FURNESS.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECTS (TWO). Grade Va. £560-£610 per annum.

Candidates must be registered architects, preferably A.R.I.B.A., and should have had experience on Education Works, Housing and General Municipal Architecture.

(b) ASSISTANT ARCHITECTS (TWO). Grade III. £450-£495.

Candidates should have had Municipal experience, and possession of a recognized professional qualification will be an advantage.

(c) ASSISTANT ARCHITECT. Grade I. £390-£435.

Candidates should be good draughtsmen, with some experience of design.

(d) QUANTITY SURVEYOR. Grade Va. £560-£610.

Candidates must possess a recognized professional qualification, and be competent to prepare quantities, specifications, estimates, and schedules for Education, Housing and General Municipal work.

The Council has accepted the principle of providing housing accommodation if required by successful applicants.

The appointments will be subject to (1) the National Scheme of Conditions of Service; (2) the provisions of the Local Government Superannuation Act, 1937; (3) termination by one month's notice on either side; (4) the successful candidate passing a medical examination; and (5) becoming a member of the appropriate Trade Union.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, and must be completed and returned to him not later than Saturday, 7th August, 1948.

No candidate summoned for interview who is not prepared to accept the position without qualification, whether it be offered to him or not, will be paid his expenses.

W. LAWRENCE ALLEN, Town Clerk. 1293

COUNTY BOROUGH OF ROTHERHAM.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, in the Office of the Borough Engineer, at a commencing salary of £520, rising by annual increments to a maximum of £570 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects, and preferably with experience in the service of a Local Authority.

The post is Superannuable, and the candidate selected for appointment will be required to pass a medical examination. The appointment will be subject to the conditions of service adopted by the Council and based on the National Scheme of Conditions of Service. It will be determinable by one month's notice on either side.

Housing accommodation will be available for the successful applicant if required.

Applicants must state whether they are related to any member or officer of the Rotherham County Borough Council. Deliberate omission to disclose any such relationship will disqualify any candidate.

Canvassing of members of the Council, whether direct or indirect, will disqualify.

Applications (endorsed "Architectural Assistant"), stating age, qualifications and experience accompanied by copies of three recent testimonials, should be delivered to the undersigned not later than Friday, 20th August, 1948.

JOHN S. WALL, Town Clerk. 1273

Municipal Offices, Rotherham, Yorks.

URBAN DISTRICT COUNCIL OF COLNE VALLEY.

ENGINEER AND SURVEYOR'S DEPARTMENT.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, in the Engineer and Surveyor's Department, at a salary in accordance with Grade II of the A.P. and T. Division of the National Scheme of Conditions of Service, namely £420 per annum, rising by annual increments of £15 to a maximum of £465 per annum.

Applicants must have had good training and experience in design and construction, be able to survey, prepare plans, estimates, quantities and specifications for building works.

They must be Registered Architects, and preference will be given to applicants who are Associates of the Royal Institute of British Architects.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to one month's notice on either side.

Applications, endorsed "Architectural Assistant," stating age, qualifications, present and past appointments, details of experience, and whether married or single, accompanied by three recent testimonials, should reach the undersigned not later than Wednesday, the 28th July, 1948.

Candidates must state whether to their knowledge they are related to any member or senior officer of the Council. Canvassing, directly or indirectly, will disqualify.

J. W. LOMAS, Clerk of the Council. 1265

Town Hall, Slaithwaite. 9th July, 1948.

COUNTY BOROUGH OF DERBY.

APPOINTMENT OF PLANNING STAFF (ESTABLISHED).

(a) CHIEF PLANNING ASSISTANT. £66-£760.

(b) GENERAL PLANNING ASSISTANTS (TWO). £480-£525.

Applications are invited for the following appointments in the Town Planning Department, Borough Engineer and Surveyor's Office:—

(a) CHIEF PLANNING ASSISTANT (Grade VIII. £685 to £760, consolidated).

Candidates should be A.M.T.P.I. and hold a basic professional qualification (preferably A.R.I.B.A.), and have had considerable experience in modern planning technique.

Preference in this appointment will be given to a person who is experienced in the planning of new development and re-development schemes in urban areas, for which work he will be primarily responsible and in which there is considerable scope.

(b) GENERAL PLANNING ASSISTANTS (Grade IV. £480 to £525, consolidated).

Candidates should be suitably qualified and experienced in general planning work, preferably in a large Municipal office. In these appointments preference will be given in one case to a person with an architectural background and in the other to a person with a surveying (valuation and estate management) background, or to a person with a degree in economics.

Conditions of service are those formulated by the National Joint Council, and the appointments are 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 will be terminable by one month's notice on either side.

Applications, appropriately endorsed, together with three recent testimonials, should be sent to M. L. Francis, F.R.I.C.S., M.I.Mun.E., Borough Engineer and Surveyor, The Council House, Corporation Street, Derby, not later than 28th July, 1948.

Canvassing, directly or indirectly, will be a disqualification, and candidates should state whether they are related to any member or senior official of the Council.

C. ASHTON, Town Clerk. 1269

Town Clerk's Office, Market Place, Derby. 7th July, 1948.

BOROUGH OF WORTHING.

BOROUGH ENGINEER'S DEPARTMENT.

APPOINTMENT OF TOWN PLANNING ASSISTANT.

Applications are invited for the appointment of a Town Planning Assistant, at a salary in accordance with Grade IV of the National Scale of Salaries—£480-£525 per annum, consolidated.

Applicants should have had a good general training in either Architecture, Engineering or Surveying, and have had previous Town Planning experience in a Municipal office, particularly with regard to the examination of deposited plans and development control.

Preference will be given to candidates who hold a recognized Planning qualification.

The appointment will be subject to one month's notice on either side and to the provision of the Local Government and Other Officers' Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination for entry to the Corporation's service.

Applications, stating age, qualifications, experience, previous and present appointments, and accompanied by copies of three recent testimonials, should be delivered to P. E. Harvey, Esq., O.B.E., A.M.I.C.E., Borough Engineer and Surveyor, not later than 3rd August, 1948.

ERNEST G. TOWNSEND, Town Clerk. 1264

Town Hall, Worthing. 6th July, 1948.

NORTH R.

COUNTY

Application

mentioned

Salaries in

Council's S

(a) ASST

IV, £480-£

MAN. Gen

age, up to

Candidate

the Inter

Institute

The abov

the provis

annuation

examination

by two mo

and (b) b

Forms of

higher in

Catchpole,

Hall, North

qualification

iculars of

and the na

whom refer

to the ur

August, 19

Canvassi

is related

under, the

applying.

County Ha

2nd July

THE NO

FAR

The Gov

of ASST

Farm Bu

advises on

ings, carr

peraining

developme

will be gi

qualifying

equivalent

applicants

and

Salary s

The per

mision to

Forms c

from the

July, 1948

Ch. Union

COU

BORO

'Applicat

appointm

Borough

TWO

SURVEY

to £710 p

The sal

of Condi

Applica

in Local

Charter

dates sho

of Bills

mates fo

various t

The ap

visions of

Act, 1937,

required

The ap

month's

Forms

Borough

Guilddall

Applica

recent te

endorsed

must be

than We

Canvas

qualify.

Guilddall

June.

CROW

Applie

Invited

QUAN

Works f

possibil

accordi

a year,

\$4,500 a

for first

equals

passages

Charter

years' e

of the v

age, wh

tielars

and m

Agents

S.W.1

a. en

NORTH RIDING OF YORKSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the under-mentioned appointments on the permanent staff. Salaries in accordance with the National Joint Council's Scales.

(a) ASSISTANT ARCHITECTS. A.P.T., Grade IV. £480-£525.

(b) JUNIOR ARCHITECTURAL DRAUGHTSMAN. General Division. Salary according to scale up to £385 (men), £308 (women).

Candidates in respect of (a) should have passed the Intermediate examination of the Royal Institute of British Architects.

The above appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Appointment (a) will be terminable by two months' notice in writing on either side and (b) by one month's notice.

Forms of application are not being issued, but further information may be obtained from J. Catchpole, A.R.I.B.A., County Architect, County Hall, Northallerton. Applications, stating age, qualifications and experience, together with particulars of present and previous appointments, and the names and addresses of three persons to whom reference can be made, must be delivered to the undersigned not later than the 2nd August, 1948.

Canvassing will disqualify, and a candidate who is related to a member of, or a senior officer under, the Council must disclose the fact when applying.

H. G. THORNLEY,
Clerk of the County Council.

County Hall, Northallerton. 1264
2nd July, 1948.

THE NORTH OF SCOTLAND COLLEGE OF AGRICULTURE.

FARM BUILDINGS DEPARTMENT.

The Governors invite applications for the post of ASSISTANT ADVISORY OFFICER in the Farm Buildings Department. This Department advises on all matters pertaining to farm buildings, carries out the investigation of problems pertaining to these subjects, and studies new developments and techniques. While preference will be given to applicants who have passed the qualifying examination for A.R.I.B.A. or its equivalent, due consideration will be given to applicants who have had a sound practical training and experience in this field.

Salary scale: £470 to £760.

The person appointed will be eligible for admission to a Superannuation Scheme.

Forms of application, which may be obtained from the undersigned, must be lodged by 31st July, 1948.

JOHN L. INNES,
Secretary.

43, Union Street, Aberdeen. 1267

COUNTY BOROUGH OF SWANSEA.

BOROUGH ARCHITECT'S DEPARTMENT.

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

TWO SENIOR ASSISTANT QUANTITY SURVEYORS (Grade VII, A.P.T.). Salary £635 to £710 per annum.

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

Applicants must be under 45 years of 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.

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 Wednesday, 11th August, 1948.

Canvassing, directly or indirectly, will disqualify.

T. B. BOWEN,
Town Clerk.

Guildhall, Swansea. 1247
June, 1948.

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

QUANTITY SURVEYOR required by Public Works Service, Malaya, for three years, with possibility of permanency. Commencing salary according to experience in scale \$4,800 to \$9,600 a year, plus cost-of-living allowance of up to \$4,500 a year. Children's allowance \$70 a month for first child and \$50 for second (Malayan dollar equals 2s. 4d.). Outfit allowance £60. Free passages. Candidates, age 25-30, should be Chartered Quantity Surveyors, and have had two years' experience, after pupillage, in all aspects of the work. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/18275/3D on both letter and envelope. 1311

CITY OF NOTTINGHAM.

CITY ENGINEER'S DEPARTMENT.

Applications are invited for the posts, as follows:—

SENIOR ARCHITECTURAL ASSISTANTS: Grade A.P.T., VII, National Scale, £255-£710. Grade A.P.T., VI, National Scale, £255-£660.

Candidates must be Associates of the R.I.B.A., and should have a thorough practical knowledge of School or Hospital work. The grade for which the application is intended must be stated when applying for the form.

JUNIOR ARCHITECTURAL ASSISTANT: Grade A.P.T., I, National Scale, £390-£435.

Candidates must have completed a full course of study at a recognized School of Architecture or articles of pupillage.

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

Applications are to be on forms to be obtained from Mr. R. M. Finch, O.B.E., M.I.C.E., City Engineer and Surveyor, Guildhall, Nottingham, and are to be returned to this office not later than Wednesday, 11th August, 1948.

J. E. RICHARDS,
Town Clerk. 1258

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

BUILDING SURVEYOR required by the Hong Kong Government Public Works Department for three years, with prospect of permanency. Commencing salary, including expatriation pay, according to qualifications and experience, in the scale \$1,048 a month, rising to \$1,820 a month.

In addition a cost-of-living allowance of up to \$425 a month is payable. (The Government rate of exchange is at present 16 dollars to the £, but is liable to alteration.) Free passages. Candidates, not over 40 years of age, must be Chartered Surveyors, preferably in both the Building and Quantities Sections, and have had at least five years' experience in the City Engineer's or similar office dealing with the approval of plans for the construction of buildings, including reinforced concrete framed structures. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/23704/3D on both letter and envelope. 1310

BOROUGH OF HESTON AND ISLEWORTH.

ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited from suitably qualified and experienced persons for the following permanent appointments in the Department of the Borough Engineer and Surveyor.

(a) SENIOR ARCHITECTURAL ASSISTANT. Salary A.P.T., Grade VI, of the National Scale (£255-£660), plus current London "weighting." Applicants must hold the examination qualification for the Associateship of the R.I.B.A., a University degree or diploma approved by the Institute, and must have had good experience in architectural design of a general character, preference being given to candidates experienced in housing and other local government work.

(b) SECOND PLANNING ASSISTANT. Salary A.P.T., Grade IV, of the National Scale (£248-£525), plus current London "weighting." Candidates should have had previous experience in Town and Country Planning, including the preparation of Schemes and Interim Development procedure. The possession of the examination of the Town Planning Institute or other equivalent examination qualification will be considered an advantage.

Application forms, which can be obtained from the Borough Engineer, 88, Lampton Road, Hounslow, by sending a stamped addressed foolscap envelope, should be returned to him (endorsed "Assistant"), not later than noon on 2nd August, 1948.

Canvassing will disqualify.

HAROLD SWANN,
Town Clerk. 1303

METROPOLITAN BOROUGH OF FULHAM.

HOUSING AND PUBLIC BUILDINGS DEPARTMENT.

Applications are invited, preferably from persons with previous local government experience, for the permanent appointment of ARCHITECTURAL ASSISTANT in the Housing and Public Buildings Department.

Preference will be given to candidates who have passed the Intermediate examination of the R.I.B.A.

Salary A.P.T., Grade I, of the National Scales (£390-£435 per annum), plus London "weighting" of £20 at ages 21 to 25, and £30 at age 26 and over for candidates possessing the above-mentioned qualification.

The salary for candidates not holding this qualification or its equivalent will be in the General Division (£290 per annum at 25 years of age, rising to £385 per annum at 32 years of age), plus London "weighting" of £20 at ages 21 to 25, and £30 at age 26 and over.

Applications on the official form, which may be obtained from me on receipt of a stamped addressed envelope, must be returned with copies of not more than three testimonials not later than 2nd August, 1948.

CYRIL F. THATCHER,
Town Clerk. 1316

Town Hall, Fulham, S.W.6.
July, 1948.

CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECTS. Consolidated salary scale, £595-£660 p.a.

(b) ASSISTANT ARCHITECTS. Consolidated salary scale, £480-£525 p.a.

(c) ASSISTANT ARCHITECTS. Consolidated salary scale, £450-£495 p.a.

(d) ASSISTANT ARCHITECTS. Consolidated salary scale, £390-£435 p.a.

Candidates for the above appointments must be Registered Architects and have had a thorough training and experience in architectural design and constructions.

(e) STRUCTURAL ENGINEER. Consolidated salary scale, £685-£760 p.a.

Candidates should hold an appropriate University degree or a diploma of the Institute of Structural Engineers, and have had experience in steelwork and reinforced concrete calculations and design as applied to building works.

(f) ASSISTANT QUANTITY SURVEYORS. Consolidated salary scale, £520-£660 p.a.

(g) ASSISTANT QUANTITY SURVEYORS. Consolidated salary scale, £450-£525 p.a.

(h) ASSISTANT QUANTITY SURVEYORS. Consolidated salary scale, £450-£495 p.a.

Candidates should be suitably qualified and have had experience in "taking off" preferably on large contracts, i.e., Schools, Public Buildings, etc.

(i) BUILDERS' CLERKS. Consolidated salary scale, £375-£420 p.a.

Candidates must be conversant with the Building Trade and have had experience in an Architect's or Builder's office.

(k) ASSISTANT SURVEYORS. Consolidated salary scale, £520-£660 p.a.

(l) ASSISTANT SURVEYORS. Consolidated salary scale, £480-£525 p.a.

(m) JUNIOR ASSISTANT SURVEYORS. Consolidated salary scale, £135 (age 16), to £385 p.a. (commencing salary according to age).

Candidates for appointments (k) and (l) should have had experience in surveying and levelling of large sites and buildings.

(n) ASSISTANT PLAN PRINTER. Consolidated salary scale £135 (age 16) to £385 p.a. (commencing salary according to age).

Candidates should have had previous experience in this type of work.

(o) CLERK OF WORKS. Consolidated salary scale £390-£435 p.a.

Candidates should have had experience in all trades, with a specialised knowledge of one of the following trades:—

1. Reinforced and pre-cast concrete construction.

2. Painter.

3. Plumber.

4. Bricklayer.

5. Joiner.

(p) JUNIOR CLERK OF WORKS. Consolidated salary scale £135 (age 16) to £385 p.a. (commencing salary according to age).

In each case the payment of salary increments will be subject to satisfactory service and will be granted normally on the 1st April following the completion of 6 months' service, except in appointments (m), (n) and (p), where birthday increments will be payable.

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

Applications on forms, to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable), must be received by me in the envelope supplied therefor not later than 10 a.m. on Wednesday, 28th July, 1948.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, C.B.E., A.R.I.B.A.,
City Architect.

Priestley House, Quarry Hill, Leeds, 9. 1302

OXFORD REGIONAL HOSPITAL BOARD.

Applications are invited from qualified Architects for appointment as ARCHITECT to the Oxford Regional Hospital Board. The appointment will be part-time and the selected candidate will be required to examine and advise the Board upon proposed alterations to and extensions of existing hospital buildings. The salary will be based on the scale of £1,350-£250-£1,550, approved by the Minister of Health for a full-time appointment. Applications, stating age, qualifications and experience, and giving the names of three referees, should reach the Secretary of the Board at 43, Banbury Road, Oxford, not later than Friday, 13th August. 1304

LONDON COUNTY COUNCIL.

PLANNING STAFF.

Vacancies in the following grades (some permanent):—

ASSISTANT SENIOR PLANNING OFFICER. £1,000 to £1,200 a year.

PLANNING OFFICER (Grade I), £840 to £960 a year.

PLANNING OFFICER (Grade II), £700 to £840 a year.

PLANNING OFFICER (Grade III), £550 to £700 a year.

Candidates should possess architectural, surveying or town planning qualifications.

Full particulars and form of application obtainable from the Architect to the Council (P), The County Hall, Westminster Bridge, S.E.1 (enclose stamped addressed foolscap envelope). (1554) 1301

**COUNTY BOROUGH OF GREAT YARMOUTH.
BOROUGH ENGINEER'S DEPARTMENT.
APPOINTMENT OF GENERAL ASSISTANT
ARCHITECT.**

Applications are invited for the appointment of a General Assistant Architect (permanent), in the Borough Engineer's Department, at a salary in accordance with Grade III of the National Scale of Conditions of Service, commencing at £450 per annum, rising to a maximum of £495 per annum.

Applicants should have had a thorough technical training, and preference will be given to candidates who have passed the Intermediate examination of the Royal Institute of British Architects.

The appointment will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed "General Assistant Architect," and must reach the undersigned not later than 6th August, 1948.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether their knowledge they are related to any member of, or the holder of any senior office under the Council. Candidates who fail to do so will be disqualified and if appointed will be liable to dismissal without notice.

FARRA CONWAY,
Town Clerk.

Town Hall, Great Yarmouth. 1332
14th July, 1948.

**BLABY RURAL DISTRICT COUNCIL.
ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT (HOUSING PROGRAMME).**

Applications are invited for the above appointment from persons with particular experience in the preparation of bills of quantities for housing work, measuring-up, examination of claims and preparation of final accounts. Candidates should also have a sound knowledge of building construction and be neat draughtsmen.

Salary according to age and experience within A.P.T. Grade II, £420 to £465 per annum.

Applications, in the candidate's own handwriting, stating age, experience and qualifications, with copies of two recent testimonials, to be sent to the undersigned not later than the 31st July, 1948.

J. J. DERRY,
Clerk of the Council.
Council Offices, Narborough, Leicester. 1333
15th July, 1948.

**COUNTY OF LINCOLN—PARTS OF
KESTIVEN.**

**KESTIVEN TRAINING COLLEGE, STOKE
ROCHFORD, NEAR GRANTHAM, Lincs.**
Applications are invited for the appointment of a CLERK OF WORKS, to supervise the works in connection with the conversion of Stoke Rochford Hall, near Grantham, into a Teachers' Training College.

The salary offered is £9 to £10 per week, according to qualifications and experience. Subject to satisfactory service, the appointment will be for the duration of the contract, with possible extension on further works at the College.

Candidates should possess practical training and experience in one of the main building trades, preferably that of Carpenter and Joiner, and should also have had previous experience as a Clerk of Works.

Forms of application may be obtained from the undersigned, to whom completed forms should be submitted not later than the 7th August, 1948.

J. E. BLOW,
Clerk of the County Council.
County Offices, Sleaford, Lincs. 1329
13th July, 1948.

**BOROUGH OF SLOUGH
BOROUGH ARCHITECT'S DEPARTMENT.
APPOINTMENT OF GENERAL ASSISTANT
ARCHITECT.**

Applications are invited for the permanent appointment of General Assistant Architect, on Grade A.P.T. IV, of the National Scale (£480—£15—£525, consolidated).

Candidates should be Registered Architects, and have had previous experience with a local authority.

The appointment will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing satisfactorily a medical examination.

Applications must give details of experience in housing, Municipal building design and general building construction, and state age, qualifications, technical training, present and previous appointments, with dates. Canvassing, either directly or indirectly, will disqualify, and candidates must disclose in their applications whether, to their knowledge, they are related to any member or senior officer of the Council.

Applications, giving the names of two Architects to whom reference can be made, must be received by the undersigned, in sealed envelopes, endorsed "General Assistant Architect," not later than Tuesday, 3rd August, 1948.

NORMAN T. BERRY,
Town Clerk.
Town Hall, Slough. 1328
16th July, 1948.

**BOROUGH OF SOUTHGATE.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the appointment of an Architectural Assistant, on the Established Staff of the Borough Engineer and Surveyor.

The salary will be in accordance with Grade V of the A.P.T. Division of the National Joint Council Scales, namely, £550 to £600 per annum inclusive.

Applicants should be Associate Members of the Royal Institute of British Architects, or hold an equivalent qualification.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass satisfactorily a medical examination. The appointment will be terminable by one month's notice on either side.

Candidates who to their knowledge are related to a member or senior officer of the Council must disclose the relationship in their application. Failure to do so will disqualify or render the candidate appointed liable to dismissal without notice.

Canvassing, either directly or indirectly, will be a disqualification.

Applications, stating (1) name and address; (2) age; (3) qualifications by examinations; (4) present position, salary and date appointed; (5) previous positions, with dates and salaries; (6) particulars of experience, accompanied by copies of three recent testimonials, should be sent to Mr. J. T. W. Peat, F.R.I.B.A., Borough Engineer and Surveyor, Southgate Town Hall, Palmers Green, London, N.13, in an envelope endorsed "Architectural Assistant," so as to reach him not later than 9 a.m. on Friday, 6th day of August, 1948.

GORDON H. TAYLOR,
Town Clerk.
Southgate Town Hall, Palmers Green, London, N.13. 1326

**STAFFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS.**

GRADES VI, V AND II, A.P.T. DIVISION.
Applications are invited for appointments in Grades VI, V and II of the Administrative, Professional and Technical Division of the National Scales.

Grade VI: £595, rising by annual increments to £660 per annum.

Grade V: £520, rising by annual increments to £570 per annum.

Grade II: £420, rising by annual increments to £465 per annum.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937. They will be terminable by one month's notice on either side, and the successful candidates will be required to submit certificates of medical fitness.

Applicants must be Registered Architects, and preference will be given to Associates of the R.I.B.A. and those with considerable experience of Local Authority work.

Applications, stating clearly which appointment is applied for, and giving full details of qualifications, experience, age, etc., together with three recent testimonials, must be delivered to the County Architect, Martin Street, Stafford, within two weeks of the appearance of this advertisement.

Applicants must disclose whether or not they are related to any member or senior officer of the Council.

T. H. EVANS,
Clerk of the County Council.
County Buildings, Stafford. 1321

**GELLYGAER URBAN DISTRICT COUNCIL.
ENGINEER, SURVEYOR AND ARCHITECT'S
DEPARTMENT.**

Applications are invited for the following appointments:

(a) GENERAL ENGINEERING ASSISTANT, at a salary in accordance with A.P.T. Grade V (£520 per annum to £570 per annum);

(b) ARCHITECTURAL ASSISTANT, at a salary in accordance with A.P.T. Grade IV (£480 per annum to £525 per annum).

Applicants for appointment (a) must be Associate Members of the Institute of Civil Engineers and/or hold the Testimonial of the Institute of Municipal and County Engineers, and have experience of the work of the Engineer and Surveyor's Department of a Local Authority; a knowledge of procedure under the Private Street Works Act, 1892, will be an advantage. Applicants for appointment (b) must be Members of the R.I.B.A. and have experience of housing and other work of a Local Authority, including Building Quantities and Pricing; a knowledge of Town and Country Planning will be an advantage.

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. Both appointments are terminable by one month's notice.

Canvassing, either directly or indirectly, will be a disqualification, and a candidate must disclose in writing whether to his knowledge he is related to any member of, or to the holder of any senior office under, the Council.

Applications, stating all relevant details, together with names and addresses of two persons to whom reference may be made, should be received by the undersigned not later than 28th August, 1948.

D. W. C. MORGAN,
Clerk.
Council Offices, Hengoed, Glam. 1322
15th July, 1948.

**STAFFORDSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
APPOINTMENT OF SENIOR PLANNING
ASSISTANTS.**

Applications are invited for appointments as Senior Planning Assistants, in the County Planning Department. Vacancies exist in the Area Offices at Quarry Lodge, Tamworth Road, Lichfield, Head Office at Stafford and Park Hall, Goldthorn Park, Wolverhampton. The persons appointed will work under the direction of the County Planning Officer, and will be mainly engaged on the preparation of outline and development plans and reporting on proposals for development. Those appointed to fill the vacancies in the Area Offices will act as Deputies to the Area Planning Officers.

Applicants should be qualified Planners, and preference will be given to those who have, in addition, a recognized qualification in Architecture, Engineering or Surveying. They should have had practical experience in planning and in the application of modern planning legislation and technique. As an alternative to those already mentioned, a qualification in landscape architecture or forestry would be considered an advantage.

The salaries will be as follows:—
Head Office: A.P.T., Grade VII, of the National Scales, £635-£710.

Area Offices: A.P.T., Grade VI, of the National Scales, £595-£660.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937; the National Joint Council's Scheme of Conditions of Service as adopted by the County Council, the passing of a medical examination; and to one month's notice on either side.

Canvassing, directly or indirectly, will be deemed a disqualification, and relationship to any Member or Senior Officer of the Council must be disclosed.

Applications should give details of age, education, technical training, qualifications, present and previous appointments and experience, and should include copies of two recent testimonials and the names of two other persons to whom reference can be made. They should be addressed to the undersigned so as to reach him not later than the 31st July, 1948, and the covering envelope should be marked "Senior Planning Assistant."

T. H. EVANS,
Clerk of the County Council.
County Buildings, Stafford. 1330
14th July, 1948.

**BOROUGH OF ILFORD.
APPOINTMENT OF (a) ARCHITECTURAL
ASSISTANT—GRADE IV; (b) TRACER—
GENERAL DIVISION.**

Applications are invited for the following appointments, on the permanent staff of the Borough Engineer's Department:—

(a) ARCHITECTURAL ASSISTANT. Salary in accordance with Grade IV of the National Scales of Salaries, viz., £480 to £525, plus £30 London weighting at age 25 or over.

Candidates should possess approved qualifications and have general Architectural experience in Municipal buildings, particularly with regard to the preparation of contracts and working drawings.

(b) TRACER. Salary in accordance with the General Division, viz., £385, plus £30 London weighting at age 32 or over. Candidates for this appointment should be neat and expeditious draughtsmen, preferably with previous Municipal experience.

The appointments will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Act, 1937, the National Conditions of Service, and to passing a medical examination by the Medical Officer of Health.

Forms of application may be obtained from the Borough Engineer, Town Hall, Ilford, and should be returned to the undersigned not later than the 9th August, 1948.

K. F. B. NICHOLLS,
Town Clerk. 1327
July, 1948.

**CITY OF ST. ALBANS.
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT.**

Applications are invited from suitable persons for the following position in the City Engineer and Surveyor's Department:—

TEMPORARY ARCHITECTURAL ASSISTANT, at a salary of £420 per annum, rising by annual increments of £15 to £465 per annum.

Candidates should have had some experience in Architectural work, preferably with a Local Authority.

The appointment, which will be terminated by one month's notice on either side, is subject to the scheme and conditions of service of the National Joint Council of Local Authorities Administrative, Professional, Technical and Clerical Services and to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications, experience, etc., and accompanied by two recent testimonials in envelopes marked "Temporary Architectural Assistant," should reach the undersigned not later than Monday, 9th August, 1948.

It is anticipated that the duration of the above appointment will be approximately three years.

W. B. MURGATROYD,
Town Clerk.
38, St. Peter's Street, St. Albans. 1331
July, 1948.

ISLE OF
COUNTY A
Applications
A THIRD ASS
A.P.T. Division
National Co
the appointme
ment officers
on either side
Applicants a
their knowled
of the Council
under the Cou
Full particula
monials should
County Hall,
July, 1948.

County Hall,
12th July.
NEWCASTLE

Application
appointments
lect to the I
(1) SENIOR
Salary will
of the A.P.T.
£585 per ann
£25 to £760

Candidates
Institute of
extensive and
of large publ
health service
To Architect
the appointme
opportunities
(2) ARCHIT
Salary will
of the A.P.T.
£400 per ann
£15 to £525

Candidates
experience of
ages, and sh
Both appo
vision of the
(annuation)
dates will be
tion.

Applicants
address; (2)
(3) present
service; (7)
and address

Applicatio
28th July,
Secretary to
Newcastle-u

Appoint
Architectur
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicants
address; (2)
(3) present
service; (7)
and address

Applicatio
28th July,
Secretary to
Newcastle-u

Appoint
Architectur
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Appoint

Architectur
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

Applicatio
let's Depar
III, IV or
The salary
qualification
R.I.B.A. of
(£400-£525),
all salaries
The succes
general Mu
in schools
The appo
visions of
annuation
a medical
Housing
Application
situation
present an
details of
two refer
F.R.I.B.A.
Widnes Ro
7th August
Canvassi
qualify.

ISLE OF ELY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of a **THIRD ASSISTANT ARCHITECT** (Grade III, A.P.T. Division), salary £450-£515-£495. National Conditions of Service will apply, and the appointment is subject to the Local Government Officers' Superannuation Acts, 1937, to a medical examination, and to one month's notice on either side.

Applicants are required to disclose whether to their knowledge they are related to any member of the Council or the holder of a senior office under the Council, and canvassing will disqualify. Full particulars and copies of three recent testimonials should be sent to the County Architect, County Hall, March, Cambs., not later than 31st July, 1948.

R. F. G. THURLOW.

Clerk of the County Council.

County Hall, March.

16th July, 1948.

1314

NEWCASTLE-UPON-TYNE REGIONAL HOSPITAL BOARD.

Applications are invited for the following appointments on the permanent staff of the Architect to the Board.

(1) **SENIOR ASSISTANT ARCHITECT.**
Salary will be in accordance with Grade VIII of the A.P.T. Division of the National Scale, i.e., £208 per annum, rising by annual increments of £28 to £276 per annum, consolidated.

Candidates must be members of the Royal Institute of British Architects, and have had extensive and responsible experience in the design of large public buildings, including hospitals and health service buildings.

To Architects interested in becoming specialists, the appointment offers wide scope and excellent opportunities.

(2) **ARCHITECTURAL ASSISTANT.**
Salary will be in accordance with Grade IV of the A.P.T. Division of the National Scale, i.e., £140 per annum, rising by annual increments of £15 to £225 per annum, consolidated.

Candidates must have had a good general experience of preparing working and detail drawings, and of making surveys of lands and buildings, and should be quick and neat draughtsmen. Both appointments will be subject to the provision of the National Health Service (Superannuation) Regulations, 1947. Successful candidates will be required to pass a medical examination.

Applicants should state: (1) Name and full address; (2) age and whether married; (3) degrees and professional qualifications; (4) experience; (5) present appointment and salary; (6) name and address of three referees.

Applications are to be received not later than 28th July, 1948, and are to be addressed to The Secretary to the Board, "Dunira," Osborne Road, Newcastle-upon-Tyne, 2.

1256

BOROUGH OF WIDNES.**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of Architectural Assistant, in the Borough Architect's Department, at a salary on A.P.T. Grades III, IV or V, of the National Scale of Salaries.

The salary grade will be determined by the qualifications of the candidate, viz., Associate R.I.B.A., on Grade V (£520-£570), Student R.I.B.A. or Registered Architect on Grade IV (£480-£525), otherwise on Grade III (£450-£495), all salaries consolidated.

The successful candidate will be engaged on general Municipal work, and previous experience in schools or housing work will be an advantage.

The appointment will be subject to the provisions of the Local Government Officers' Superannuation Act, 1937, and to the candidate passing a medical examination.

Housing accommodation available if required.

Applications, stating age, married or single, education, technical training, qualifications, present and previous posts (with dates), and details of experience, together with the names of two referees, should be sent to F. Mellor, F.R.I.B.A., Borough Architect, Brendan House, Widnes Road, Widnes, not later than Saturday, 7th August, 1948.

Canvassing, directly or indirectly, will disqualify.

JAMES WALLACE.

Town Clerk.

Town Hall, Widnes.

1324

SPALDING URBAN DISTRICT COUNCIL.**ARCHITECTURAL ASSISTANT.**

Applications are invited for the above appointment in the Surveyor's Department, at a consolidated salary according to the A.P.T. Division, Grade IV, of the National Scale of Salaries. Preference will be given to applicants who are Associate Members of the Royal Institute of British Architects or hold other suitable professional qualifications, and have had experience in general architectural and housing work, including the preparation of working drawings, specifications and quantities.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Applications, endorsed "Architectural Assistant," stating age, qualifications, present and previous appointments and experience, and names and addresses of two referees, should reach the undersigned not later than 10th August, 1948.

RAYMOND W. HASTINGS.

Clerk of the Council.

11, Market Place, Spalding.

16th July, 1948.

1349

FIFE COUNTY COUNCIL.**COUNTY ARCHITECT'S DEPARTMENT,****CUPAR.**

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, in the County Architect's Department. Applicants must be qualified Architects, under 45 years of age, with previous experience of Local Authority Schemes, particularly Housing. Consolidated salary will be £490, rising to £590 per annum. The appointment is superannuable, and the successful candidate will require to undergo a medical examination. Applications, stating age, qualifications, and experience, accompanied by copies of testimonials, must be lodged with the undersigned not later than 17th August, 1948. No canvassing.

J. M. MITCHELL.

County Clerk.

County Buildings, Cupar-Fife.

16th July, 1948.

1352

BOROUGH OF ROYAL LEAMINGTON SPA.**DEPARTMENT OF THE DIRECTOR OF HOUSING.****APPOINTMENT OF JUNIOR ASSISTANT ARCHITECT.**

Applications are invited for the above appointment, at a salary in accordance with Grade I (Miscellaneous Division) of the National Scales, i.e., £315, rising by annual increments of £15 to £360 per annum, inclusive of consolidated bonus. The appointment will be on the unestablished staff of the Corporation, terminable by one calendar month's notice on either side, and subject to the Scheme of Conditions of Service of the National Joint Council.

Candidates should be experienced in the preparation of working drawings and details, particularly in relation to housing.

Applications, together with copies of not more than two testimonials, must be submitted to H. Fedeski, A.R.I.B.A., Dip.T.P., A.M.T.P.I., Director of Housing, Town Hall Annex, 3, Regent Grove, Leamington Spa, before 12 noon Friday, 30th July, 1948.

JAMES N. STOTHERT.

Town Clerk.

Town Hall, Leamington Spa.

14th July, 1948.

1351

SOUTHAMPTON COUNTY BOROUGH.**APPOINTMENT OF TOWN PLANNING STAFFS.**

Applications are invited for the following appointments:—

(a) **SENIOR ASSISTANT PLANNING OFFICER**, Grade VI (Permanent). Salary £598-£660.

(b) **ASSISTANT PLANNING OFFICER**, Grade V (Permanent). Salary £520-£570.

(c) **ASSISTANT PLANNING OFFICER**, Grade IV (Permanent). Salary £480-£525.

The appointments are in connection with the preparation of the Development Plan under the Town and Country Planning Act, 1947, and for work on the reconstruction of the Central Area of the town. Candidates should have experience in drawing up practical proposals for urban redevelopment; they should be qualified for Associate Membership of the Town Planning Institute, and preference will be given to applicants possessing in addition a recognized qualification in architecture, engineering or surveying.

The above posts are subject to the National Joint Council Scheme of Conditions of Service, as adopted by the Corporation, and to the passing of a medical examination for the purposes of the Local Government Superannuation Act, 1937. Applications, stating age, qualifications and experience, and enclosing copies of two recent testimonials, should reach the undersigned not later than 23rd August, 1948.

DENIS WINSTON.

Borough Architect.

Civic Centre, Southampton.

14th July, 1948.

1350

LANCASHIRE COUNTY COUNCIL.**COUNTY PLANNING DEPARTMENT.**

Applications are invited from University Graduates, with degrees in Geology, Geography, Economics and the Social Sciences, for two appointments on the Research Staff of the County Planning Department at the County Offices, Preston.

The appointments will be subject to the National Joint Council's Scheme of Conditions of Service for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the Local Government Superannuation Act, 1937.

(a) **SENIOR PLANNING ASSISTANT (RESEARCH)**, A.P.T. Grade VII (consolidated salary £635 x £25 to £710 per annum). Duties will include enquiries into various aspects of land use, mineral development and estimates of Urban congestion. Candidates should possess experience in a Government Department, or with a Local Authority, or with an established research organization.

(b) **PLANNING ASSISTANT (RESEARCH)**, A.P.T. Grade V (consolidated salary £520 to £570 per annum). Duties will include maintenance of comprehensive statistical records, and investigations into problems connected with industry and housing.

Testimonials are not required, but applicants should give the names of two persons to whom reference may be made.

Applications, stating age, qualifications and experience, should be received by the undersigned not later than Saturday, 14th August, 1948.

R. H. ADCOCK.

Clerk of the County Council.

County Offices, Preston.

14th July, 1948.

1325

CITY OF OXFORD EDUCATION COMMITTEE.**SCHOOLS OF TECHNOLOGY, ART AND COMMERCE.****SCHOOL OF ARCHITECTURE AND BUILDING.**

Applications are invited for the post of **FULL-TIME STUDIO INSTRUCTOR IN ARCHITECTURAL DESIGN AND CONSTRUCTION**.

Applicants must be members of the R.I.B.A. and should preferably be holders of a degree or diploma of a recognized School of Architecture. Special experience and knowledge of science applied to Building will be an additional qualification.

The post is newly created to meet expansion, and is permanent. Salary will be paid in accordance with the Burnham (Technical) Award.

Forms of application and further particulars may be obtained on receipt of a stamped addressed foolscap envelope from the Chief Education Officer, 77, George Street, Oxford, to whom completed forms must be returned as soon as possible, and in any case not later than fourteen days from the appearance of the advertisement.

1323

METROPOLITAN BOROUGH OF SHOREDITCH.**APPOINTMENT OF BOROUGH ENGINEER, SURVEYOR AND ARCHITECT.**

Applications are invited for the position of Borough Engineer, Surveyor and Architect to the Council from gentlemen suitably qualified, possessing extensive Local Government experience.

Candidates should be members of the Institute of Civil Engineers (or the Institute of Municipal Engineers) and Registered Architects.

The duties of the appointment, which are more fully described in the form of application, will include the customary duties assigned to a Borough Engineer and Surveyor, together with the architectural work of the Council. The Council are at present engaged on a large and expanding programme of permanent housing. A knowledge of town planning procedure will be an advantage.

The consolidated salary for the appointment will be at the rate of £1,500 per annum, rising by increments of £50 to £1,650 per annum.

Applications must be made on forms to be obtained from the undersigned, and must be submitted not later than 28th August, 1948. The appointment will be subject to the Council's superannuation scheme and general conditions of service, and to a medical examination.

Candidates must state in writing whether they are related to any member or senior officer of the Council. Canvassing in any form will disqualify.

R. CYRIL RAY.

Town Clerk.

Town Hall, Old Street, E.C.1.

July, 1948.

1347

ISLE OF MAN LOCAL GOVERNMENT BOARD.

Applications are invited for the following posts in the Office of the Architect and Planning Officer to the Isle of Man Local Government Board:—

(1) **ARCHITECTURAL ASSISTANT**, at a salary of £390 per annum, rising by annual increments of £15 to a maximum of £435 per annum.

(2) **JUNIOR TECHNICAL ASSISTANT**, at a salary of £200 per annum, rising by annual increments of £15 to a maximum of £265 per annum.

Candidates for (1) should have had good general Architectural experience, including working drawings, and preference will be given to a candidate who is a member of the R.I.B.A.—at least of Intermediate standard.

Candidates for (2) should have completed a period as articulated pupil or have had equivalent experience.

Subject to the approval of His Excellency the Lieutenant Governor, each post will be declared pensionable (on a contributory basis) for the purposes of the Isle of Man Officers of Boards (Superannuation) Scheme, 1934.

Applications, stating age, present position and salary, qualifications and experience, and accompanied by copies of not more than three recent testimonials, should be sent to the undersigned not later than the 14th August, 1948.

W. H. KARRAN.

Secretary.

6, Mount Havelock, Douglas, Isle of Man.

1345

COUNTY BOROUGH OF STOCKPORT.

Applications are invited for the following positions:—

SENIOR TOWN PLANNING ASSISTANT. A.P.T. V (£520-£570 p.a.).

TOWN PLANNING ASSISTANT. A.P.T. III (£450-£495 p.a.).

GENERAL ARCHITECTURAL ASSISTANT. A.P.T. IV (£480-£525 p.a.).

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.

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, must be delivered to the undersigned by Monday, 9th August, 1948. Candidates must disclose in their applications whether to their knowledge they are related to any member of the Council or to any Senior Official of the Corporation.

Canvassing, directly or indirectly, will be a disqualification. WM. F. GARDNER, M.I.C.E., A.M.T.P.I., Borough Surveyor.

Town Hall, Stockport.

July, 1948.

1315

COUNTY OF ESSEX.
ILFORD COMMITTEE FOR EDUCATION.
The Essex County Council invite applications for an **ARCHITECTURAL ASSISTANT**, to work in the office of the Borough Engineer of Ilford, to deal with work for the Committee for Education.

Applicants should be members of the Royal Institute of British Architects, and have had considerable experience in the planning, designing, construction and supervision of School Buildings, and have had administrative experience.

Applicants should have had good general training, and experience.

The scale of salary will be in accordance with the provisions of the National Joint Council, A.P.T. Division, Grade V.

There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council.

In fixing the commencing salary, regard will be had to the qualifications and experience of the successful applicant.

The appointment will be held at the pleasure of the County Council, and may be terminated by the holder of the office by two months' notice.

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

Applications must be made on a form to be obtained from the Borough Education Officer, and returned to him at the Town Hall, Ilford, together with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement.

Canvassing, either directly or indirectly, is forbidden. 1348

Competitions

6 lines or under, 10s.; each additional line, 1s. 6d.

ARMCHAIR CRITIC? . . . here's another chance to express your ideas; 500 gns. in prizes for Amateur and Professional Designers in the Palatial National Furniture Design Competition; now open. Entry form and details from Palatial, Ltd., 616, Old Ford Road, London, E.3. 1307

Partnerships and Financial

6 lines or under, 10s.; each additional line, 1s. 6d.

REGISTERED ARCHITECT (age 34), ex-Major R.E., desires Partnership in country practice, preferably Southern Counties; considerable private and Local Authority experience; capital available. Box 1340.

ARCHITECT and SURVEYOR (33) (late Surveyor of Works, R.E.), seeks Architectural Practice or Partnership in Southern England. Please apply Box 1341.

Architectural Appointments Vacant

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

INTERNATIONAL Correspondence Schools require for immediate full-time employment an **ARCHITECT**, A.R.I.B.A., also **JUNIOR ARCHITECTURAL ASSISTANT**, qualified by examination. Write or 'phone, stating age, experience and salary required, to Director of Instruction, International Correspondence Schools, Kingsway, W.C.2. 1214

ARCHITECT'S ASSISTANT required in Midlands Office. Must be quick and accurate draughtsman, with experience in Industrial Buildings. Reply, with full particulars, salary required, etc., to Box 1207.

ARCHITECTURAL ASSISTANTS required in Offices at Tavistock, Newton Abbott, and Plymouth; applicants should have reached at least R.I.B.A. Intermediate standard, and be capable of working with a minimum of supervision; salary according to experience and qualifications. Reply to L. F. Vanstone & Partners, Chartered Architects, Surveyors, National Provincial Bank Chambers, Tavistock. 1263

BRIGHTON Architect has vacancy for **ASSISTANT**; busy general practice; capable of writing. Specifications and taking charge of small jobs; progressive situation. Box 1248.

LONDON Firm of Architects require **TWO ASSISTANTS**, of Intermediate or higher standard, for their Manchester office; previous office experience desirable; salary by arrangement. Box 1270.

REQUIRED, in West End Architects' office, **ONE SENIOR ASSISTANT** A.R.I.B.A., and **ONE JUNIOR ASSISTANT**, of intermediate standard; previous office experience essential; salary according to ability. Box 1271.

SURVEYOR'S ASSISTANT for London Company; war damage claims, dilapidations, and priced schedules of disrepair; age 25-35; state qualifications salary and expenses. Box 1276.

CAPABLE ASSISTANT required, with good general experience in the Architect's Department of a Multiple Company in the Midlands; permanency and good prospects to suitable applicant. Apply, stating age, experience, and salary required, to Box 1282.

ASSISTANT ARCHITECT required by large industrial concern operating in the Middle East; applicants should be Associate Members of the Royal Institute of British Architects, and not more than 35 years of age; must be able to prepare sketches for major and minor works, including housing, and be able to develop these sketches to working drawings for minor works, and possibly to a lesser degree for major works; should also be capable of preparing 3 in. details from architect's drawings, and be able to design and develop layouts for housing and other schemes; attractive salary, plus generous allowance in local currency; free passage out and home, medical attention, and kit allowance. Apply, stating age and full details of qualifications and experience (no specimens at this stage), quoting Department F.12, to Box 1319, at 191, Gresham House, E.C.2. 1291

SENIOR ASSISTANT ARCHITECT required in West End office, with at least 10 years' office experience; capable of preparing sketch plans, site surveys, details, for large scale conversions, new housing, farm buildings, etc.; state age, qualifications, experience, and training; commencing salary £700. Box 1318.

JUNIOR ASSISTANT required for Isle of Wight; good draughtsman essential. Apply Box 1317.

SENIOR ARCHITECT'S ASSISTANT required in busy West End office; must be a good draughtsman, have sound knowledge of construction, and used to supervision on the job; salary according to ability. Telephone WELbeck 6244, or letter stating experience and salary required, to Box 1309.

ARCHITECT'S ASSISTANT required for Architect's Department of large multiple Firm in North London; experience in alteration of existing buildings, dilapidations, and shop front design desirable. Apply, stating age, experience, and salary required, to Box 1308.

ARCHITECTURAL ASSISTANTS (Senior and Junior) for progressive East Riding practice; seniors must be A.R.I.B.A. or equivalent, with office experience; juniors Inter. standard; salary according to age and qualification. Box 1305.

TWO ASSISTANTS required for general drawing office work, surveys and levelling. Write, giving age, experience, salary required, and when available. Lambert & Oliver, Chartered Architects, 35, South Street, Bridport, Dorset. 1300

SENIOR ARCHITECTURAL ASSISTANT urgently required; capable of taking full charge of works in hand; good salary paid to experienced applicant. Wheatley & Houldsworth, Savile House, Savile Street, Hull. 1343

A COMMERCIAL Firm, with London headquarters, having large wholesale and retail connections in the fish trade, require the services of an **ARCHITECT**, with good general qualifications and experience and some specialised knowledge of retail shop fittings, general alteration, repairs and maintenance; in addition the person appointed would be required to play a part in development, and the position offers scope for a resourceful and adaptable man; applicants should be preferably about 25 to 30 years of age, have passed the A.R.I.B.A. Exam. or equivalent, and have some administrative ability; salary £475-£575 per annum. Applications should be sent to Personnel Department (FMD), Lever Brothers and Unilever, Ltd., Blackfriars, London, E.C.4. 1334

ARCHITECT'S ASSISTANT (SENIOR) required, with practical experience, first-class draftsman, and experienced in war damage work, and able to prepare specifications for domestic and industrial work; able to commence 1st September; reply, with full particulars, salary required, etc.; W.C.3 district. Box 1339.

ARCHITECT'S and SURVEYOR'S ASSISTANTS required by important Institution in London; applicants should be Associates of R.I.B.A., age 30/35, with good general experience and capable of making building surveys; salary up to £550, according to age and experience. Write only to Box E.313, c/o Streets, 110, Old Broad Street, E.C.2. 1330

MR. LAWRENCE BOND requires a young **ASSISTANT**, who is interested in churches, and a good draughtsman, to specialize in church work, at 11, Elmer Street, Grantham. 1364

Architectural Appointments Wanted

12 YEARS an A.R.I.B.A. wants work in a West End Architect's office; has had wide architectural experience, and was in full charge of large drawing office abroad for some years until fairly recently; salary £10 per week. Box 140.

QUALIFIED SENIOR QUANTITY SURVEYOR desires change; good draughtsman, keen estimator, taking off, abstracting, and final bills and final accounts; would like to take up appointment where housing accommodation can be found for family; age 31 years; keen worker; please write, stating salary, etc. Box 144.

CHARTERED ARCHITECT, having wide experience in England and overseas, desires responsible appointment; administrative experience; able to take complete charge. Reply to "Room 32," 4, Inverness Terrace, W.2. 143

REGISTERED ARCHITECT, fully qualified (37), seeks full-time or part-time employment; London area; experienced draughtsman. Apply Box 145.

STUDYING ARCHITECTURAL ASSISTANT (24), with nearly 7 years' experience, desires change of office; salary about £350. Please write Box 147.

YOUNG ARCHITECTURAL ASSISTANT (20), experience with architects and contractors, also prepare quantities and use surveying instruments, requires change; London or coast preferred. Box 146.

Other Appointments Vacant

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

TAKER-OFF required to take charge of branch office of London Chartered Quantity Surveyor in Dorset. Reply, stating age, experience, and salary required, to Box 1255.

BOYS of Girls, leaving School, wishing to train as **ARCHITECTURAL ASSISTANTS**, required. Write or telephone for appointment to T. P. Bennett & Son, 43, Bloomsbury Square, London, W.C.1. 1338

EAST AFRICA—BLACKBURN, NORBURN & PARTNERS, FF./L.R.I.B.A., Chartered Architects, of Nairobi, Kenya, require an **OFFICE MANAGER**; the post could be competently filled by either an Architectural or Quantity Surveying Assistant, recently qualified or qualifying; preferably single, and between 25 and 30; the position is an influential one in a growing practice, with extensive works throughout East Africa, and could lead to more important status for suitable man; commencing salary £45 to £55 monthly, according to experience. Applications to W. J. D. George, F.R.I.C.S., 143, Church Road, Bexleyheath, Kent, London agent. 1339

Services Offered

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

GENTLEMAN, 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.

PERSPECTIVES.—Water colour or line; professional; terms moderate. Write "New Services," 85, Heath Street, Birmingham. 18. 1079

BUILDER'S MERCHANT'S MANAGER, with connection among Architects and Builders in mid-Sussex, now living S.W. London, seeks new appointment with merchants or manufacturers in either district. Box 137.

SENIOR ASSISTANT, willing to undertake spare-time work; working drawings, specifications, surveys, etc.; North London. Box 1306.

BUILDING AND QUANTITY SURVEYOR (26), with 64 years' experience in Architects' and Surveyors' offices, distinguished war record R.A.F., requires position in Architects' or Surveyor's office; Northumberland or Durham preferred; further particulars will be given at request. Box 1339.

3RD YEAR STUDENT will undertake Tracing Work at home during vac.; 3s. per hour; interviews in London possible. Write Box 1353.

For Sale

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

14-IN. 4-screw Level and Tripod, by Baker. High Holborn; in correct working adjustment; £20 or offers; inspection by appointment 18, Oxford Road, Acocks Green, Birmingham. 1297

TRACING PAPER.—100 pads, each containing 100 sheets of 18 in. by 24 in. tracing paper, all brand new, in box of 10 pads, at 15s. per pad. H. H. Bradford, Ltd., Ramsey, Harwich, Essex. 1299

DUMPY Level, also Sun Printing Frame. Box 1299.

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, 10, 107, St. Pauls Road, N.1. Canonbury 2061.

SPECIFICATIONS, BILLS OF QUANTITIES, etc.—General Duplicating or Typing. Nothing too large or too small. Prompt, efficient service by experienced staff at reasonable charges. Copycraft, Ltd., 3, Broad Street Buildings, Liverpool Street, E.C.2 Bishopsgate 9100. 1199

ARCHITECTURAL Photography by **PETER PITT**. Specialist (and engineer). Utmost detail and pictorial presentation. I.B.P. scale of charges. 7, Inglemere Road, London, S.E.23. FOR. 8224. 1206

CENTRAL HEATING OIL BURNERS.—Insist on the British-made Parwinc—no smoking, clean, trouble free; no waiting for coal or coke deliveries; no embargo now. Write at once to Parker, Winder & Achurch, Ltd., Makers, 30, Broad Street, Birmingham, 1.

FLOORS OF DISTINCTION Laid: in wood, rubber, composition, cork, mosaic; existing floors repaired, resurfaced and polished; also painting restored. Davis Floorings, Grove Hall Court, Hall Road, N.W.8. CUN. 3205/6 and 5616. 600

OFFICE space wanted by Architect; West End or central area preferred; 200 to 400 sq. ft.; could share telephone. Box 1319.

OFFICES for Professional Purposes only; Knightsbridge; central position, close to Harrods; ground floor; 4 rooms and cloakroom (90 sq. ft.); lease 21 years; rent, £700 p.a. ex.; premium £300; extremely light and newly decorated. Apply Osborn & Mercer, 28b, Albemarle Street, W.1. Reg. 4304/5/6. 1337

ARCHITECTURAL SCALE MODELS from drawings, sketches and photos; also inexpensive simplified Models for experimental purposes promptly executed. Apply 1, Colet Gardens, W.14. Tel.: RIV. 6206. 1342

CONSULTING ENGINEER would be glad to receive Trade Catalogues, etc. Write Günther H. W. Rabe, P.O. Box 142, Ndola, N.R. 1344

Educational Announcements

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

R.I.B.A. AND T.P.I. EXAMINATIONS.—Mr. L. Stuart Stanley, M.A., F.R.I.B.A., Dist.T.P., M.T.P.I., Tutor in the Bartlett School of Architecture, London University, prepares candidates by correspondence tuition. 212, Euston Road, N.W.1. Tel.: EUSTON 7760.

CANTERBURY EDUCATION COMMITTEE. CANTERBURY COLLEGE OF ART, SCHOOL OF ARCHITECTURE.

A limited number of places will be available for Session 1948-49 in the 1st, 2nd, 3rd and 4th Years. The School, which is under the direction of Mr. Robert Paine, A.R.I.B.A., A.R.C.A., is listed by the R.I.B.A., and offers a full-time five-year course, leading to the external Final Examination.

Applications for admission should be addressed to the Principal, Mr. A. Moody, A.R.C.A., Canterbury College of Art, St. Peter's, Canterbury. Phone: 2708.

JAMES GREEN,
Chief Education Officer. 1346

R I B A 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., 10, ALBANY HOUSE, WORCESTER. London Office: 103, Old Brompton Road, S.W.1.

STEELWORK BY

I.W. SHARMAN LTD.

SWAN WORKS, HANWORTH, MIDDX

Phones: Sunbury 3210. Grams: "Sharmar," Sunbury 3007.

MUMFORD BAILEY & PRESTON LTD

AIR CONDITIONING & HEATING

HOT & COLD WATER SERVICES

SANITARY ENGINEERING ETC.

NEWCASTLE HOUSE, CLERKENWELL CLOSE, LONDON, E.C.1

Phone: Clerkenwell 6301

Branches at Bournemouth & Dublin

THE WORLD'S GREATEST BOOKSHOP

FOYLES
★ FOR BOOKS ★

LARGE DEPT FOR BOOKS ON ARCHITECTURE

New & secondhand Books on every subject
We BUY Books, too

119-125 CHARING CROSS RD LONDON WC2

Gerrard 5660 (16 lines) * Open 9-6 (inc Sats)

MODELS

ESTAB. 1893.

BY

John B. THORP

FOR TOWN PLANNING
PUBLIC BUILDINGS
ESTATES AND INTERIORS

TELEPHONE: HOLBORN 1011

LIFTS

by **MORRIS**

Herbert Morris Ltd

Loughborough

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

WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
BULWELL 78237-8

M. McCARTHY & SONS, LTD

BULWELL NOTTINGHAM

FOR SATISFACTION—



SAND FACED BRICKS

Manufactured by

THE HAMMILL BRICK CO. LTD
EASTRY · SANDWICH · KENT

Telephone: EASTRY 247 FOR SAMPLES

Phone: PERIVALE 7251

for reliable and prompt
Electrical Installations

Specifications and complete
schemes gladly submitted

SERVICE ELECTRIC CO. LTD
WATER ROAD, ALPERTON, MIDDLESEX



Pressed Steel Tanks by

BRAITHWAITE

& CO ENGINEERS LTD

KINGS HOUSE, HAYMARKET, S.W.1

Telephone: WH 1154/2 3093 Telegrams: Bromkirk-Phone

INFORMATION SHEET

29.GI

MAX HEAT TUBULAR HEATERS

Wardle

CATALOGUES ALSO AVAILABLE.

Obtainable from
The Wardle Engineering Co., Ltd., Old Trafford, Manchester 16
dm. W.A.8

CIRCUIT BREAKERS to control electric current of up to 4,000 amps or for

STARTERS for electric motors of up to 1,000 H.P.

Specify ELLISON

Made by GEORGE ELLISON Limited, Perry Barr, Birmingham, 22B

FIRE PROTECTION

See Information Sheet No. 78. Copies may be obtained from:

CLARKE & VIGILANT SPRINKLERS LTD.

Atkinson St. Deansgate, Manchester, 3
Phone: Deansgate 2727/8

and
10/13, Bedford St., Strand, W.C.2
Phone: Temple Bar 8114/5



Alphabetical Index to Advertisers

| | PAGE | | PAGE | | PAGE |
|---|--------|---|--------|--|-----------|
| Aidas Electric, Ltd. | viii | Froy, W. N., & Sons, Ltd. | xvi | Pel, Ltd. | xliii |
| Associated Metal Works (Glasgow), Ltd. | | Gaskell & Chambers, Ltd. | | Pilkington Bros., Ltd. | xxix |
| Austin-Hall Group of Companies, The | | General Accessories | | Pollard, E., & Co., Ltd. | |
| Automatic Telephone & Electric Co., Ltd. | | Gent & Co. | xliv | Pritchett & Gold & E.P.S. Co., Ltd. | xix |
| Baldwin, Son & Co., Ltd. | ii | Gillett & Johnston, Ltd. | | Pryorite, Ltd. | |
| Banister, Walton & Co., Ltd. | | Gilgins Ferro-Concrete Co., Ltd. | ii | Pynford, Ltd. | iv |
| Barralots, Ltd. | | Griffiths Bros. and Co., Ltd. | | Radiation, Ltd. | xxxviii |
| Bath Cabinet Makers & Artcrafts, Ltd. | | Greenwood's & Airvac Ventilating Co., Ltd. | ii | Ripolin, Ltd. | |
| Blackburn, Thomas, & Sons, Ltd. | xlvii | Hall, J. & E., Ltd. | lvii | Ruberoide Co., Ltd. | |
| Blundell Spence & Co., Ltd. | | Hammill Brick Co., Ltd., The | | Rubery, Owen & Co., Ltd. | xxxvii |
| Booth, James, & Co., Ltd. | xxxii | Harvey, G. A., & Co. (London), Ltd. | | Sadd, John, & Sons, Ltd. | |
| Booth & Sons (Bolton), Ltd., John | | Helliwell & Co., Ltd. | | Sadler, Thomas, Sons & Co. | xxi, xlii |
| Bone, Connell & Co., Ltd. | ii | Henderson Safety Tank Co., Ltd. | xli | Sankey, J. H., & Son, Ltd. | ii |
| Boulton & Paul, Ltd. | | Hills Patent Glazing Co., Ltd. | xxv | Santon, Ltd. | xlix |
| Howaters Building Boards, Ltd. | lix | Holloway Bros. (London), Ltd. | xxxiv | Salter, F. E., Ltd. | |
| Boyle, Robert, & Son | | Hollway, W. F., & Brother, Ltd. | xlv | Scaffolding (Great Britain), Ltd. | |
| Braby, Fredk., & Co., Ltd. | xvii | Holophane, Ltd. | | Sealocrete Products, Ltd. | |
| Braithwaite & Co., Engineers, Ltd. | lvii | Holoplast, Ltd. | | Secomastic, Ltd. | xlvi |
| Briggs, William, & Sons, Ltd. | ii | Hope, Henry, & Sons, Ltd. | xxxii | Sement, Ltd. | xxxvii |
| British Gas Council | | Hopton-Wood Stone Firms, Ltd. | | Service Electric Co., Ltd. | lvii |
| British Industries Fair | xli | Imperial Chemical Industries, Ltd. | xi | Sharman, R. W., Ltd. | lvii |
| British Mouldex Rubber Co., Ltd. | | Insulate Products Corporation, Ltd. | xli | Simplex Electric Co., Ltd. | |
| British National Electric, Ltd. | | International Correspondence Schools, Ltd. | | Smith & Pearson, Ltd. | |
| British Trane Co., Ltd. | xli | Jenkins, Robert, & Co., Ltd. | lix | Smith, Henry (Constructional Engineers), Ltd. | |
| Broad & Co., Ltd. | xlviii | Jewwood, Ltd. | | Smith & Rodger, Ltd. | |
| Bull Motors (E. R. & F. Turner), Ltd. | | Key Engineering Co., Ltd. | | Southern Lime Association, The | |
| Cable Makers' Association | | King, George W., Ltd. | vi | Spiral Tube & Components Co., Ltd. | xlv |
| Carlisle Electrical Manufacturing Co., Ltd. | | Leaderflush, Ltd. | | Spon, E. & F. N. | xlviii |
| Carlton Metal Mouldings Co., Ltd. | lviii | Lead Industries Development Council | | Stent Precast Concrete Co., Ltd. | |
| Cement Marketing Co., Ltd. | | Lever, James, & Son, Ltd. | xlviii | Sundeala Board Co., Ltd. | v |
| Central Distributing Co., The | | Loft Ladders, Ltd. | lix | Temple Varnish Co., Ltd. | |
| Clark & Eaton, James, Ltd. | xv | London Sand Blast Decorative Glass Works, Ltd., The | | Thompson Beacon Windows, Ltd., John | |
| Clarke & Vigilant Sprinklers, Ltd. | lvii | Lysaght, John, Ltd. | | Thornborough & Sons (Manchester), Ltd. | |
| Cloakroom Equipment, Ltd. | xlii | Magnet Joinery, Ltd. | x | Thornton, A. G., Ltd. | xlv |
| Colt, W. H. (London), Ltd. | iii | Mallinson, William, & Sons, Ltd. | xxxv | Thorn Electrical Industries, Ltd. | xxvii |
| Copper Development Association | | Marley Tile Co., Ltd. | xxiii | Thorp, John B. | lvii |
| Crabtree, J. A., & Co., Ltd. | ix | Maxwell, Andrew | xlix | Travis & Arnold, Ltd. | xi |
| Crittall Manufacturing Co., Ltd. | xviii | McCall & Co. (Sheffield), Ltd. | | Tretol, Ltd. | xlv |
| C.S.A. Industries, Ltd. | xx | McCarthy, M. & Sons, Ltd. | lvii | True-Flue, Ltd. | xlv |
| Denny, Mott & Dickson, Ltd. | | Merchant Adventurers, Ltd. | | Trussed Concrete Steel Co., Ltd., The | |
| Doulton & Co., Ltd. | | Metropolitan-Vickers Electric Co., Ltd. | | Turners Asbestos Cement Co., Ltd. | xii |
| Durafencing, Ltd. | | Midland Electric Manufacturing Co., Ltd. | | United Steel Companies, Ltd., The | |
| Eagle Range & Grate Co., Ltd. | xlvii | Midland Joinery Works, Ltd. | | Vernon Industries, Ltd. | |
| Edgar, Wm., & Son, Ltd. | | Midland Woodworking Co., Ltd. | xxxix | Versil, Ltd. | xi |
| Ekco-Ensign Electric, Ltd. | xxviii | Mills Scaffold Co., Ltd. | | Vulcanite, Ltd. | i |
| Ellison, George, Ltd. | lvii | Morris, Herbert, Ltd. | lvii | Wadsworth, Wm., & Sons, Ltd. | |
| Ellis School of Building | xxx | Mumford, Bailey & Preston, Ltd. | | Wardle Engineering Co., Ltd., The | lvii |
| English Joinery Manufacturers' Assoc. | xli | National Federation of Clay Industries, The | | Watco, Ltd. | lx |
| Fenning & Co., Ltd. | ii | Nobles & Hoare, Ltd. | xxii | Whately & Co., Ltd. | xxvi |
| Fordham Pressings, Ltd. | lvii | North British Chemicals, Ltd. | | Williams, John, & Sons (Cardiff), Ltd. | xiv |
| Foryle, W. & G., Ltd. | | | | Wimpey, George, & Co., Ltd. | xlv |
| Franki Compressed Pile Co., Ltd. | | | | Woods of Colchester, Ltd. | |
| French, Thomas, & Sons, Ltd. | | | | Wood Wool Building Slab Manufacturers' Association | |

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales see pages lii, liii, liv, lv, lvi and lvii.

... we have got something up our sleeve!

We design and manufacture all types of Architectural Metal Work, Bronze, Metal and Stainless Steel Mouldings, Shopfronts, Grilles, Showcases, Metal Letters, etc. We should be pleased to help you with any problems you may have.

WRITE OR PHONE US TODAY—WE CAN HELP YOU
DEPT A.J.10

**CARLTON METAL MOULDING
CO. LTD.**

TAYBRIDGE WORKS · BATTERSEA · SW11



LIGHTWEIGHT GROUND MANHOLE COVERS IN *unbreakable* STEEL



Always specify
Jenkins

Export Enquiries Invited.

Light in weight and unbreakable;
hinged or plain; standard or
special sizes.

Robert Jenkins & Co. Ltd.
ESTABLISHED 1856
ROTHERHAM

Telephone: 4201-6 (6 lines).

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

**BOWATERS BUILDING
BOARDS LIMITED**

15 PORTMAN STREET, LONDON, W.1



20%

increase in house space by installing a LOFT LADDER

Every new building, every repaired or converted building should be utilised to its fullest extent and all space made available for use. Don't let the loft space be wasted.

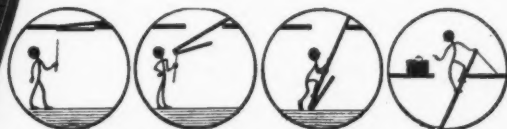
Our information sheets show in detail how this space may be made available, both in new work and conversions.

Write for full particulars of construction, balancing units, finish, erection and prices of the various types.



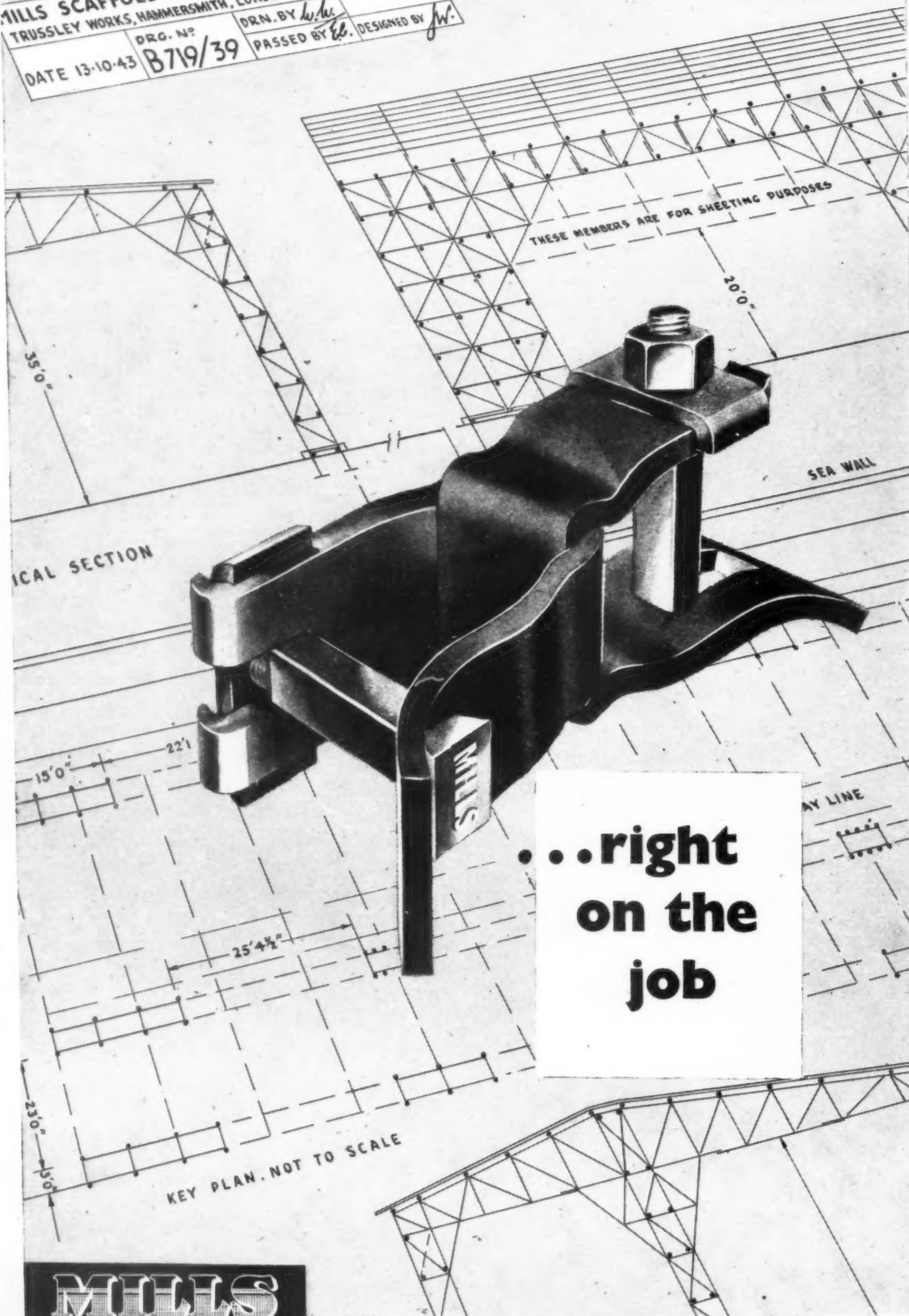
**LOFT
LADDERS LTD**

BROADWAY WORKS · BROMLEY · KENT
RAVENSBORNE 2624



INFORMATION SHEETS
free on request

MILLS SCAFFOLD COMPANY LTD.
TRUSSLEY WORKS, HAMMERSMITH, LONDON, W.6.
DRG. NO. B719/39
DATE 13-10-43
DRN. BY *h.w.*
PASSED BY *eb.* DESIGNED BY *fw.*



...right
on the
job

MILLS
SCAFFOLD CO., LTD.

Head Office: TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6. Tel: RIVerside 5026/9

