

THE ARCHITECTS' JOURNAL

STACK



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

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

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
IIBD	Incorporated Institute of British Decorators.	Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects.	12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071	Museum 7197
IOB	Institute of Builders.	48, Bedford Square, W.C.1.	Monarch 7391
IR	Institute of Refrigeration.	Empire House, St. Martin's-le-Grand, E.C.1.	Abbey 6172
IRA	Institute of Registered Architects.	47, Victoria Street, S.W.1.	Sloane 7128-29
ISE	Institution of Structural Engineers.	11, Upper Belgrave Street, S.W.1.	Museum 9200
IWA	Inland Waterways Association.	11, Gower Street, W.C.1.	Whitehall 7264
LIDC	Lead Industries Development Council.	Eagle House, Jermyn Street, S.W.1.	Museum 3891
LMBA	London Master Builders' Association.	47, Bedford Square, W.C.1.	Euston 2158-9
MARS	MARS Group (English Branch of CIAM).	34, Gordon Square, W.C.1.	Whitehall 3400
MOA	Ministry of Agriculture and Fisheries.	55, Whitehall, S.W.1.	Mayfair 9400
MOE	Ministry of Education.	Curzon Street House, Curzon Street, W.1.	Whitehall 4300
MOH	Ministry of Health.	Whitehall, S.W.1.	Whitehall 6200
MOLNS	Ministry of Labour and National Service.	St. James's Square, S.W.1.	Gerrard 6933
MOS	Ministry of Supply.	Shell Mex House, Victoria Embankment, W.C.	Abbey 7711
MOT	Ministry of Transport.	Berkeley Square House, Berkeley Square, W.1.	Whitehall 8411
MOTCP	Ministry of Town and Country Planning.	32-33, St. James's Square, S.W.1.	Reliance 7611
MOW	Ministry of Works.	Lambeth Bridge House, S.E.1.	Abbey 1010
NAMMC	Natural Asphalt Mine-Owners and Manufacturers Council.	94, Petty France, S.W.1.	Abbey 5277/8
NAS	National Association of Shopfitters.	9, Victoria Street, S.W.1.	Kensington 8161
NBR	National Buildings Record.	37, Onslow Gardens, S.W.7.	Abbey 5111
NCBMP	National Council of Building Material Producers.	2, Caxton Street, S.W.1.	W.1. Langham 4041
NFBTE	National Federation of Building Trades Employers.	82, New Cavendish Street, W.1.	Macaulay 4451
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Whitehall 2881/2/3	Whitehall 2881/2/3
NFHS	National Federation of Housing Societies.	13, Suffolk St., S.W.1.	Langham 4041
NHBRC	National House Builders Registration Council.	82, New Cavendish Street, W.1.	Molesley 1380
NPL	National Physical Laboratory.	Head Office, Teddington.	S.W.1. Abbey 1359
NSAS	National Smoke Abatement Society.	Chandos House, Buckingham Gate, S.W.1.	Whitehall 0211/2
NT	National Trust for Places of Historic Interest or Natural Beauty.	42, Queen Anne's Gate, S.W.1.	Whitehall 7245
PEP	Political and Economic Planning.	16, Queen Anne's Gate, S.W.1.	Whitehall 9936
RCA	Reinforced Concrete Association.	94, Petty France, S.W.1.	Edinburgh 20396
RIAS	Royal Incorporation of Architects in Scotland.	15, Rutland Square, Edinburgh.	Langham 5721/7
RIBA	Royal Institute of British Architects.	66, Portland Place, W.1.	Whitehall 5322
RICS	Royal Institution of Chartered Surveyors.	12, Great George St., S.W.1.	Whitehall 3935
RFAC	Royal Fine Art Commission.	22A, Queen Anne's Gate, S.W.1.	Regent 3335
RSI	Royal Society.	Burlington House, Piccadilly, W.1.	Temple Bar 8274
RSA	Royal Society of Arts.	6, John Adam Street, W.C.2.	Sloane 5134
RSI	Royal Sanitary Institute.	90, Buckingham Palace Road, S.W.1.	Wimbledon 5101
RIB	Rural Industries Bureau.	35, Camp Road, Wimbledon, S.W.19.	Regent 6347
SBPM	Society of British Paint Manufacturers.	20, Piccadilly, London, W.1.	Western 1571
SCR	Society for Cultural Relations with the USSR.	14, Kensington Square, London, W.8.	Abbey 7244
SE	Society of Engineers.	17, Victoria Street, Westminster, S.W.1.	Mansion House 3921
SFMA	School Furniture Manufacturers' Association.	30, Cornhill, London, E.C.3.	Central 4444
SIA	Structural Insulation Association.	14, Moorgate, London, E.C.2.	E.C.1. Metropolitan 8344
SIA	Society of Industrial Artists.	Room 243, Empire House, St. Martin's-le-Grand, E.C.1.	Holborn 2646
SNHTPC	Scottish National Housing & Town Planning Council.	Hon. sec., Robert Pollock, Town Clerk, Rutherglen.	Covent Garden, W.C.2.
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 4771 (6 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.	

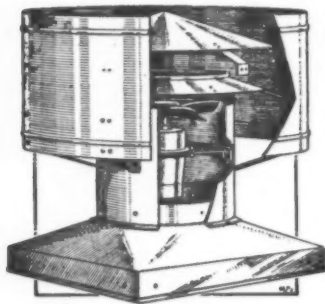
No. 2848]

[Vol. 110

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

Price 9d.

Registered as a Newspaper.



CUT-AWAY VIEW SHOWING
FAN INSTALLATION IN
DUAL-PURPOSE "MECHAVENT"
NATURAL AND MECHANICAL
ROOF VENTILATOR

GREENWOOD-AIRVAC

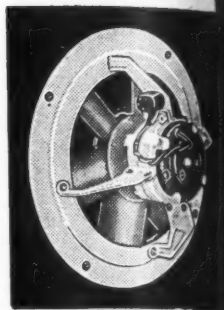
COMPLETE SYSTEMS OF SCIENTIFICALLY
BALANCED VENTILATION FOR BUILDINGS

TRUNKED HOODS WITH FANS FOR
REMOVING UNWANTED HEAT, FUMES
AND STEAM FROM THE KITCHEN
EQUIPMENT OF SCHOOLS, HOSPITALS,
CANTEENS, RESTAURANTS AND HOTELS

EFFICIENT VENTILATION FOR KITCHENS
AND CANTEENS

MECHANICAL AND STATIC EXTRACTORS
AND INTAKES FOR ROOFS AND WALLS

FAN UNITS AND VENTILATING EQUIPMENT
FOR HOUSING AND INDUSTRY



RING-MOUNTED WALL
FAN WITH HOPPA OR
AUTOMATIC LOUVRES.
A USEFUL EXTRACTOR
FAN ASSEMBLY

GREENWOOD'S
MULTI-LOUVRED
"MAXAIRE" PANELS,
"DIFUSEX", AND
HIT AND MISS
VENTILATORS



FOR CUPBOARDS,
DOORS, WALLS,
PARTITIONS,
CEILINGS, AND
FOR FITTING
EXTERNALLY

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LIMITED

SPECIALISTS IN THE DESIGN AND MANUFACTURE OF VENTILATORS AND VENTILATING EQUIPMENT

BEACON HOUSE • KINGSWAY • LONDON, W.C.2.

AIRVAC, LONDON

CHANCERY 8135/6/7

SEALOCRETE SEALANTONE

SEALOCRETE

MAKES CONCRETE
DUSTPROOF
OILPROOF
WATERPROOF
CASE HARDENED
Rapid hardens—seals leaks under pressure
ENABLES CONCRETING TO BE
CARRIED OUT IN FROSTY WEATHER

SEALANTONE

THE ORIGINAL
AND UNIQUE
NON-FADING
LIQUID COLOURS
for
CONCRETE, CEMENT, ROUGH CAST, ETC.
ASSURES Intensity and Uniformity with Extreme
Hardness; PREVENTS Dust; AIDS Water, Grease
and Oil Resistance . . .
ALL THESE IN ONE OPERATION

SOLE MANUFACTURERS

SEALOCRETE PRODUCTS LTD ATLANTIC WORKS, MACBETH ST. W.6.

Telephone: RIVerside 2686-7.

Telegrams: Exploiture, London.

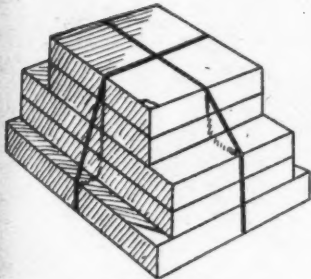


6.

don.

For Efficient Insulation specify

STRAMIT TANK INSULATORS



AS DELIVERED

EASY TO FIX

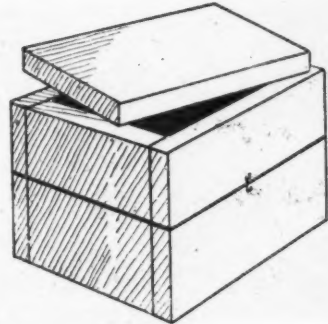
Prefabricated to fit any tank.
Can be erected in under one hour.
No nails necessary.

ECONOMIC TO BUY

Low initial cost.
No waste.

EFFECTIVE TO USE

K Value 0.60—equivalent to 24" brick.
Reduces possibility of freezing to minimum.



AS FIXED

STOCKED AND DISTRIBUTED BY:

PHOENIX TIMBER CO. LTD

FROG ISLAND, RAINHAM, ESSEX

Telephone: Rainham 3311

88, QUEEN VICTORIA ST., E.C.4

Telephone: CENTral 6976

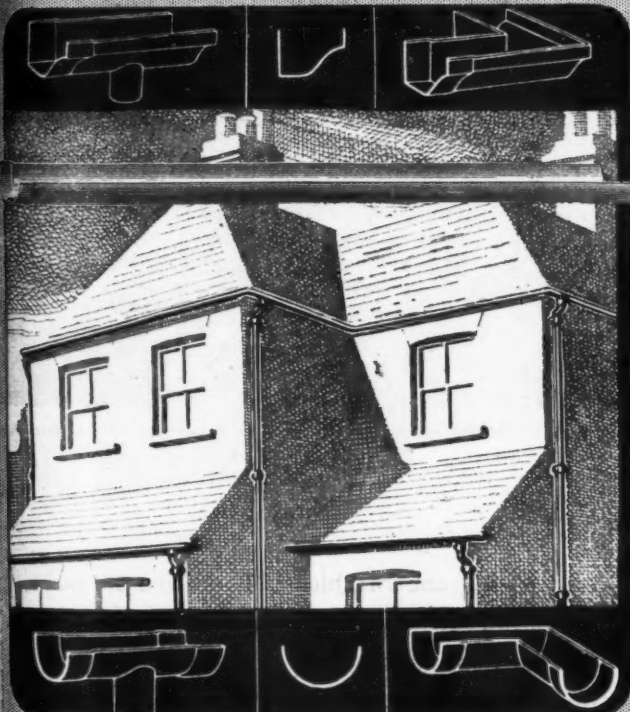
TO THE ARCHITECT-SURVEYOR AND BUILDER

***Yours the problem—
Harveys the answer!***

Whenever it is a question of "where-to-get" Zinc, Copper or (Galvanised after manufacture) Pressed Steel Gutters—remember Harveys. For "Harco" Gutters, made by Harveys, can be supplied in any size, gauge or section to suit customer's requirements. All "Harco" (Galvanised after manufacture) Gutters are supplied as standard with pressed socket ends. Get all supplies from your local Builders' Merchants. For full details send for descriptive List.

Harvey

**G.A. Harvey & Co. (London) Ltd.
Woolwich Rd. London. S.E.7**





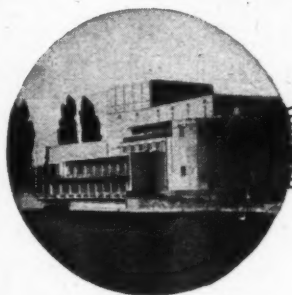
From an original drawing by GORDON CULLEN of the Wheatsheaf Hotel, Thornton Heath Pond.

Floor Tiles for Pubs

FOR PUBLIC HOUSES, restaurants, canteens and hostels, there must be comfortable gay floors that are easy to keep good looking and clean. Marley Floor Tiles are colourful, silent, resilient, durable, hygienic and waterproof. They provide also an inexpensive solution of the flooring problem for housing, schools, hospitals and offices. They can be supplied immediately in any quantity and in a wide range of colours.

The Marley Tile Company Limited, London Road, Riverhead, Sevenoaks, Kent. Sevenoaks 2251/6 **MARLEY**

Catering in Shakespeare's Theatre



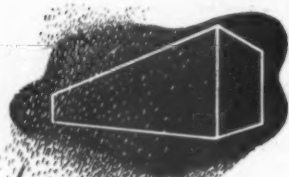
The Restaurant kitchens of the Shakespeare Memorial Theatre at Stratford-upon-Avon are equipped with Radiation large cooking gas appliances. During the season some 200 theatre patrons are served each day with meals cooked in these appliances, which include the 4-oven Grosvenor Range shown below. The services of Radiation kitchen planning specialists are available, without obligation, to all concerned in the planning and equipment of kitchens for hotels, hospitals, restaurants, canteens and similar establishments.



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, London, W.1. Phone: Mayfair 6462



FROM—START—TO—FINISH—



7 MONTHS

THERE is nothing remarkable about this structure. As far as Orlit is concerned it is just a "run of the mill" job. A three-storey block of flats had to be built with the maximum speed and the minimum use of timber and steel. The Orlit pre-cast method of construction was the logical choice.

The load-bearing framework is of pre-cast concrete stanchions, set out by a steel jig and resting on a 6-inch reinforced concrete raft. Orlit pre-cast units were used for walls, roof and for support for the floorings.

External walls of cavity construction consist of precision-made units. The internal skin is of light-weight concrete; the external skin being of dense concrete with a rough stone finish, cast integrally with the block. The cladding is structurally independent of the frame.

From start to finish only seven months elapsed, but there were unusual conditions of subsoil, and normally, Orlit could have completed their work in five months.

Block of flats at Poplar, E.14.

*Borough Engineer: W. J. Rankin, A.C.G.I., A.M.Inst.C.E.,
A.M.Inst.M. and Cy.E., A.M.T.P.I.*

*Architects are invited to apply for details
of Orlit Pre-cast Construction. Illustrated,
descriptive booklets etc. will be sent on request.*

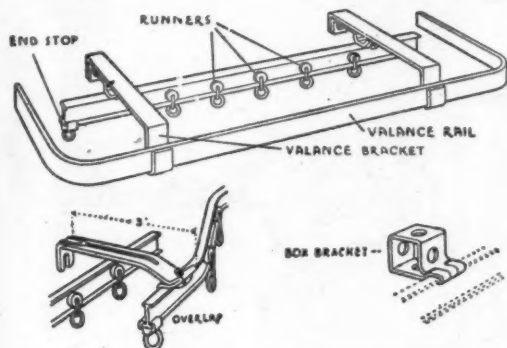
ORLIT
PRE-CAST
CONSTRUCTION

ORLIT LTD • 18 BUCKINGHAM GATE • LONDON • SW1 • Telephone: Victoria 6701-4
ORLIT (LANCASHIRE) LTD • 3 BROWN STREET • MANCHESTER 2 • Telephone: Blackfriars 0718
ORLIT (N. IRELAND) LTD • BENSON STREET • LISBURN • Co. ANTRIM • Telephone: Lisburn 3249

SPECIFY 'Rufflette' CURTAIN SUSPENSION SYSTEMS

'Rufflette' brand RECESSED CURTAIN TRACK

'Rufflette' brand Recessed Curtain Track is a permanent and integral part of building construction. It is inexpensive and simple to fit into wood, plastered or fair-faced concrete lintels. The rail is held rigidly in position by a patent spring clip without screws and is a concealed and a permanent fitting.



FOR WOOD OR FAIR-FACED CONCRETE



FOR PLASTERED CONCRETE LINTELS

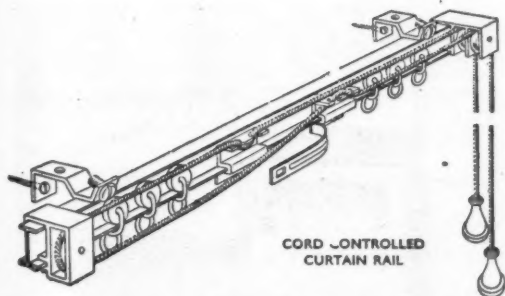
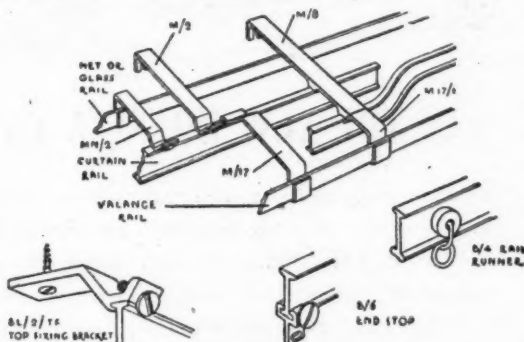


'Rufflette' brand B/L CURTAIN RAIL

This rail has been specially designed for wood frame windows. The construction is of heavy extruded brass, with top or face fixing brackets made specially for quick fitting and is therefore a valuable time-saving device. For strength, durability and easy running specify 'Rufflette' brand B/L Curtain Rail.

'Rufflette' brand M SERIES RAIL FOR METAL WINDOWS

The special feature of this rail is the use of extension supports from the main rail for the valance and net curtain rails; this reduces the number of main supports needed and minimises drilling. 'Rufflette' brand M Series Curtain Rail can be fitted to any shaped window straight or curved. The 'Rufflette' M Series Curtain Rail is specially designed for quick and easy fitting to metal windows.



'Rufflette' brand CORD CONTROLLED CURTAIN RAILS

For smooth and trouble-free operation the 'Rufflette' brand Cord Controlled Curtain Rail is recommended for use in large establishments such as hotels, residences and offices where curtains receive constant usage. It is of simple construction and quickly fitted without dismantling. 'Rufflette' brand Cord Controlled Curtain Rail will fit all straight windows.

Architect's Journal: the following Information Sheets are available and will be sent on request to manufacturers.
SHEET 44 D.1. ('RUFFLETTE' RECESSED TRACK). SHEET 44 D.2. ('RUFFLETTE' B/L and M Type Rails).

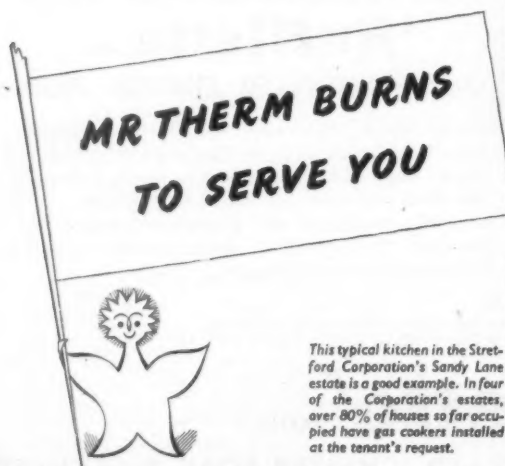
'Rufflette' BRAND

MANUFACTURED BY THOMAS FRENCH & SONS LTD., CHESTER ROAD, MANCHESTER 15
FACTORIES: Manchester, Wythenshawe, Fall River, Mass., U.S.A. LONDON OFFICE: 156-162 Oxford Street, W.1
Also at BRITISH EMPIRE BUILDING, NEW YORK CITY and 751, VICTORIA SQUARE, MONTREAL

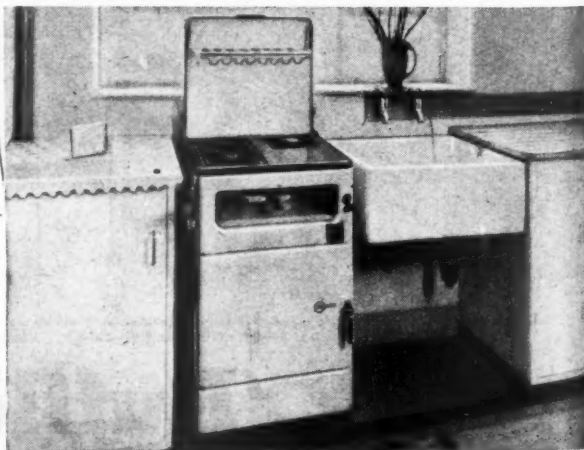


IN THE NEW HOUSING ESTATES Mr. Therm is at home

Post war heating, cooking and hot water systems adopted by Local Authorities invariably require one solid fuel and one 'fuel on tap'. As many Authorities have proved, an admirable combination is found in Mr. Therm's smokeless fuels, Gas and Coke. Both can be used economically in so many different ways to achieve the standards of comfort recommended by Government bodies. Gas for cooking, home laundry, "topping up" heating, summer water heating, and refrigeration (when installed). Coke for living room fire (gas lit) combined fire and water heater, or domestic boiler. For Council housing, Gas and Coke are largely complementary, and the Nation's coal is conserved by their use.

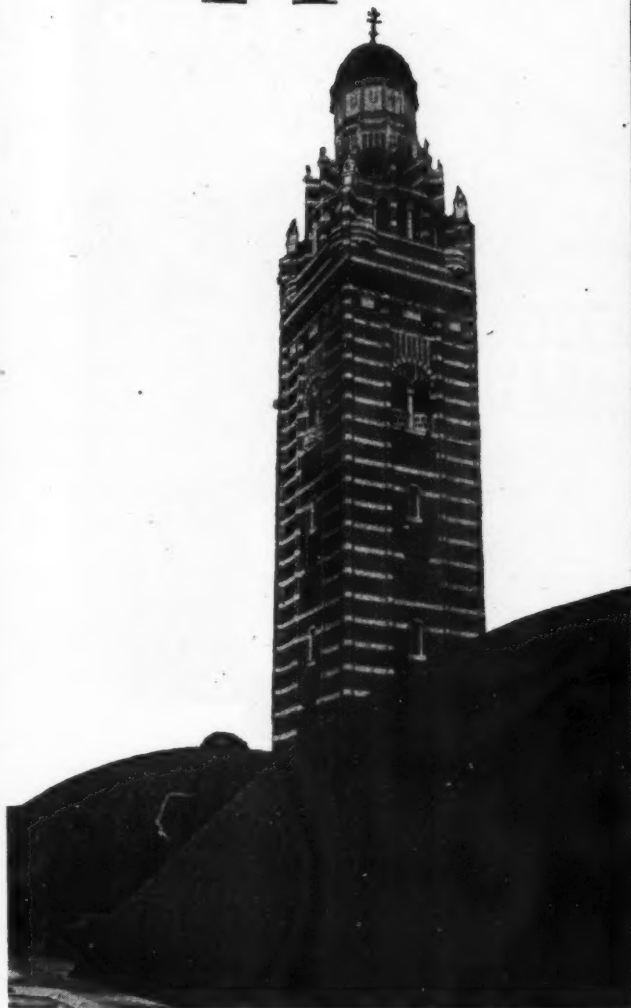


This typical kitchen in the Stretford Corporation's Sandy Lane estate is a good example. In four of the Corporation's estates, over 80% of houses so far occupied have gas cookers installed at the tenant's request.



THE GAS COUNCIL • 1 GROSVENOR PLACE • LONDON • S.W.1

Copper



in architecture

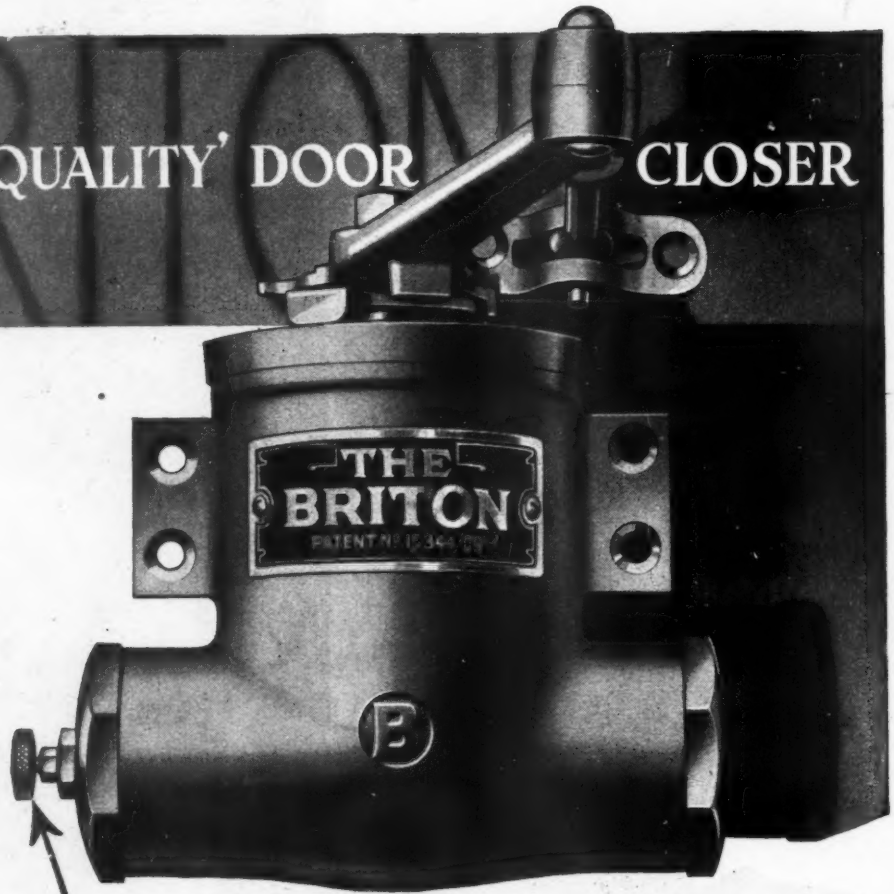
More than 15,000 square feet of copper sheet made by the Metals Division of I.C.I. have recently been used by Messrs. Frederick Braby & Co. Ltd. for covering the domes of Westminster Cathedral. Of all metals, copper is the best fitted for architectural work of this kind. It is ductile and easily handled, and the corrosion-resistant green patina makes it virtually everlasting, as well as adding beauty to the building.

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



M.177

THE 'QUALITY' DOOR CLOSER



HYDRAULIC CHECK, ADJUSTABLE TO FINE LIMITS.
EVERY 'BRITON' CARRIES THE MAKERS 5 YEAR GUARANTEE

*Architects are invited to inspect our display
of Door Springs, Floor Springs, etc., recently
placed on view in the Building Centre,
9, Conduit Street, London, W.1.*

WILLIAM NEWMAN & SONS LTD.

MANUFACTURED BY

HOSPITAL STREET. BIRMINGHAM. 19.

F

(

un

m

si

ho

ho

fo

th

en

ST

Gr

Br

40

M

hi

K

G

gr

is

(to

m

an

m

vi

to

cl

PRODUCT OF A FAMOUS FOUNDRY

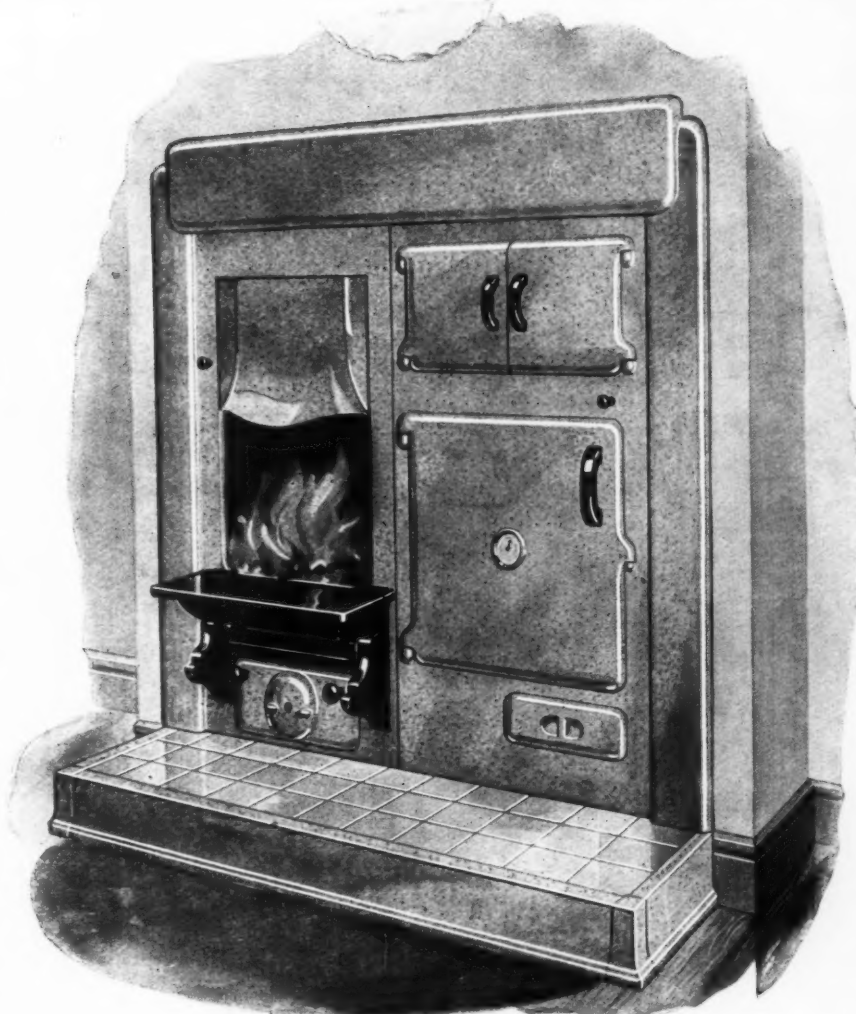
ONE efficient and economical fire provides heat for a large and uniformly heated oven, a fast boiling machine-ground hot-plate with extension hob, a hot closet and a supply of hot water for a normal family household. The fire has a closed position for slow overnight burning, and for the prevention of excessive heat emission during the summer months

SPECIFICATION :

Grate, overall size 38in. by 38in. by 14½in.
Brickwork opening required, 44in. high by 40in. wide and 15in. deep.

Mantel: overall size 45½in. wide by 44½in. high.

Kerb: to suit 44in. by 12in. tile hearth
Grate supplied in mottled fawn, mottled green and black vitreous enamel. Mantel is supplied in mottled fawn, mottled brown (to tone with the mottled fawn grate), mottled green vitreous enamel or fine-cast and primed one coat. Kerb is supplied in mottled fawn, mottled green and black vitreous enamel. A bolster can be supplied to restrict heat losses from firebox in its closed position.



To satisfy modern requirements the cooker may be adjusted to stay alight overnight and is capable of giving the performance specified in B.S. 1252 1945, on both coal and anthracite. Other solid fuels, such as coke, wood, or patented fuels may be used if the cooker is not required to stay alight unattended for a very long period.

The cooker has been selected for inclusion in the Ministry of Health's approved List of improved appliances as recommended to all local authorities.

Facilitates assembly, cleaning and maintenance: The boiler and the fireparts are designed for easy removal and replacement without disturbing the brickwork in any way. Please write for leaflet A.2.

The
GLOW-WORM
"Derwent"

COMBINATION GRATE

GLOW-WORM BOILERS LIMITED · DERWENT FOUNDRY · MILFORD N^o DERBY

the name behind the job

COSTAIN

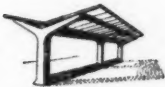


RICHARD

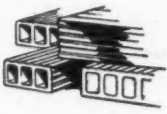
COSTAIN
LIMITED

BUILDING & CIVIL ENGINEERING CONTRACTORS
DOLPHIN SQUARE, LONDON S.W.1 VICTORIA 8434

For proof of Concrete Progress

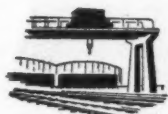
That concrete can do still more is the  inspira-

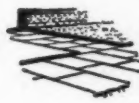
tion of the Dow-Mac organisation. In the experience gained

in the  successful production of pre-stressed

concrete main line railway sleepers,  in pre-stressed

bridge beams and in pre-stressed constructional

work  lies your guarantee of quality in all

the many Dow-Mac Concrete Products—from  paving

slabs to transmission line poles.

depend on

*For the Mass Production of all types of Pre-cast Units :
Sleepers, Transmission Poles, Lighting Columns, Kerbs,
Fence Posts, Bridge Beams, Piles, Flooring and Decking.*

**DOW-MAC (PRODUCTS) LTD
TALLINGTON, LINCOLNSHIRE**

LONDON OFFICE: Lion House, Richmond, Surrey.

Works also at: Griffiths Crossing, Caernarvonshire, North Wales
and Warrenpoint, Nr. Newry, Co. Down, Northern Ireland.



THE ART OF BALANCE

And that goes for paint—Joseph Mason Paint—as well. Of all products, paint depends most on balance of ingredients to give satisfactory service. Whether it is covering power, gloss, texture or colour, balance is essential.



JOSEPH MASON & CO. LTD
D E R B Y

LYN-O-MAS • MASOPAR • MASONIA

MAKERS OF 'BALANCED' PAINTS

2

TD

NIA

TS

STEEL WINDOWS



ARTHUR HENDERSON HOUSE Block 1 and 2
FULHAM

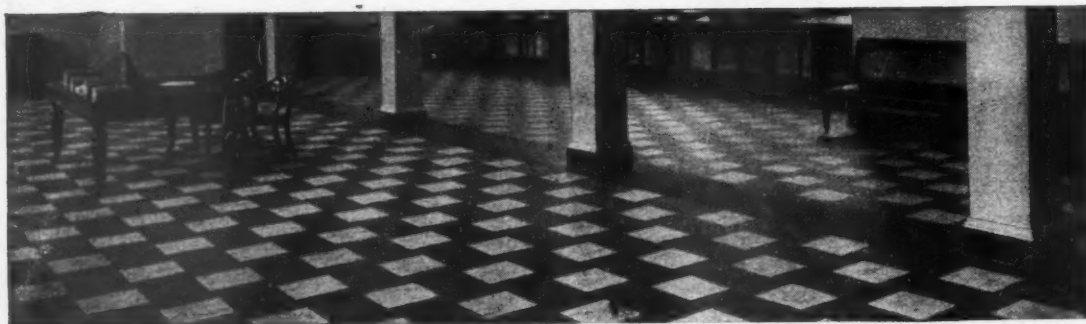
J. Pritchard Lovell, Esq., L.R.I.B.A.
Chief Architect

METROPOLITAN BOROUGH OF FULHAM
Town Hall, Fulham, London, S.W.6

JOHN THOMPSON BEACON WINDOWS
LIMITED WOLVERHAMPTON

NEW LOW-COST FLOORING IN FREE SUPPLY

ARMSTRONG'S ACCOTILE



*Alkali-resistant, ideal on
concrete sub-floors*

This Armstrong's Accotile floor was laid in 1939 at the offices of the London Provision Exchange, 1 London Bridge, S.E.1. After ten years' service, it is still in excellent condition.

DISTINCTIVE APPEARANCE THAT STANDS HARD WEAR

A NEW and attractive tile flooring material is now available in Britain. Low in first cost, it is nevertheless exceptionally durable.

Now in full production at the new Tyneside factory of Armstrong Cork Co. Ltd., Armstrong's Accotile Flooring has been tested and proved during 20 years of successful experience in the United States. And Accotile floors laid in Britain before the war show little sign of 10 years' hard use.

Unaffected by alkaline moisture

Accotile is a composition of inert asbestos and ground rock fillers, fadeless mineral pigments, and asphalt or resin binders.

Since it is entirely non-absorbent and alkali-resistant, it is perfectly suitable for use on concrete sub-

floors without damp-course, at ground level or below it, provided there is no pressure of water. For such applications it offers an unusually attractive floor which withstands the hardest usage, either in domestic kitchens, entrance halls, etc., or in shops and public buildings.

Quickly laid, easily cleaned

Accotile floors are quickly laid, and can be used immediately. The tiles are available in a wide range of pleasing marbled or plain colours, giving ample scope for individual design. These colours are permanently fresh, and since they are an integral part of the composition, they cannot wear off. Warm and quiet to the tread, Accotile is easily washed or polished. It resists staining—even cigarette

marks are easily removed. Should any damage occur, it is quickly made good by inserting a few new tiles.

We feel sure that you will be interested in this versatile new flooring. We shall be pleased to send sample tiles on request, with full information.

★

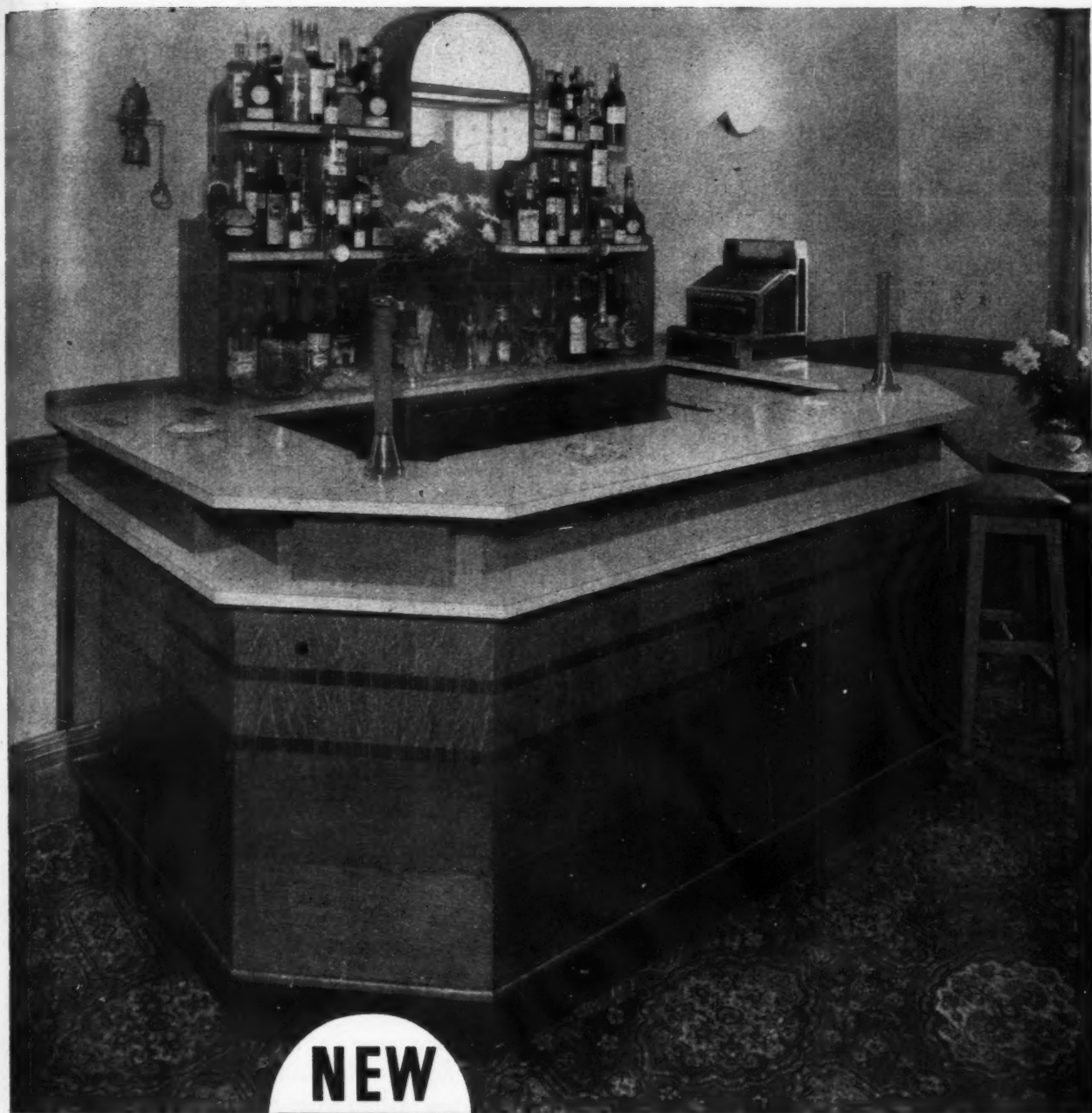
SKILLED INSTALLATION BY APPROVED ACCOTILE SPECIALISTS

TO ENSURE that every Accotile floor shall be entirely satisfactory, installation is carried out by workmen who have been trained at the Armstrong's Accotile Laying School.

ARMSTRONG CORK COMPANY LTD.

KINGSBURY, LONDON, N.W.9
Telephone: Colindale 7080

Scottish Branch: 5 OSWALD STREET, GLASGOW, C.1
Telephone: Central 5703



**NEW
BAR**

F O R M I C A

T E C H N I Q U E

The full value of Formica—the new wonder material—as a counter or bar top is seen at its best in its application by Gaskell & Chambers specialised technique. Scratchproof, burnproof and easiest cleaned, this new material should be taken into consideration every time a bar is redesigned or rebuilt.

This fine example of G. & C. craftsmanship is reproduced by kind permission of Mr. E. A. Gosling of the Union Hotel, Hinckley, for whom the bar was designed and constructed.

*Table
Tops, too!*



BRITAIN'S BIGGEST BAR FITTERS

Head Office: **DALEX WORKS, COLESHILL STREET, BIRMINGHAM, 4.**
LIVERPOOL • MANCHESTER • NEWCASTLE-ON-TYNE

Branches: LONDON • BRISTOL • CARDIFF • LEEDS • PORTSMOUTH
PRESTON • HANLEY • SHEFFIELD • NOTTINGHAM • GLASGOW • EDINBURGH



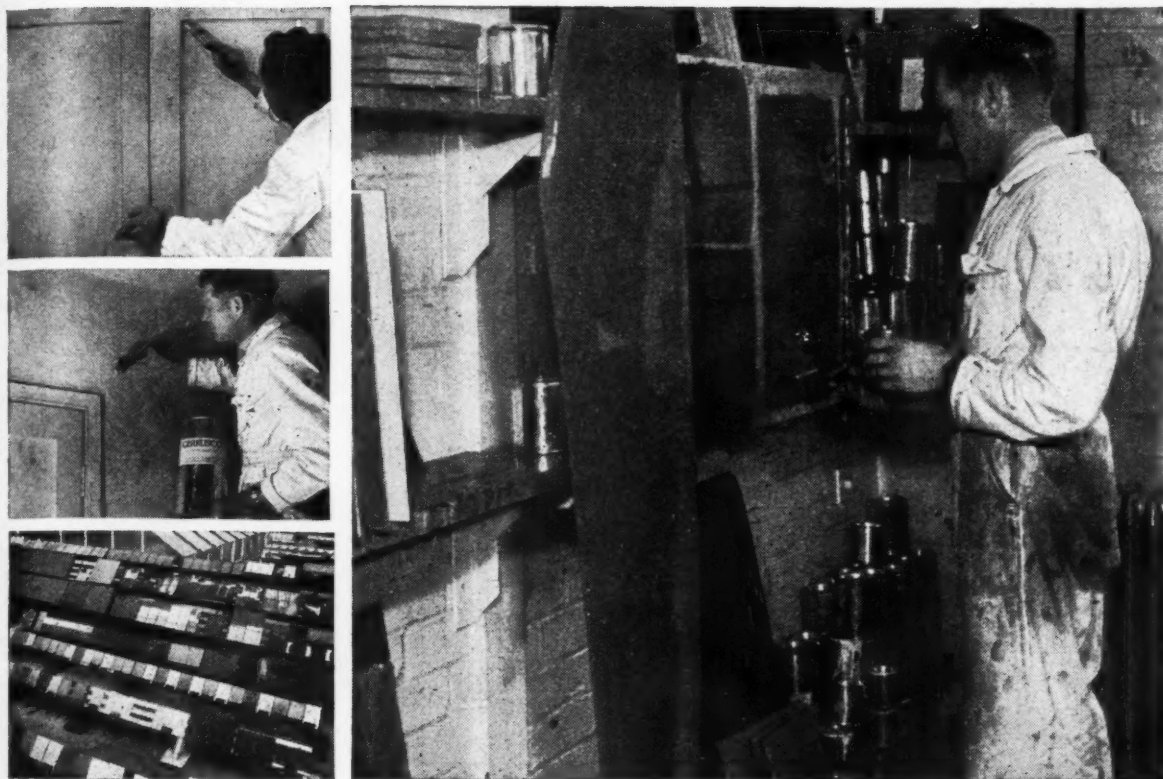
Architect : W. H. Gunton, F.R.I.B.A.

This walnut panelled room in the London Headquarters of the Cornhill Insurance Company provides further testimony to the quality of Bath Cabinet Company craftsmanship. Enquiries are invited from Architects interested in the Furnishings of Offices, Public Buildings, Ships, Hotels, etc.

Bath

**CABINET MAKERS
AND ARTCRAFT LTD**

LOWER BRISTOL ROAD, BATH Tel: 7214-5 · LONDON SHOWROOMS, 1 GRAFTON ST. W.I. Tel: Regent 4671



Everything under Control...

In the words of the popular song—"It's not what you do: it's the way that you do it". What we do is make paints, but the way that we do it ensures that they are good paints. The delicate testing instruments in our Laboratory tell us that. But to make assurance doubly sure—to satisfy ourselves on the practical side as well—we take a sample of every batch of CERRUX Decorative Finish and have it brushed out by an experienced painter. In this way consistency of flow, drying time and ease of application is checked and double-checked before it reaches you—the ultimate user.

CERRUX

DECORATIVE PAINTS



CELLON
Aircraft
Finishes



CERRIC
Wood
Finishes



CERRUX
Marine
Paints



CERRUX
Coach
Paints



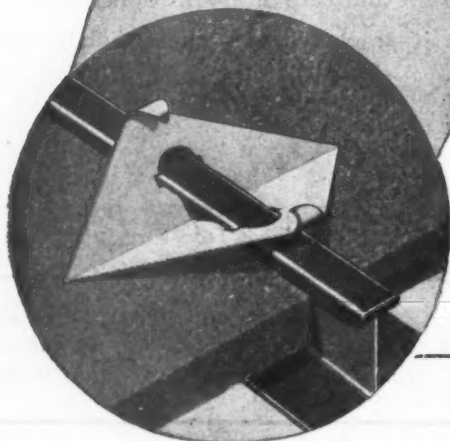
CERRIC
Industrial
Finishes

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

CVS-620

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 unobstrusive panel border. Trimming members (Tee noggings, Channels, Angles, etc.) are also available in alloy.

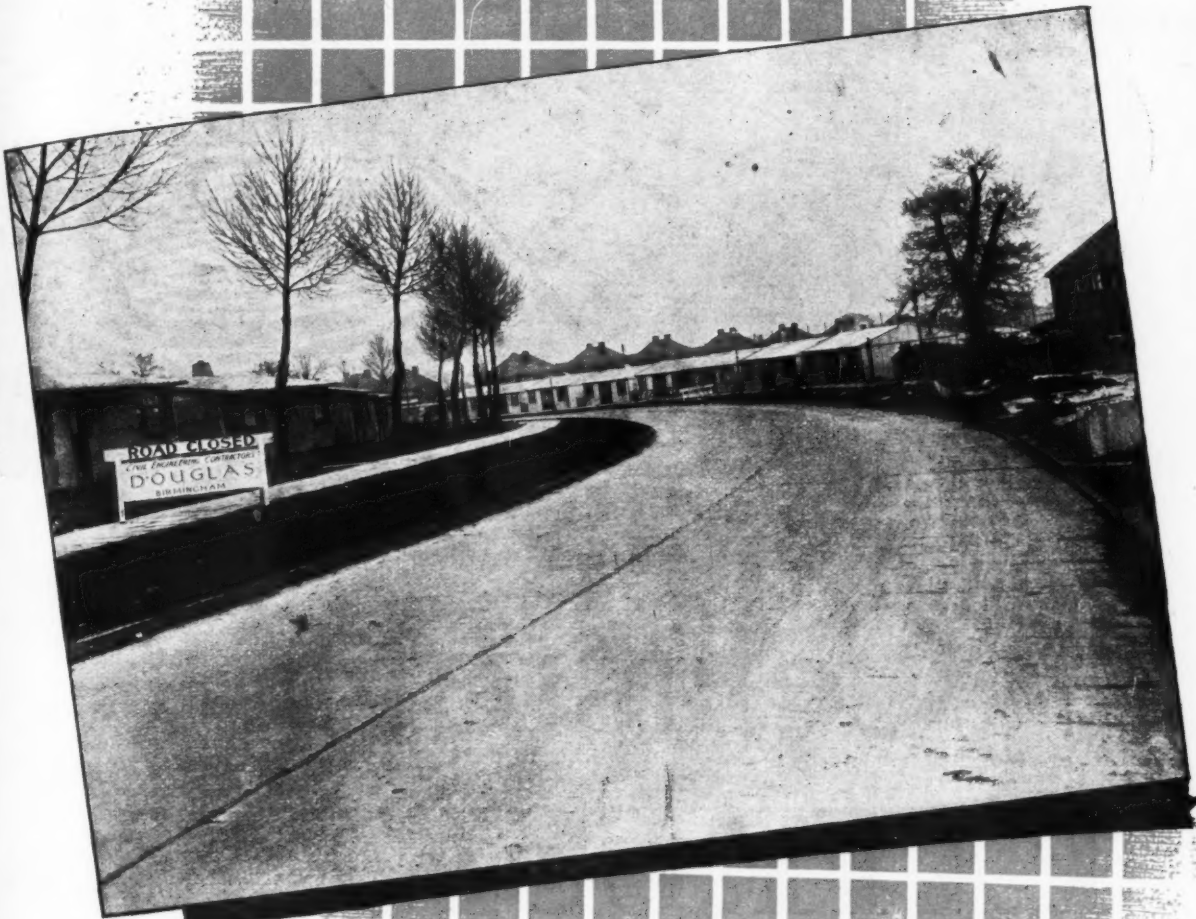


No permit is required and supplies are available for immediate delivery. Send us drawings or details of your insulation requirements.



SUNDEALA BOARD CO. LTD., ALDWYCH HOUSE, LONDON, W.C.2. Tel: CHAncery 8189

REINFORCED CONCRETE ROADS



CHEAPEST IN THE LONG RUN WITH -

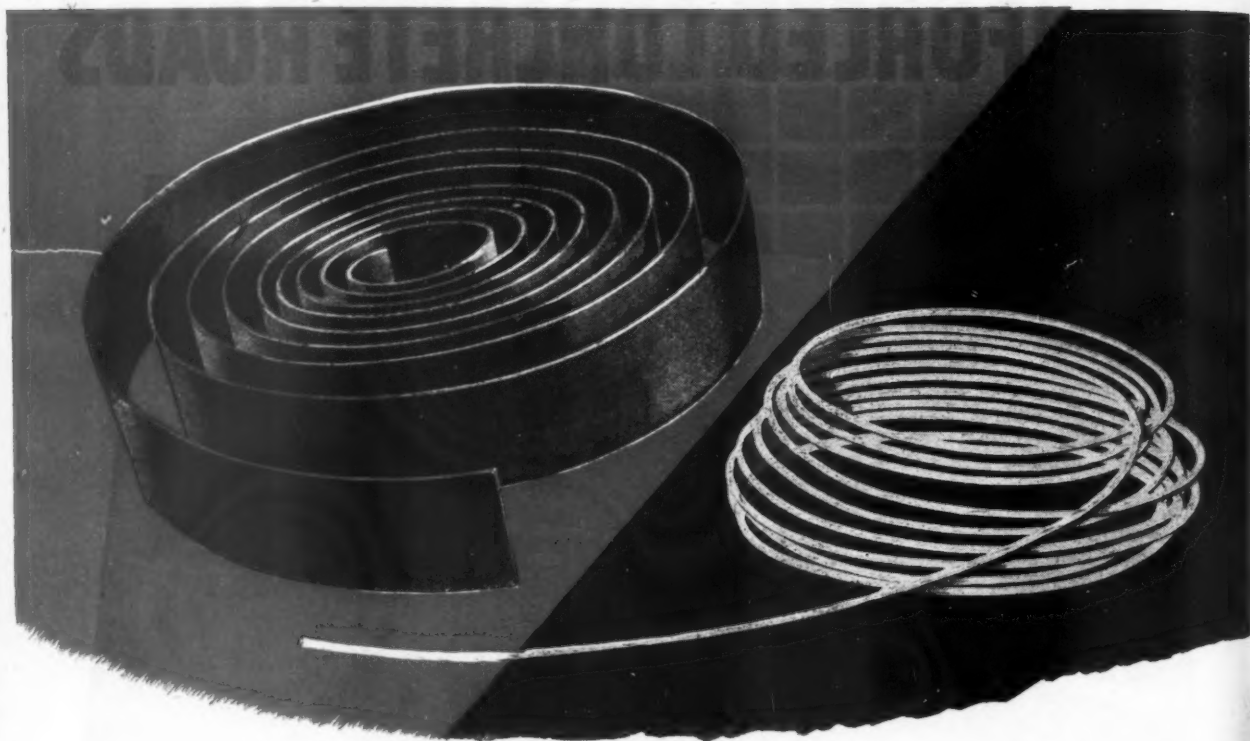
McCall's "Matobar" welded steel reinforcement was used in the laying of Queens Road, Yardley, Nr. Birmingham, the site shown in the photograph.

Engineers: H. J. Manzoni, C.B.E., M.Inst.C.E., City Engineer & Surveyor, Birmingham,
Contractor: Robert M. Douglas (Contractors) Ltd., Birmingham.

**REINFORCEMENT BY
M^cCALL'S**

McCALL & COMPANY (SHEFFIELD) LIMITED

TEMPLEBOROUGH · SHEFFIELD · AND AT LONDON



'Celastoid'

TRADE MARK
Cellulose Acetate

EXTRUSIONS

'CELASTOID' EXTRUSIONS solve problems in many industries. Available in rods, tubes and sections—their versatility enables the designer's vision to be translated into practical action. The two examples shown are supplied in reels or in hank form. The flexible strip section, in various widths, thicknesses and colours, is suitable for every type of automatic punching and blanking. The circular flexible section (.040 ins. dia. upwards) has many uses, including binding, decorative work etc.

'Celastoid' Extrusions include:—

TUBING: Diameters from $\frac{1}{4}$ " o.d. to 3" o.d., minimum wall thickness .030". Can be blown to irregular shapes by steam or air. An ideal covering for metal tubes or wooden dowels.

RODS: Diameters from $\frac{1}{8}$ " upwards.

SECTIONS: A variety of special sections made to order either flexible, as illustrated, or semi-rigid.

The services of our Laboratory of Applied Plastics are freely available for consultation and, where possible, for practical demonstrations of the application of plastics. Impartial advice will be given in all cases. All enquiries to:—

BRITISH CELANESE LIMITED

Plastics Division, Celanese House, Hanover Square, London, W.1

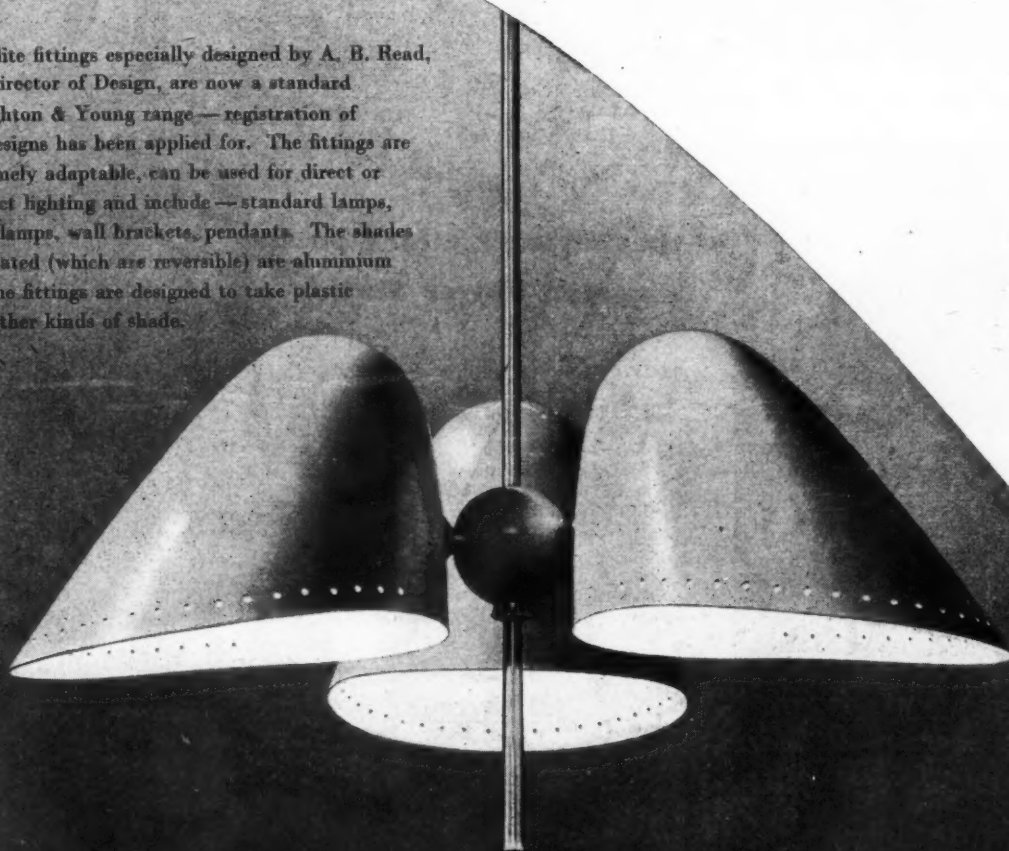
VERSALITE the new range of lighting

fittings designed by A. B. READ, R.D.I., A.R.C.A., F.S.I.A.

are now available as standard

Architects are invited to call at our
showrooms or write for details.

Versalite fittings especially designed by A. B. Read, our Director of Design, are now a standard Troughton & Young range — registration of the designs has been applied for. The fittings are extremely adaptable, can be used for direct or indirect lighting and include — standard lamps, table lamps, wall brackets, pendants. The shades illustrated (which are reversible) are aluminium but the fittings are designed to take plastic and other kinds of shade.

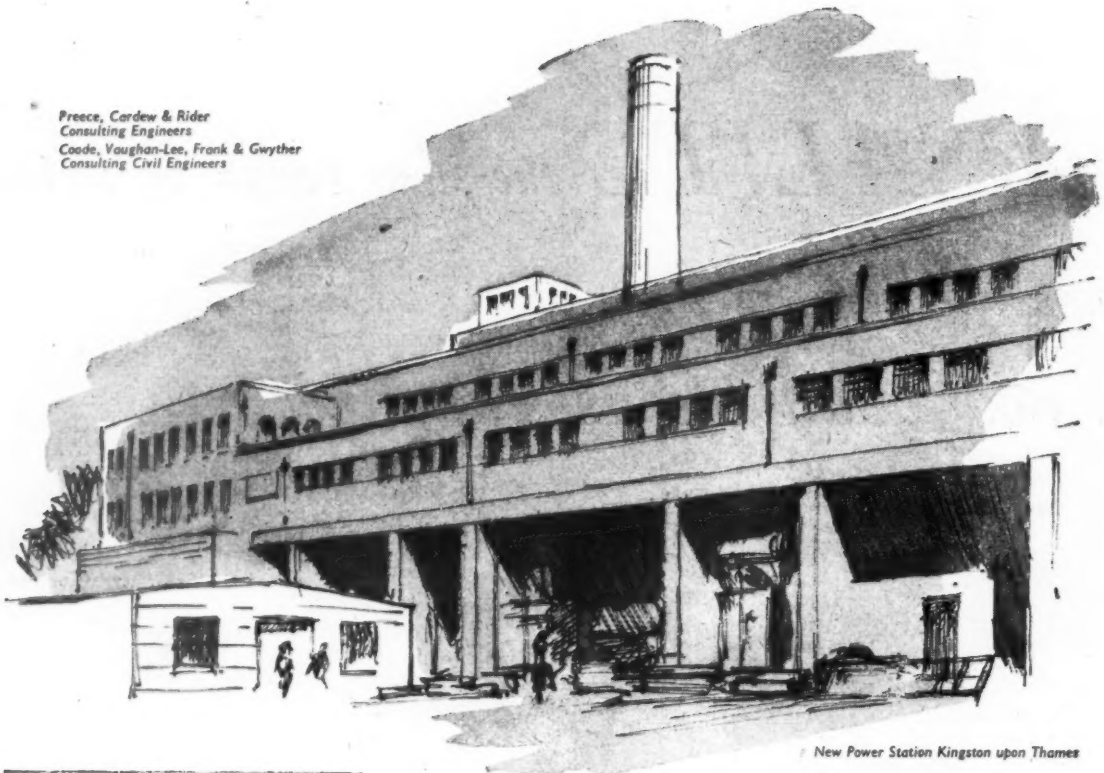


TROUGHTON & YOUNG (LIGHTING) LTD

THE LIGHTING CENTRE, 143 KNIGHTSBRIDGE, LONDON, S.W.1

TELEPHONE: KENSINGTON 7457 (10 LINES)

Preece, Cardew & Rider
Consulting Engineers
Coode, Vaughan-Lee, Frank & Gwyther
Consulting Civil Engineers



New Power Station Kingston upon Thames



the Siegwart effort on the Kingston Power Station

SIEGWART Precast Roofs are widely
used in Power Station construction.

Kingston Power Station
is another example of SIEGWART
Construction in the Turbine
and Boiler House Roofs
and to the Auxiliary
Buildings

SIEGWART

PRECAST FLOORS

SIEGWART FLOOR CO. LTD.
GABLE HOUSE, 40 HIGH STREET, RICKMANSWORTH, HERTS.
Telephone: Rickmansworth 2268
Branch Offices at Birmingham, Manchester and Glasgow.
Works at Croxley Green, Enderby near Leicester, and Paisley

Ref. SL/5/49

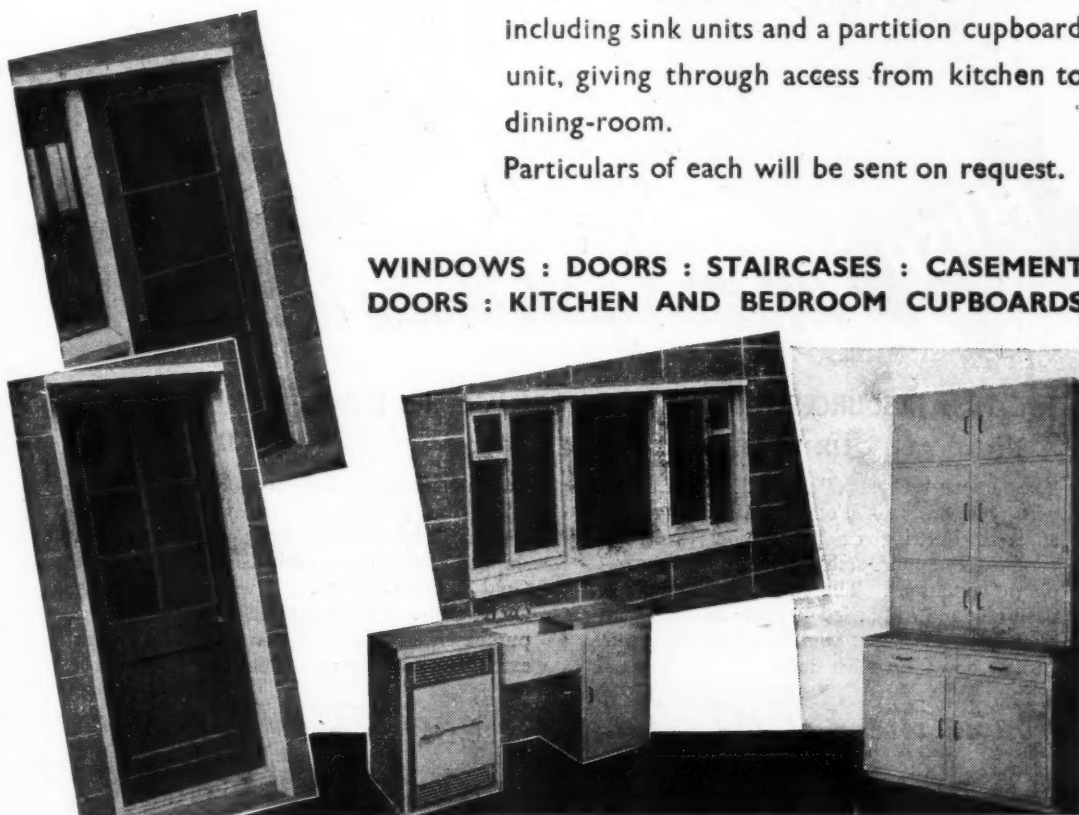


Joinery

The joinery for many of the new permanent houses has been designed and made by us. These contain several interesting features, including sink units and a partition cupboard unit, giving through access from kitchen to dining-room.

Particulars of each will be sent on request.

**WINDOWS : DOORS : STAIRCASES : CASEMENT
DOORS : KITCHEN AND BEDROOM CUPBOARDS**



AUSTIN-HALL GROUP OF COMPANIES

AUSTINS OF EAST HAM LTD.

GRAngewood 3444

LONDON E.6



**THE VAST RESOURCES OF THE HILLS ORGANISATION ENSURE QUALITY DOORS
... AND ALL OUR DOORS ARE GRADE 1**

The famous "Clymax" flush doors are made with plywood facings, offering a greater resistance to bursting or penetration by sharp corners. It is more stable in fluctuating atmospheric conditions. The core construction has been well and truly tried — made and designed by Hills, the people who have the complete "know how" on flush doors.

To maintain Grade 1 production of panel doors from Hills factories, Canadian door stock is augmented by selected prime quality hard wood shipped direct from Hills concessions in the Gold Coast Colony . . . which incidentally enable Hills to offer a price advantage to the purchaser. Details of standard designs for exterior or interior use on request.


Make the RIGHT choice for quality and price..

HILLS FLUSH AND PANEL DOORS



A CENTURY OF EXPERIENCE GOES INTO THE MAKING OF EVERY HILLS PRODUCT

Blockboard Factory	MANCHESTER
Joinery Factory	WEST HARTLEPOOL
Log Extraction, Sawmills, Blockboard Factory	TAKORADI, GOLD COAST COLONY
HEAD OFFICE: STOCKTON-ON-TEES	TELEPHONE 67141 (7 lines)



London Borough Specifies 'Plastex'

FLEETWOOD 'PLASTEX' Plastic Paint led the Borough Engineer and Surveyor of Bethnal Green to experiment with plastic paint covering on walls. The outcome of their experiment was reported in the *Municipal Journal*,

"The results have been very satisfactory. In addition to preventing condensation there will be an estimated saving over a period of years, as the plastic ('Plastex') paint lasts considerably longer than ordinary paint or distemper."

"In view of this report the Housing Committee have authorized that future decorations to walls of kitchens and bathrooms of the Council's Housing Estates should be carried out with plastic ('Plastex') paint."

LONG LIFE and the prevention of condensation are only two of the qualities that make 'Plastex' the outstanding plastic paint.

Its rock-like surface stands the hardest wear over a long period.

It may be applied *direct* to new plaster, cement, asbestos, wall-board and many other surfaces without the previous use of a primer.

It can be washed with soap and water.

It is very elastic; cracking due to the warping of timber is reduced to a minimum.

It is simple to texture (see illustrations) and is economical, one coat giving a pleasing finish.

Fleetwood 'Plastex' Plastic Paint is oilbound and ready for use in $\frac{1}{2}$ CWT. KEGS and 1 GL. CONTAINERS.

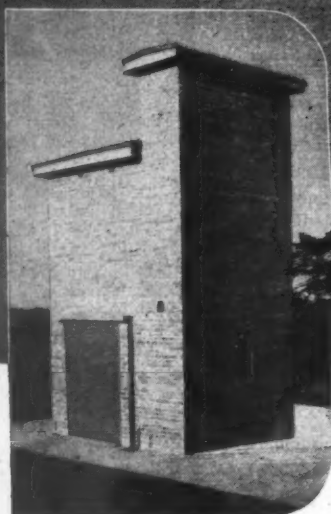
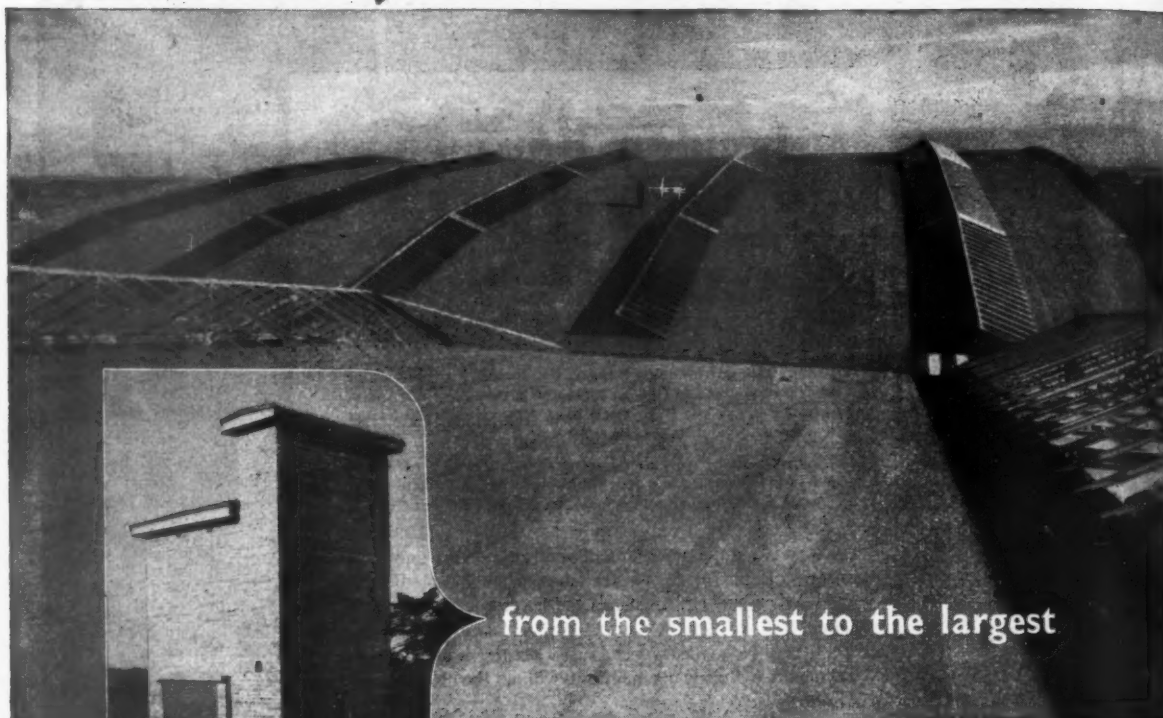
Fleetwood Architectural Service Department offers free help and advice to all Architects and Trade Users. A lavishly illustrated brochure may be obtained from leading Builders' Merchants and from Fleetwood Paints Ltd., at 2/6 a copy. It answers all questions dealing with 'Plastex'.

**LET FLEETWOOD PAINTS
PROTECT YOUR PROPERTY**

MANUFACTURERS: FLEETWOOD PAINTS LTD., PRINCE STREET,
DEPTFORD, LONDON, S.E.8. TIDEWAY 3801/2, 2141.

RUBEROID

A complete roofing service



R46

from the smallest to the largest

Above: The roof of the Brabazon Hangar, Bristol.
Area, 270,000 square feet of Ruberoid Insulated Steel Roof.

Photograph by permission of Williams & Williams Ltd.

Architect: Eric Ross, A.R.I.B.A. Consulting Engineers: Brian Colquhoun and Partners

Ruberoid Roofing gives protection to buildings of all designs and dimensions in every variety of climate the world over. Whether measured in square feet or acres, the quality is always of the standard that has been associated with Ruberoid since the earliest days of its manufacture, over 50 years ago.

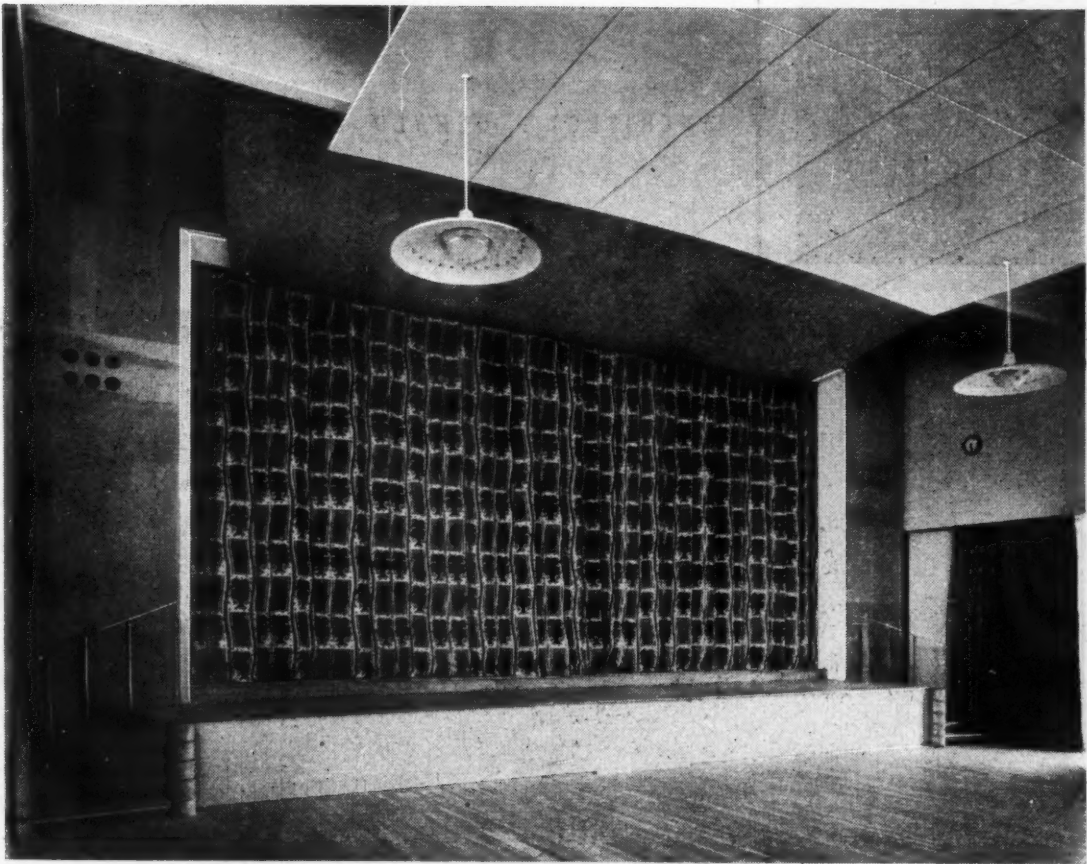
Ruberoid Contract Departments in London, Birmingham, Manchester, Leeds, Newcastle, Nottingham, Edinburgh, Glasgow and Belfast, estimate for supplying and fixing Ruberoid Roofing anywhere in the British Isles.

Architects, Engineers and Builders are invited to write for our Range of Technical Publications, including No. 326 entitled "Standard Specifications for Ruberoid Roofs."

RUBEROID ROOFING

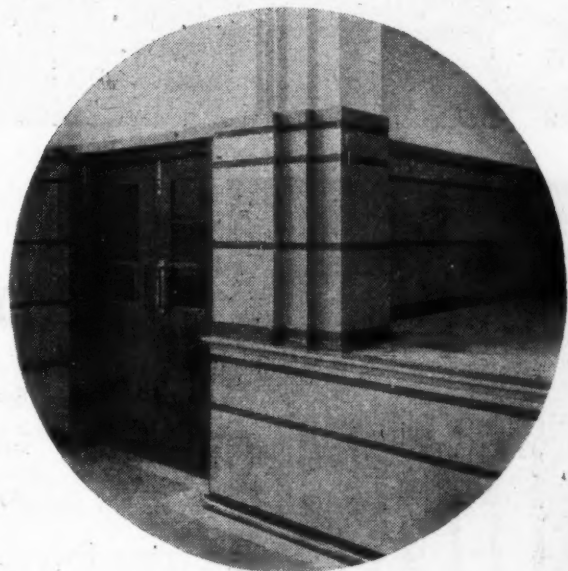


THE RUBEROID COMPANY LIMITED 1, COMMONWEALTH HOUSE, NEW OXFORD STREET, LONDON, W.C.1



SADDS for JOINERY to DETAIL

For the most part our works are busy with long runs of economical joinery for housing—doors, windows, staircases, kitchen units etc.—but we take every opportunity to supply the highest class of woodwork to special detail, for which Sadds have always had an excellent reputation among architects.



Top: STEVENAGE SCHOOL ASSEMBLY HALL

The acoustic flap is 30 feet long by 10 feet wide, and specially shaped to Architect's details, for sound control and direction to suit the building. The inner (movable) flap is 30 feet long by 3 feet wide similarly made.

Bottom: ASSEMBLY HALL, ENFIELD SCHOOL

JOHN SADD & SONS LTD. - MALDON - ESSEX

Telephone: MALDON 131

London Office: Aldwych House, W.C.2. :: Telephone: Chancery 7214

swedish
travel
bureau

ARCHITECT : GERALD LACOSTE, O.B.E., A.R.I.B.A.



POLLARDS

assembled and

fixed at Coventry Street, W. the joinery and metalwork constructed in Sweden. Swedish timbers form the motif of almost the entire scheme of decoration.

E. POLLARD & COMPANY LTD. HEAD OFFICE : 159,
ST. JOHN ST., LONDON, E.C.1. 'PHONE : CLERKENWELL 6701

SHOWROOMS: 299, OXFORD STREET, W.1. 'PHONE: MAYFAIR 6703

xxx

An
announcement by
**THE BRITISH
DOOR ASSOCIATION**

PANELLED AND GLAZED WOOD DOORS

In order to satisfy the demands of Local Authorities, Architects and Builders for panelled doors of a quality that can be guaranteed, the members of The British Door Association Limited are now manufacturing

GRADE 1 DOORS

These doors will have clear (knotless) framing and panels not inferior to B Quality Plywood, or at Seller's option for internal doors panels of two thicknesses of $\frac{1}{2}$ " Hardboard glued together, smooth faces outwards. Doors supplied to this Specification are guaranteed against defects arising through faulty material or workmanship notified within 12 months of the date of delivery.

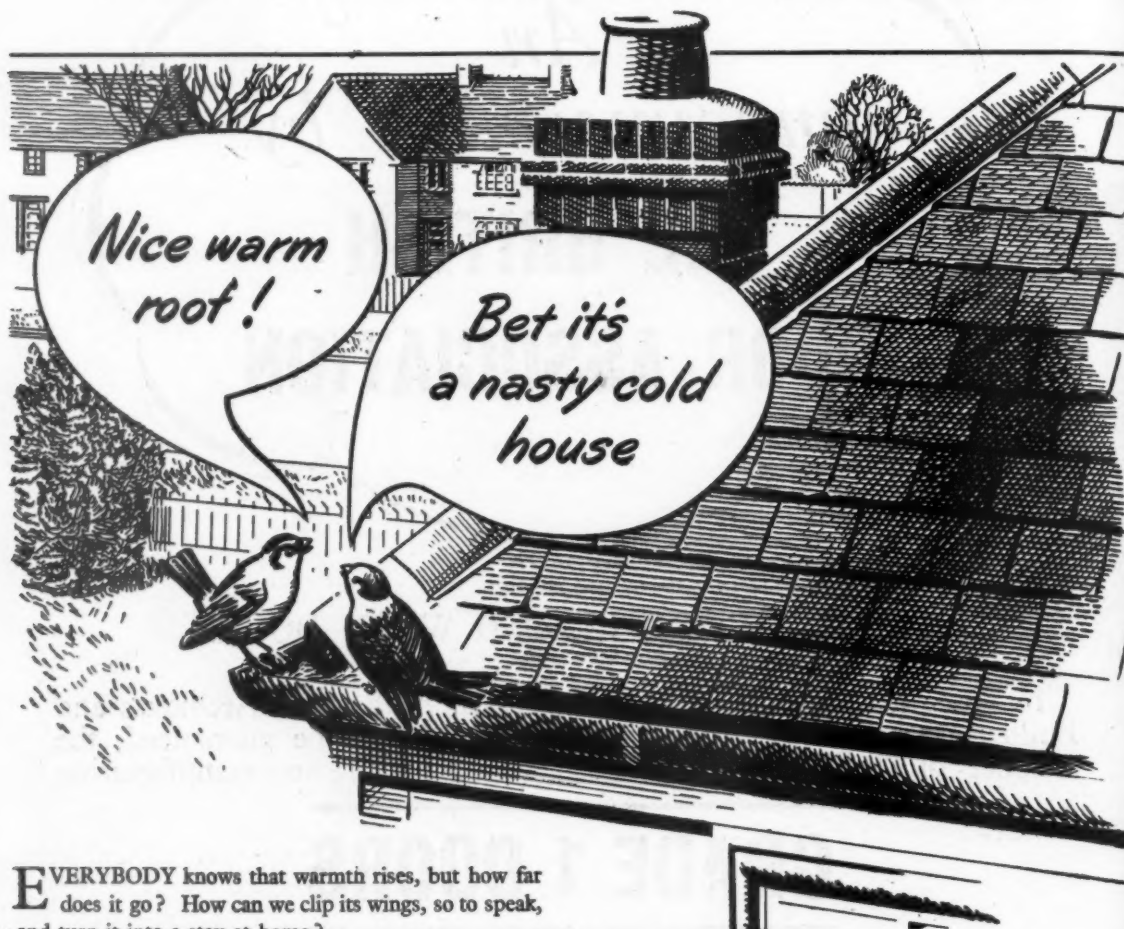
To ensure satisfaction specify—

"PANELLED DOORS B.D.A. GRADE 1"

These doors will be marketed through the usual trade channels, further particulars can be obtained from the Secretary.

THE BRITISH DOOR ASSOCIATION LIMITED
10 THE BOLTONS, LONDON, S.W.10

STEPS TO THERMAL EFFICIENCY



EVERYBODY knows that warmth rises, but how far does it go? How can we clip its wings, so to speak, and turn it into a stay-at-home?

That is largely decided by "U"—by the thermal transmittance of ceilings and of roofs. Good insulation keeps the heat at home, keeps the occupiers of a building comfortable, keeps their fuel consumption down. Thermal Efficiency starts at the top!

THE ROOF AND "U"

A plaster ceiling with a pitched roof of tiles and battens has a "U"-value of about 0.56, whereas the figure recommended in Codes of Practice and other authoritative publications is 0.20 or less.

This list shows how "U" varies for pitched roofs according to the constructional methods employed:

- | | |
|--|------|
| A Tiles on battens, plaster or plasterboard ceiling | 0.56 |
| B Tiles on battens on felt, plaster or plasterboard ceiling | 0.43 |
| C Tiles on battens on $\frac{1}{2}$ " insulating board, $\frac{1}{2}$ " insulating board ceiling | 0.19 |
| D As B, but with sheet of aluminium foil draped over joists | 0.19 |
| E As B, but with corrugated aluminium foil on plain sheet of foil laid between or over joists | 0.16 |

- | | |
|---|------|
| F As D, but with $\frac{1}{2}$ " insulating board ceiling | 0.16 |
| G As B, but with 1" loose fill or 1" quilt or blanket laid on top of ceiling between joists | 0.18 |
| H As B, but with 1" insulating blanket or quilt draped above joists | 0.15 |
| I As H, but with ceiling of $\frac{1}{2}$ " insulating board | 0.13 |
| J As B, but with $\frac{1}{2}$ " insulating board ceiling and $\frac{1}{2}$ " insulating quilt laid between joists. | 0.19 |
| K As J, but with the $\frac{1}{2}$ " quilt draped over joists to include an air space | 0.17 |
| L Tiles on boards and felt, ceiling of 1" wood wool slabs plastered | 0.20 |
| M Tiles on battens on 2" wood wool slabs, plaster ceiling | 0.19 |

Some of these methods can be used after houses have been built. Have you seen "it all depends on 'U' "? It can be obtained, price 3d., from H.M. Stationery Office (post free 4d.) or through any bookseller.

Remember that when the top floor ceiling is insulated it is most important to lag the cold water pipes and cistern in the roof space.

A TRADE MARK AS



GOOD AS A BOND

T. & W. Farniloe

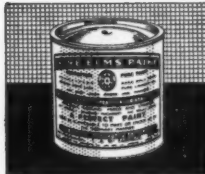
LIMITED

MAKERS OF

NINE ELMS

PURE PAINT PRODUCTS

These products are the first choice of those who have experienced the greater satisfaction of using only materials which are in the famous FARMILOE tradition of quality. The list below includes only a small selection from a range of materials which includes sanitary, plumbing, glazing and decorators' equipment of all kinds.



NINE ELMS WHITE LEAD PAINT AND COLOURS

In its original white form this famous paint is guaranteed to be made only from Genuine White Lead, Pure Linseed Oil, the best Liquid Driers and Thinners. With the addition of pigment, NINE ELMS PURE PAINT is also available in a wide range of colours.

FAROMAT A flat wall paint with a matt velvety finish. It has immense hiding and covering capacity, is easily applied, remains in perfect suspension and has an after-flow unprecedented with this type of paint. At present available in ten pastel shades and white.



FARNILOE'S HARD GLOSS PAINT

The original hard-wearing, weather resisting, hard-gloss preservative paint. It gives complete protection against weather and atmospheric conditions, and can be used for both interior and exterior work. Dries with an enamel-like gloss. Available in an increasingly wide range of beautiful colours.

NINE ELMS ALUMINIUM PAINT

An untarnishable paint of great covering capacity which is easy to apply and requires no undercoating. Being anticorrosive, it stands up particularly well to the rigours of marine weather. It has proved ideal for use on all exposed ironwork such as railings, lamp standards, etc.



CEILINGITE A ceiling distemper giving a solid white surface that cannot be obtained with ordinary whitewash. It requires only the addition of cold water to be ready for use. CEILINGITE is not washable and can easily be removed when necessary. Supplied blue, unblued, and standard deep cream.

NINE ELMS VIRGIN WHITE

A dense white flat undercoating for inside use. It has very high covering and hiding power and can be brushed easily on large flats. It may be used as undercoating for enamel, oil gloss paint, or as a base for scumble. May be tinted as required.



NINE ELMS OIL-BOUND WATER PAINT

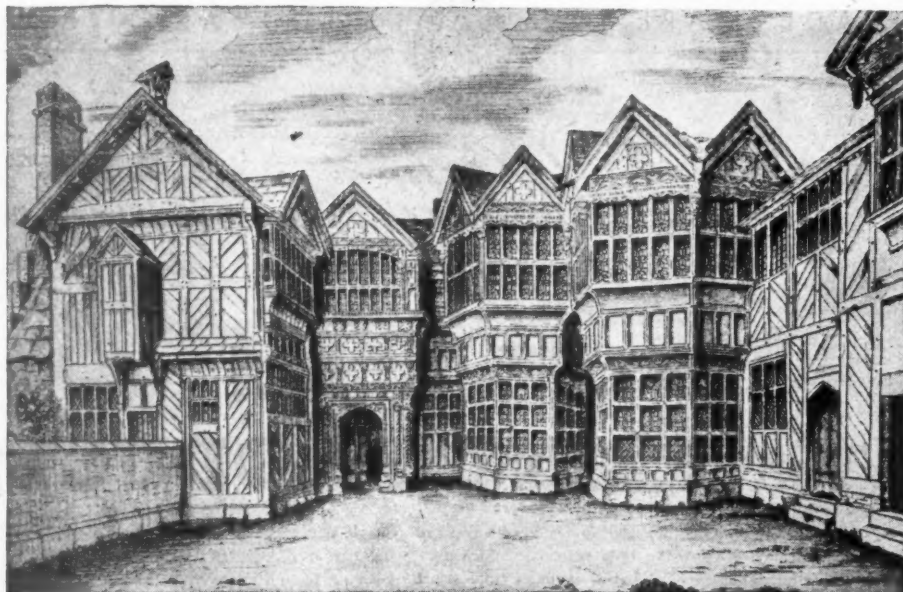
A washable distemper with an established reputation. Being in paste form it is easily handled and only requires thinning with water. For use on Plaster, Stone, Wood, or Paper. Use Petrifying Liquid instead of water to render work more waterproof. In white and ten delightful colours.

NINE ELMS IMPLEMENT PAINT

An extremely durable, hard-drying paint of the highest quality, specially prepared for use on Agricultural Implements and Industrial Machinery. It can be brushed on or sprayed and produces a very high gloss. Available in seven colours: Canary, Orange, Red, Blue, Green, Grey and Black.



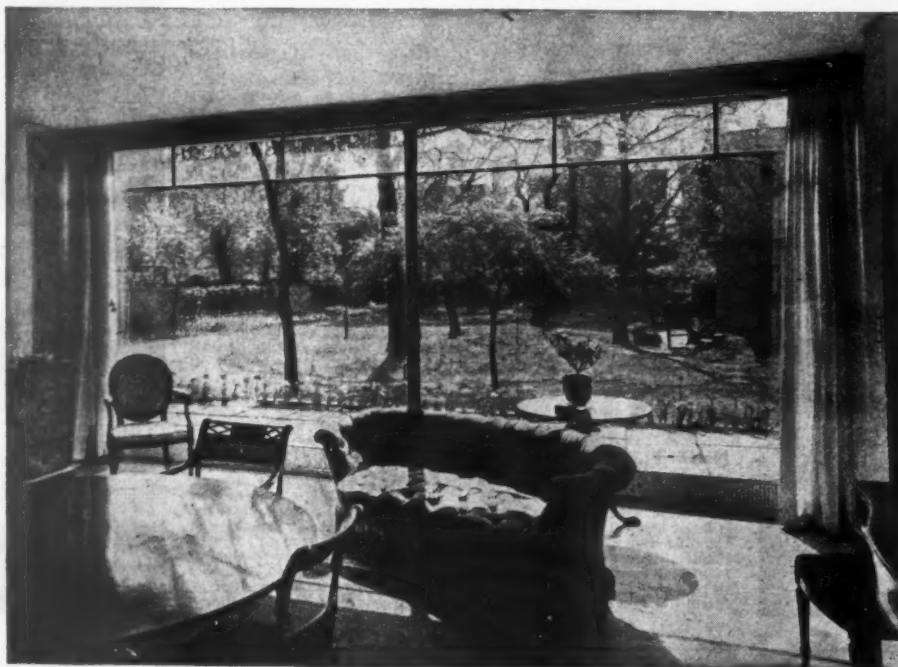
T. & W. FARNILOE LIMITED, ROCHESTER ROW, WESTMINSTER, LONDON, S.W.1



*Little Moreton
Hall, Cheshire.
From Lysons Magna
Britannia, Vol. II*

THE BATTLE FOR DAYLIGHT

won, after three and a half centuries, by the large modern pane of
POLISHED PLATE GLASS



*Architect:
E. Maxwell Fry,
B.Arch.,
F.R.I.B.A.*

PILKINGTON BROTHERS LIMITED • ST. HELENS • LANCS.



Architects and Architectural Students are invited to consult our Technical Sales and Service Department at St. Helens, or our West End Office at Selwyn House, regarding the properties and uses of glass. Head Office and Works: St. Helens, Lancashire. Tel.: St. Helens 4001. West End Office and Showrooms: Selwyn House, Cleveland Row, St. James's, S.W.1. Tel.: Whitehall 5672-5676

Standardise on Hobart



If you standardise on Hobart you are not only assured of the finest possible equipment but you have only one manufacturer to look to for its upkeep and Service. For over a half a century the name HOBART has stood for the Highest Quality in a complete line of machines for Better Kitchen Methods. Hobart range includes :—

GENERAL PURPOSE MIXERS, POTATO PEELERS, DISH AND GLASS WASHERS, MINCERS, COMBINATION MINCERS AND BOWL CUTTERS, COFFEE GRINDERS, ELECTRIC BEAN SLICERS.

Plus numerous valuable attachments—all in a range of sizes to suit any establishment.

THE HOBART MANUFACTURING COMPANY LTD.

HOBART CORNER, NEW SOUTHGATE, N.11

Telephone: ENTERprise 1212



Branches and Service Depots at:—

BELFAST • BIRMINGHAM • BRISTOL • DUBLIN • GLASGOW • LEEDS • MANCHESTER • NEWCASTLE-ON-TYNE and NOTTINGHAM

MORE DAYLIGHT

through corrugated 'PERSPEX'

means greater output

Supplied to match corrugated metal and asbestos sheeting, corrugated 'Perspex' has exceptionally high light transmission, is tough, durable and easy to fix.

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

IMPERIAL CHEMICAL INDUSTRIES LIMITED





E. H. BROOKE BOULTON, M.A. Cambridge. Awarded Diploma in Forestry with distinction, specializing in timber utilization and diseases of wood—the only person ever to hold this distinction. After 14 years as The University Lecturer in Forestry, joined the Timber Development Association, resigning his appointment there as Technical Director last year to devote himself to the eradication of DRY ROT and other timber diseases and the destruction of WORMWOOD. His organization, PESTCURE LTD., undertakes the treatment of large and small affected buildings in any part of the country or the world, and his personal services are also available as a consultant or expert witness.

These exclusive area distributors for Pestcure Dry Rot Solution, Wormwood Solution and Termite Solution have been appointed:

ALVIN MORRIS & CO. LTD., Black Bull Street, Sawmills, Leeds, 10
 BRYCE WHITE & CO. LTD., North Common, Warmley, Bristol
 DEVON TRADING CO. LTD., Queen Street, Station Yard, Exeter
 JAMES B. FRASER & CO. LTD., 108 North Wallace Street, Glasgow, C.4
 IRVIN & SELLERS LTD., Forge Street, Derby Road, Liverpool, 20
 MCGREGOR & BALFOUR LTD., North Tay Works, Loons Road, Dundee
 MEGGITT & JONES LTD., 28 St. Mary Street, Cardiff
 JOHN MOON & SON LTD., St. Mary's Wharf, High Street, Guildford
 TRAVIS & ARNOLD LTD., Mill Road Wharf, Cambridge and Twyford Road, Eastleigh, Hants.
 F. H. THOMPSON & SONS LTD., Skinnerburn Road, Newcastle-on-Tyne, 4
 WEBSTER HOLT & CO. LTD., Moss Saw Mills, Ashton-under-Lyne, Lancs.
 J. P. CORRY & CO. LTD., Princes Dock, Belfast, Northern Ireland

Pestcure

LIMITED

6 KINGLY STREET, REGENT STREET,
 LONDON, W.1

Telephones: REGent 0704 and MAYfair 3397

Timber

PRESERVATION



Specify - **'Tanalised' Timber**

"Tanalised" Pressure Impregnated Timber has been specified for housing and constructional work, railway sleepers, pit props, cooling towers, etc.—in fact wherever protection is required against decay.

"Tanalised" Timber resists Fungi, termites, and all known wood-destroying insects, and can be treated in a few hours at any of the plants listed below.

IMPREGNATION PLANTS:—

BIRMINGHAM: Hickson's Timber Impregnation Co. (G.B.) Ltd., Cinder Bank, Netherton, nr. Dudley, Worcs.

BOSTON (Lincs.): Calders Limited, The Pole Yard and Creosoting Works, London Road.

CASTLEFORD: Hickson's Timber Impregnation Co. (G.B.) Ltd., Ings Lane.

HULL: Hickson's Timber Impregnation Co. (G.B.) Ltd., De La Pole Street.

KING'S LYNN: J. T. Stanton & Co. Ltd., St. Ann's Fort.

LONDON: Burt, Boulton & Haywood, Ltd., Brettenham House, Lancaster Place, Strand, W.C.2.

LONDON: Calders, Ltd., Eros House, 29-31, Regent Street, S.W.1.


MANCHESTER: J. Gerrard & Sons Ltd., Swinton.

WIDNES: Wm. Evans & Co. (Manchester) Ltd., Ditton Road.

WEST HARTLEPOOL: Robert Lauder & Co. Ltd.

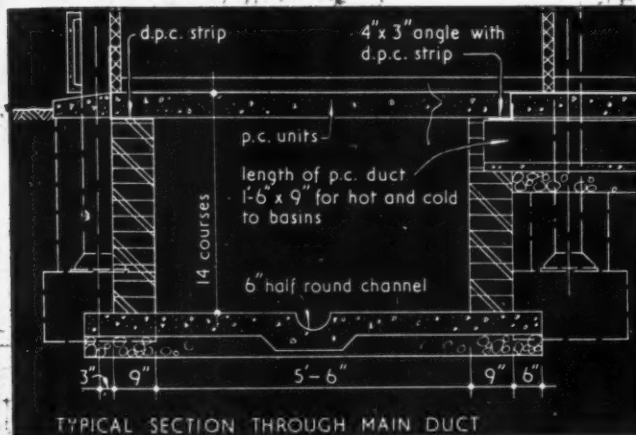
WASHINGTON (CO. DURHAM): Calders, Ltd., Sawmills and Creosoting Works.

HICKSON'S TIMBER IMPREGNATION CO. (G.B.) LTD.

CASTLEFORD

YORKSHIRE

LONDON OFFICE: 36, Victoria Street, S.W.1. Telephone: ABBey 1477/8.

MAIN DISTRIBUTORS IN SCOTLAND:
Brownlee & Co. Ltd., City Sawmills, Port Dundas, Glasgow, C.A.



TYPICAL SECTION THROUGH MAIN DUCT

FOR THIS JOB—PHORPRES COMMONS

In the new Stevenage School a single duct is used for all supply and waste services, thus reducing to a minimum the disturbance which need be caused in order to rectify any breakdowns or make additions. The retaining walls of the duct, like so much other underground work demanding high performance brickwork, are carried out in PHORPRES Commons.

Architects: F. R. S. Yorke, F.R.I.B.A., E. Rosenberg,
C. S. Mardall, A.R.I.B.A., 35 Welbeck Street,
Contractors: Messrs. Gilbert Ash Ltd., 2 Stanhope Gate, W



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

Work being carried out for the Education Committee of the Grimsby County Borough Council under the supervision of Mr. J. V. Oldfield, M.Inst.C.E., Registered Architect, Borough Engineer and Surveyor.

A SCHOOL IN GRIMSBY



OR BRIDGES FOR CHINA



These illustrations are typical of the diverse projects which we have undertaken. We are specialists in the Design, Fabrication and erection of Structural Steelwork.



E S T A B L I S H E D 1 8 5 0

James Austin & Sons Dewsbury Ltd

THORNHILL IRON AND STEEL WORKS

IRON AND STEEL
STOCKHOLDERS

Dewsbury

STRUCTURAL
ENGINEERS

Telephone: 1750 (5 lines).
Telegrams: Austins, Dewsbury



OUR CENTENARY

is, perhaps, the one occasion upon which sincere reference may be made in public to the friendship shown to us by trade friends and the team work of our nation wide organisation.

The steady, certain progress that marks the rise of Anderson's from modest beginnings in Belfast one hundred years ago could never have been accomplished without the co-operation that has existed between the company, its distributors and all sections of the Building and Allied Industries.

RED HAND ROOFING FELTS
LININGS AND INSULATING FELTS
DAMP COURSES
BUILT UP ROOFING SYSTEMS
METAL ROOF DECKS
PAINTS AND COMPOSITION FOR
INDUSTRIAL BUILDINGS AND SHIPS

D. ANDERSON & SON LIMITED


Stretford—Manchester

ROACH ROAD · OLD FORD · LONDON, E.3.

and at : Belfast, Birmingham, Glasgow, Leeds, Nottingham.

OPERATING COSTS with the *Charlton* 'TWIN' TYPE DUAL-PURPOSE ELECTRIC WATER HEATER

"TWIN"
INFORMATION
SERIES
No. 3



Period in Days	244	224	204	199	204
Water Used (gallons)	3404	4587	9476	—	3475
Units Consumed	1220	1632	2115	1609	1032
Unit Charge	3d.	3d.	3d.	3d.	3d.
Average Gallons used per day	13.95	20.47	46.45	—	17.03
Average Units used per day	5.0	7.29	10.37	8.09	5.06
Average Cost per day	3.75d.	5.47d.	5.2d.	4.04d.	2.53d.
Cost per Gallon	0.27d.	0.27d.	0.11d.	—	0.15d.
Gallons per Penny	3.7	3.7	9.1	—	—

* Water meter not installed in Household *

... obtained by an INDEPENDENT AUTHORITY



"We need lots
of hot water."

Obtained independently by one of the largest housing authorities in the Country, these figures prove the efficiency of the design of the *Charlton* 'Twin.' In five representative households a complete hot water service was enjoyed without any labour or coal-carrying, without dirt or fumes, and at a minimum installation charge, for a running cost between 1/6 and 3/- per week. The figures are given in detail in Publication HD20—may we send you a copy?



BRITISH NATIONAL ELECTRICS LTD.
THE DOMESTIC APPLIANCES SECTION OF
JOHNSON & PHILLIPS LTD.
NEWARTHILL · MOTHERWELL · SCOTLAND.

FROM MAYFAIR



Calder House, London, W.I. Decorated externally with Cementone No. 7. Contractors: F. W. Barnard Ltd., S.W.I.

TO

MELBOURNE



Military Hospital, Heidelberg, Melbourne, Victoria. Cementone No. 1 Colours used in Renderings, Floors, etc.

In the Arctic Circle or the Tropics, in Europe or in Asia, in North America or South America—you will find a CEMENTONE Job.

The result obtained with Cementone decorative and protective products in these varying climatic conditions is your safety margin and provides proof that whether it is internal or external work

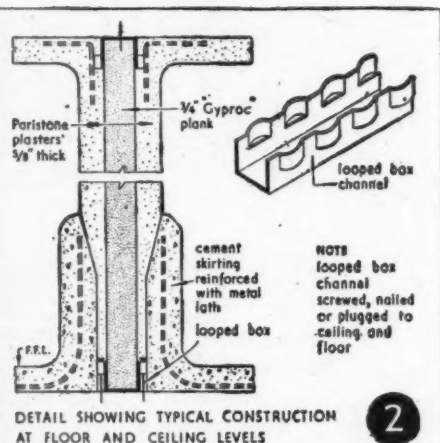
YOU CAN DEPEND ON

Cementone

JOSEPH FREEMAN SONS & CO. LTD., CEMENTONE WORKS, LONDON, S.W.18.

BAT. 2432 (5 lines)

The "Gyproc" 2-inch solid partition combines low cost, phenomenal strength *and* high fire resistance



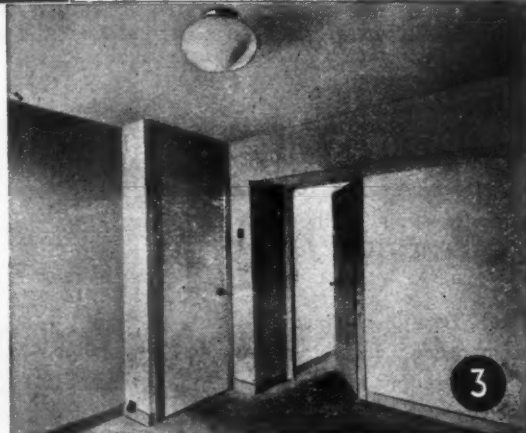
The "GYPROC" 2-inch solid partition consists of 3/4" "GYPROC" plank faced both sides with PARISTONE Plaster, making a total thickness of 2-inches. It is a low cost system because the large "GYPROC" planks are low priced themselves, and because they reduce the time required for erection compared with smaller units.

The strength of the finished partition is due to the fact that it is solid gypsum throughout and the plaster applied in-situ acts as a stressed skin on each side of the "GYPROC" planks.

The high fire resistance results from the solid masonry construction coupled with the natural "sprinkler" action which gypsum has under fire conditions. Tested in accordance with B.S. 476 by the B.R.S., the fire rating was Grade D—that is, one hour fire resistance.

Other advantages of this partition are: adaptability, freedom from cracking, economy of floor space, average weight of only 14 lb. per square foot, Thermal Transmittance (U) 0.43, Sound Insulation (N.P.L.) 34 db.

Further particulars of this and other "GYPROC" products or systems will gladly be supplied.



The illustrations show:

- 1 Ceiling channels and floor grounds laid out to the line of the partition.
- 2 Typical fixing at ceiling and floor.
- 3 A view of a finished partition.

GYPROC PRODUCTS LIMITED

HEAD OFFICE: Westfield, Upper Singlewell Road, Gravesend, Kent.
Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend.

GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.1.
Telephone: Govan 2141-3. Telegrams: Gyproc, Glasgow.

LONDON OFFICE: Morris House, 1-5 Jermyn Street, London, S.W.1.
Telephone: Whitehall 9821-5.

Makers of "GYPROC" Plasterboard,
"GYPKLITH" Light-weight Building Slabs,
"GYPSTELE" Partitions and Ceilings
"FLAXSTELE" and "ACOUSTELE" Ceilings,
"GYPROC" 2-Inch Solid Partitions.



SOME sort of lock fastening has been required and made since the days when doors first came to be used, so it may be said that the trade has developed in an evolutionary manner over the centuries.

The lock we now illustrate has been made for 2,000 years in this form and it embodies the principles of the modern **UNION** cylinder lock. It is of wood embellished with bone inlay; its "case" is 11½" high and 4" wide. The key is bone, 6" long, and in operation lifts tumblers in the lock to a height when they will clear the bolt which can then be withdrawn.

The lock was bought in Zanzibar in 1935 by a Director of the Company.

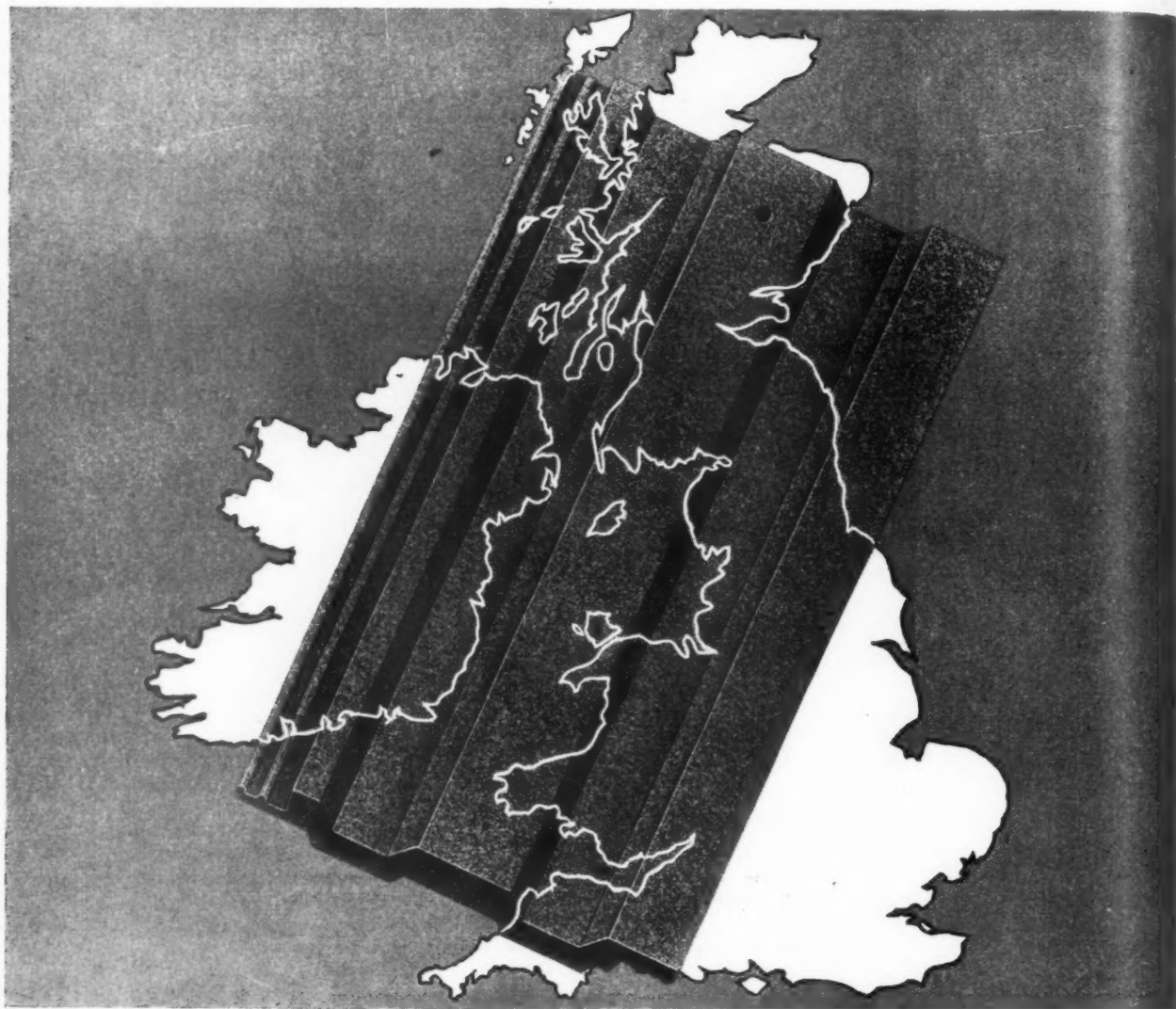
UNION locks are modern in design, and are produced in an up-to-date factory employing nearly 1,000 people.

Sold only through ironmongers and builders' hardware merchants.

Josiah Parkes & Sons Ltd.
 Union Works - Willenhall
 England

ESTABLISHED 1840

REDLAND . . . all over Britain



The name Redland represents a nation-wide tile manufacturing organisation with works all over the country. This means something more than high speed tile production by modern methods; it means the pooling of the accumulated fruits of research, skill and long experience. Redland tiles conform

to all the acknowledged standards of accuracy, endurance and economy and also please the eye of those who design and those who live in the homes of Britain.

- REDLAND TILES ARE SPECIFIED AND USED BY LOCAL AUTHORITIES THROUGHOUT GREAT BRITAIN



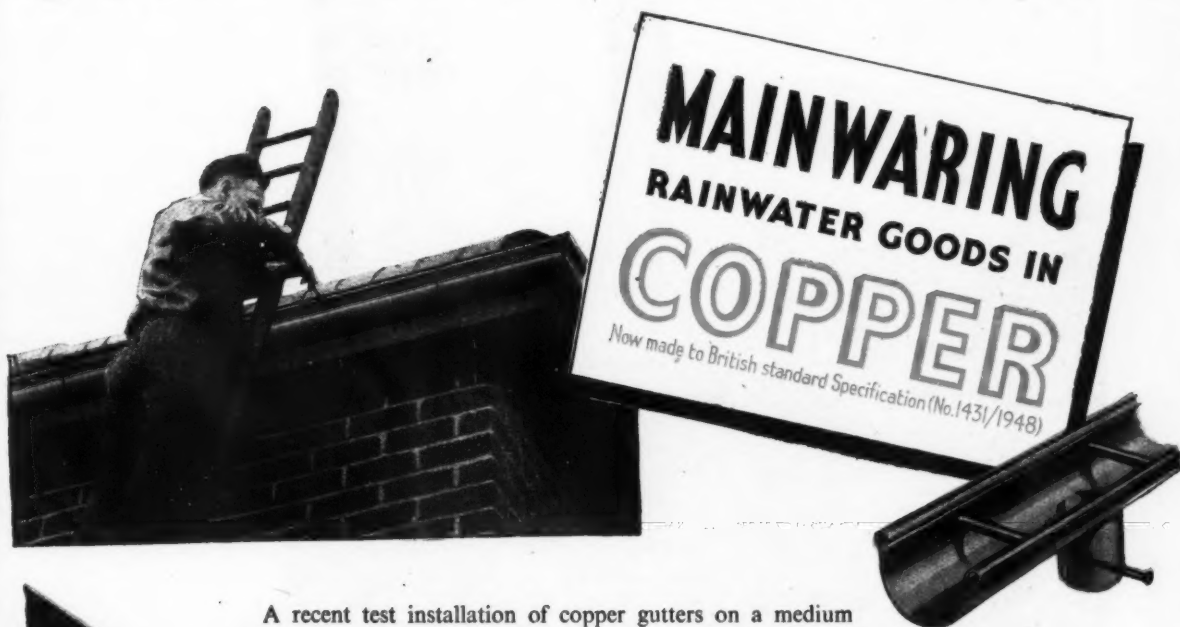
See our Exhibit at
the Building Centre



Selling Organisation for Redland Tiles:—
REDHILL TILE CO., LTD.
MOORHOUSE, NR. WESTERHAM, KENT

Telephone: Limpsfield Chart 3206/7

50% saving in erection costs proved by actual "installation test" with...



A recent test installation of copper gutters on a medium sized detached house proved that they could be erected in half the normal time with the resultant saving in man hours and labour costs. The main reason for this saving is lightness in weight which enables three or four 6 ft. lengths to be prefabricated on the ground and erected in one simple operation. Copper being a malleable and ductile material, saves a considerable amount of time in cutting and preparing the required lengths and jointing is a simple soft soldering operation.

Supporting brackets are not necessary, as during manufacture the gutters are fitted with cross tubes which allow brass screws to be inserted through the gutter and into the fascia board—thus strengthening both the fixture and the gutter.

The photographs on the left show—

(Above) A complete run, the full length of the house, which was erected in one piece. The fall was then adjusted in one simple operation.

(Below) A complete bay section which was prefabricated on the ground and erected complete.



NOW MANUFACTURED BY PRECISION METHODS — Enquiries to:

HENRY MAINWARING (COPPERSMITHS) LTD.

ESTABLISHED IN 1845

CHARLES ST., OXFORD ROAD, MANCHESTER

TELEPHONE: ARDWICK 4049

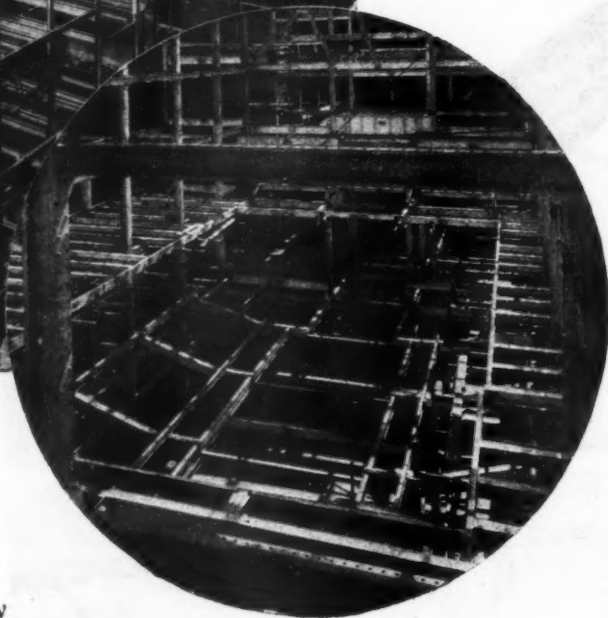


Structural steel in course of erection,
for the House of Commons rebuilding.
For the Ministry of Works.

Oscar Faber, O.B.E., D.C.L.(Hon.), D.Sc., Consulting Engineer.

Sir Giles Gilbert Scott, R.A., Architect.

John Mowlem & Co. Ltd., Main Contractors.



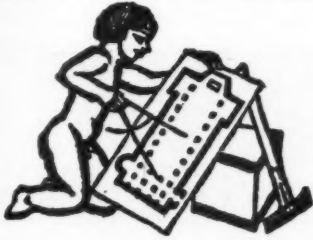
Structural steelwork by

**REDPATH
BROWN & Co Ltd**



EDINBURGH, GLASGOW, MANCHESTER, BELFAST,
BIRMINGHAM, BRIGHTON, BRISTOL, GLOUCESTER, HULL,
LEEDS, LIVERPOOL, NEWCASTLE, SHEFFIELD, SOUTHAMPTON
LONDON OFFICE: 26a, ALBEMARLE STREET, W.1

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 17s. 6d. each; carriage 1s. extra.



DIARY FOR 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.

BRADFORD. *Design Week organized by the Council of Industrial Design.* Details to be announced locally. SEPT. 12-17

GLASGOW. *Electrical Appliances Exhibition.* (Permanent.) Electrical Section, Scottish Building Centre, 425 and 427, Sauchiehall Street, Glasgow, C.2.

Scottish Industries Exhibition. Kelvin Hall. (Sponsor, the Scottish Council.) 10 a.m. to 10 p.m. daily, except Sundays. UNTIL SEPTEMBER 17

LONDON. *Background to Design Exhibition.* (Sponsor, CID.) Rayon Design Centre, 1, Upper Grosvenor Street, W.1. Weekdays, except Saturday, 10 a.m. to 4 p.m. Closing date not announced.

Engineering and Marine Exhibition. Olympia, Monday to Saturday, 11 a.m. to 9 p.m. UNTIL SEPT. 10

Dry Rot Exhibition. Building Centre, 9, Conduit Street, W.C.1. (Sponsor, DSIR.) FROM SEPT. 12

TUNBRIDGE WELLS. *Building Week.* (Sponsor, MOW.) SEPT. 19-24

Buildings Illustrated

Secondary Modern School, Stevenage, Hertfordshire. (Pages 250-262). Architects: F. R. S. Yorke, E. Rosenberg and C. S. Mardall, assisted by T. R. Evans, C. Kitchen, R. R. Tomalin and Miss P. Whiting. County Architect: C. H. Aslin. General Contractor: Gilbert Ash, Ltd. Quantity Surveyor: Davis, Belfield and Everest. Structural Engineer: O. Marcel. Heating Consultant: Oscar Faber and J. R. Kell. Electrical Consultant: A. H. Barker & Partners. Drainage Consultant: Daniel Longden. Bronze Sculpture Group designed by Henry Moore. Mural in the entrance hall by Kenneth Rowntree. Sub-contractors: dampcoursers, William Briggs, Ltd.; reinforced concrete, Square Grip reinforcement, Truscan floor slabs, Hills roof units; bricks, external facings, East Acton stocks; internal facings, Uxbridge Flint Lime, Commons, Flettons; precast wall units, slabs, and light constructional steel frame, Hills (West Bromwich), Ltd.; special ceilings, Sundeala, patent suspension, Secolith, Uni Seco; steel partitions, windows and doors, Williams & Williams, Ltd.; domelights, Ide's and Pilkingtons; glass bricks, James Clark & Eaton; roof lights, Lenscrete; oak strip flooring, Hollis Bros.; patent flooring, Gran-

wood composition Cork tiles by Armstrong's; concrete tiles by Moordon; terrazzo flooring by Mosaic & Terrazzo, Ltd.; central heating, G. N. Haden & Sons, Ltd.; electric wiring, Etna Lighting & Heating, using Pyrotex cables; electric light fixtures, Troughton & Young, Ltd., Benjamin Electric, Ltd., and F. H. Pride, Ltd.; ventilation equipment, G. N. Haden & Sons, Ltd.; plumbing, R. J. Audrey, Ltd.; sanitary fittings, Stitsons Sanitary Fittings, Ltd.; stair treads, Mosaic & Terrazzo, Ltd.; door fittings and furniture, Remios, Ltd., Dryad, Ltd., Gibbons, Ltd.; window gear, Arens Controls, Ltd.; radio, Audix Sound Equipment, Ltd.; hardwood internal doors, Multigon by Joseph Sandall, Ltd.; rolling shutters, W. G. Parker & Co., Ltd.; duct and M.H. covers, Broad & Co., Ltd.; metal hand railing, Clark, Hunt & Co., Ltd.; sunblinds, Avery Blinds & Co., Ltd.; internal and external fibrous plaster, Dejonges; metalwork, Clark, Hunt & Co., Ltd.; joinery, Educational Supply Association, P. H. Barker, Ltd., John Sadd & Co., Ltd.; acoustic tiles, Acousti-Celotex by Horace W. Cullum & Co., Ltd.; tiling, Carter & Co., London, Ltd.; textiles, Gerald Holton; wallpapers, A. Sandersons & Sons; wall fabric, Morton Sundour; paint, Screetons, I.C.I., Thos. Parsons & Sons, Ltd.; furniture, Harris Lebus, Educational Supply Association, Geo. M. Hammer & Co., Ltd.; tree surgery, Chiltern Tree Surgeons; shrubs and trees, Digswell and Chiltern Tree Surgeons; cloakroom fittings, Clark, Hunt & Co., Ltd.; curtain track, Thos. French & Son, Ltd.; clocks, Gents of Leicester.

COMPETITIONS

Competition for Design of Strip Carpet. IAAS competition open to architects and architectural students in the United Kingdom and the Commonwealth. Divided into three sections: hotels, cinemas and theatres and ships. In each section a first prize of 75 guineas and a second prize of 25 guineas will be awarded. Closing date, October 31, 1949. Assessors, Kenneth J. Lindy, E. C. Leach, and Hurley Robinson. Technical Advisers, John Anderson and J. P. Glass. Details from the General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

Design of Community Centre. The Incorporated Association of Architects and Surveyors. Two prizes, £150 and £75, for Urban Design. Two prizes, £100 and £50, for Rural Design. Open to all architect members of the IAAS, and to any architect, whether principal or assistant, in the United Kingdom, Northern Ireland and Eire. Closing date, February 1, 1950. Applications to General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

NEWS

THURSDAY,
No. 2848

September 8, 1949
Vol. 110

News	241
Merulius Lacrymans	242
This Week's Leading Article	243
Astragal's Notes and Topics	244
Letters	245
An Exhibition of Dry Rot	246
An American Steel House	247
Societies and Institutions	248
School at Stevenage	250
Information Sheets:	

14.N7 Doors and Windows	
Fixed in Insulight	
Hollow Glass Block	
Internal Panels	To face
38.B1 Walpamur Oil	page 262
Bound Water Paint:	
Painting Specifications for Various Surfaces	

Technical Section:

Technical Leader	263
Information Centre	264
The Industry. By Brian Grant	267
Prices	268

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.

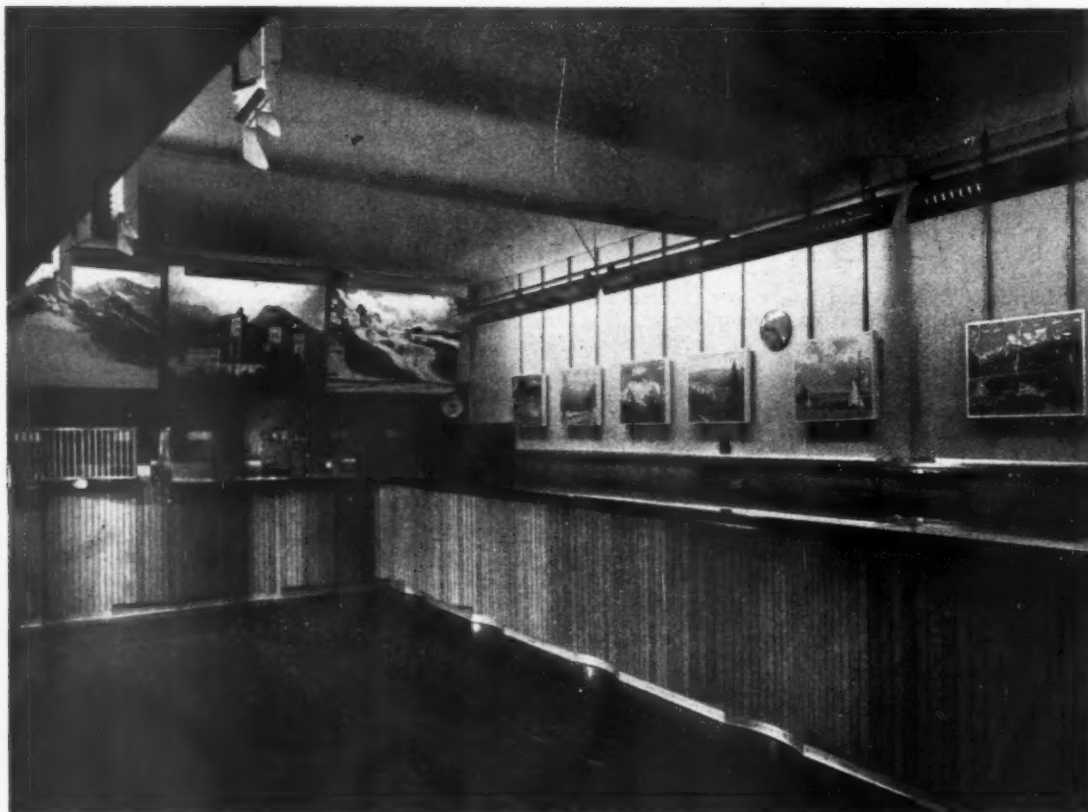
Any feature marked with more than two stars is very big building news indeed.

★

Work on PETERLEE will start in a few weeks.

Mr. Lewis Silkin, Minister of Town and Country Planning, announced at Easington (Co. Durham) last week that the building of the new town of Peterlee would begin in two or three weeks. Mr. Silkin said that the main difficulty had been the coal deposits which underlie the site, but the programmes of coal-mining and building have been correlated so that both can go ahead for a number of years with a minimum of obstruction. It is now presumed that coal-exploited ground is free from subsidence after five years. The present available land is for the centre of Peterlee and it will be suitable for heavy buildings and houses. Work on road and sewers for the first hundred houses will start in two or three weeks. The Minister could give no estimate for the rate of progress, and he hazarded a guess of twenty years for the completion of the scheme. Similarly, he could not assess the cost, as much would depend upon the extent of the corporation's ownership of property. The original estimate of £14,000,000, he said, could be no guide.

C R E A T I O N W I T H C R A F T S M A N S H I P



Architectural Review photograph

An interior view in the Swiss National Tourist Office, Golden Cross House, Trafalgar Square, London, S.W.1. Architect : Alfred Roth B.S.A., S.I.A., of Zurich, in association with Messrs. T. P. Bennett & Son F/A.R.I.B.A. Architectural joinery by Courtney, Pope Ltd.

TELEPHONE: STAMFORD HILL 4266 (10 LINES)
COURTNEY, POPE LTD.
ANHURST PARK WORKS
TOTTENHAM
LONDON, N.15

From AN ARCHITECT'S Commonplace Book

PRESERVING THE PAST. [From Colonial Williamsburg.] The restoration of Colonial Williamsburg represents the first attempt on a large scale to recover the physical form and atmosphere of an entire colonial town. This project has been undertaken with the conviction that our old buildings with their furniture and implements are the visual memories of our early history—"the scene and witness of human adventures and events." It was the realization that a wealth of historic fact and artistic value lay hidden in the venerable remains of Williamsburg which led to its restoration. Only recently has America come to recognize the cultural values in its past architecture, although historic buildings have always had their loyal protectors. Mount Vernon, Independence Hall, and the Old State House at Boston were early accepted as historic monuments, as well as many other significant buildings in all sections of the country. Inexperience or misdirected enthusiasm sometimes led to faulty restoration work which caused even more damage to a building than indifference or neglect; but gradually there has grown up a tradition of preserving the original expression as well as the actual physical structure of buildings.

An EXHIBITION of DRY ROT is to be held at the Building Centre.

The DSIR state: Dry rot in a building means expense, inconvenience and waste of a valuable material. Building timber is likely to be scarce in Britain for many years to come, and its premature decay should never be allowed to occur. To help with this problem an exhibition sponsored by the DSIR is opening on Monday, September 12, at the Building Centre. Timber is a naturally durable material and some kinds of wood endure indefinitely under any conditions. The common softwoods used in building, however, are liable to decay if they are exposed to persistent damp, and there is danger of dry rot wherever timber in a building becomes moist. This moisture is essential for the original development of the fungus responsible, which, once established, may carry its own water by means of conducting strands and invade dryer parts of the building. It may even pass through thick brick or stone walls.

By means of photographs and specimens of timber attacked, the exhibition shows what dry rot looks like and points out the likely places to find it. Once dry rot is discovered, the cure is drastic. Measures which must be taken and methods of applying preservatives to the wood are therefore explained in detail. A further exhibit illustrates the ways in which dry rot can be prevented in new buildings by effective damp-proof courses, thorough ventilation, and the use of properly seasoned timber. Among the other sections is one showing

the distinction between dry rot and insect damage. This point is important because the treatments required are quite different.

The exhibits and information in the exhibition, which will be open for two months, have been provided by the Forest Products Research Laboratory, DSIR.

★

A CENTRE FOR THE CONTEMPORARY ARTS is shortly to be opened in London.

London is to have as a centre the Watergate Theatre, where those practising and interested in the contemporary arts can meet, eat, drink and talk, and see the latest developments in the theatre and cinema (16 mm. film), listen to modern music at convenient times, and be entertained by topical cabaret, puppet shows, and small exhibitions of painting, sculpture and photography from all over the world. The theatre club is shortly to be opened, with the co-operation of the Institute of Contemporary Arts, at 29, Buckingham Street, Strand, W.C.2. The premises will be opened as soon as the public has shown, by taking shares in the enterprise or by joining the Club, that it is ready to support the Watergate. Club membership, which includes membership of the theatre, is 3 guineas a year. Subscriptions can now be received at 29, Buckingham Street, W.C.2, and will date from the opening of the Club. Special terms will be arranged for overseas visitors, country members and students. Theatre membership alone is

10s. 6d. a year (5s. for students of recognised schools and colleges), which gives the right to buy tickets for all activities in the theatre. Theatre members will receive a monthly programme free of charge.

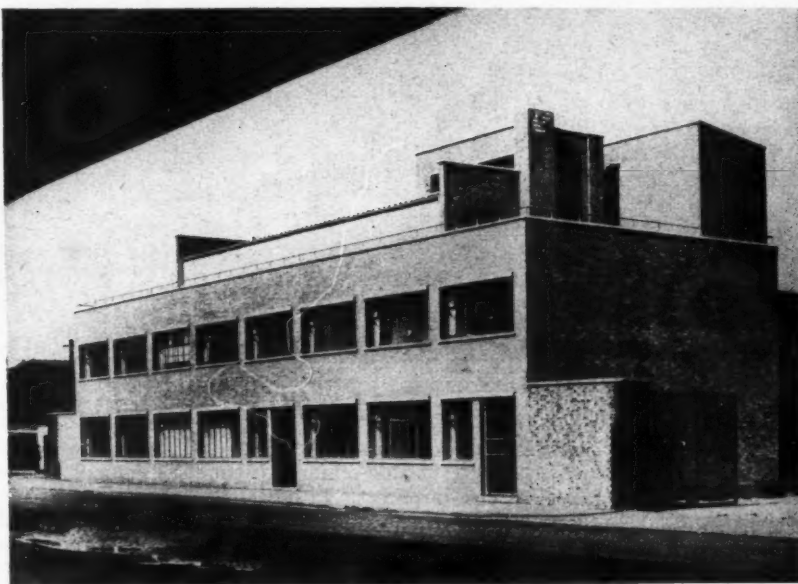
A model of the theatre and auditorium and designs for the decoration of the club rooms has been made by Miss Sadie Speight, A.R.I.B.A., F.S.I.A. Mr. Eric Capon, the Administrator of the Watergate, formerly Director of the Glasgow Citizens Theatre, will be very pleased to answer any questions of detail. The Joint Watergate Theatre Committee will consist of: Edward Clark, Roland Penrose, E. C. Gregory, Ewan Phillips, G. M. Hoellering, Herbert Read, Hugh Hunt and Frederick Laws, of the ICA, and Elizabeth Denby, Jane Drew, Velona Pilcher and Elizabeth Sprigge, of the Watergate.

1,855 FEWER HOUSES were built in July than in June.

The July total was 14,634 (against 16,489 the previous month), bringing the total this year so far to 115,811. New houses completed under the post-war programme now total 698,677, of which 541,531 are permanent, and the number of families rehoused since the war's end by new building, repairs, conversion and requisitioning is now 990,713. Local authorities were responsible for 11,902 of the new houses for July. In Scotland, 1,584 new permanent houses were completed in July, of which local authorities built 1,433.



These Goods Offices at Canada Dock, Liverpool, have been designed by the Architects' Office of the Civil Engineer's Department, London Midland Region, British Railways. The building is steel framed, and is designed for future extension. A 3-ft. 4-in. grid has been used. A suspended ceiling to the beam soffits, together with walls which are flush with the stanchions, gives an unobstructed office space which allows for easy rearrangement of the plywood partitions.





Merulius Lacrymans

This deadly rot, which weeps crocodile tears to moisten the sound timbers which it devours, has for centuries been one of the great causes of wastage in timber. In order to show architects and the public that the disease of dry rot, when properly understood and dealt with, need not be the cause of anxiety and expense which it has in the past, the Department of Scientific and Industrial Research are spon-

soring an exhibition of disease in timber at the Building Centre, 9, Conduit Street, London. The photograph above shows an exceptionally vigorous growth of merulius lacrymans on a wooden strut in a damp unventilated basement, and is reproduced by permission of the Director, Forest Products Research Laboratory (Crown copyright reserved). See also opposite page and page 246.

LCC's appeal allowed for HOUSING SCHEME at MERSTHAM.

The MOH and the MOTCP have decided to allow the LCC to develop 210 acres of land at Merstham, near Reigate, Surrey, to house about 6,000 people. This decision follows a joint inquiry and upholds the LCC's appeal against the Surrey County Council's refusal to allow the development on the ground that it was inconsistent with the MOTCP's proposals for the ultimate population in the area. In a letter to the Surrey County Council Mr. Silkin states that the LCC badly need a site on the south side of London to fulfil their immediate housing programme, and the Minister is satisfied that no suitable alternative site can be found. His ultimate population figures for Greater London were always intended to be provisional and subject to variation after more detailed survey of existing conditions. Mr. Silkin considers that it will be possible for the LCC to develop Merstham as a balanced community and that it should not become a dormitory suburb with large numbers travelling daily to London. There is a shortage of labour in the Redhill area; and in choosing their out-county estate residents the LCC take into consideration the places where they work in order that daily travel may be reduced to a minimum.

It is not thought that the North Downs Preservation Area would be adversely affected by the scheme, but, as a safeguard, the Minister expresses the opinion that land south of the Bletchingley Road should be used to the fullest possible extent for the provision of schools, playing fields and community buildings, both for the existing as well as the new population. Care should also be taken to avoid cutting down trees, especially north of the Bletchingley Road. These steps would help considerably to protect the view from the Downs.



Mr. Adrian Ashton, an architect of Sydney, Australia, arrived in London on August 29, for a three months' visit under the auspices of the British Council to see housing developments, new schools, industrial buildings and town and country planning schemes. Mr. Ashton is the first President of the National Trust of Australia, and is interested in studying the work of the National Trust and the Royal Fine Art Commission. He is President of the New South Wales Chapter, a Fellow of the Royal Australian Institute of Architects, and an Associate of the RIBA.

WASTE AND DECAY

FOR one reason or another, many essential and once plentiful commodities are now scarce, and some of the earth's natural capital resources, only used in quantity after the industrial revolution, are being exploited at a rate which brings exhaustion within the foreseeable future.

It seems that abundance, like familiarity, breeds contempt, and that, ironically, it is only with scarcity that man learns to respect the materials essential to his well-being. Either through ignorance, or because of the difficulty or expense of carrying out preventive measures, or simply for immediate gain, there has been, in the past, a reluctance to take precautions against waste.

Long overdue attention is now being given to the many manifestations of this subject. We are witnessing, for instance, campaigns for the conservation of food; for the saving of fuel; for the prevention of waste of metals due to corrosion; for the checking of atmospheric pollution, and for the more efficient use of timber in structures, and the prevention of its decay caused by wood-rotting fungi and beetle attack. An exhibition on this latter subject has been arranged at the Building Centre, and will be opened by Dr. W. P. K. Findlay, of the Forest Products Research Laboratory, on September 12. Not only has the shortage of timber made this an important subject, but most architects will have had experience of the vast increase in dry rot caused by bomb damage and general neglect of property during the war years, particularly where incendiary bombs were extinguished with large volumes of water. Whilst the greatest emphasis is placed on the prevention of decay, the exhibition also deals with the problem of the recognition and eradication of wood rotting fungi once they have established themselves. A further section deals with the allied problems of beetle attack, and distinguishes between the two sources of destruction.

Since its establishment in 1927, the Forest Products Research Laboratory has done valuable work for the better utilization of timber in this country. It has recently developed means of identifying fungi in timber, in the absence of their fruitifications, which is essential if the source of infection is to be determined. Research has also been undertaken on the natural durability of wood, and certain toxic substances have been discovered in timber which explain why some species are more resistant to decay than others. This has an application in determining the best use of many of the unfamiliar timbers which are now being imported. Methods of testing the effectiveness of chemical wood preservatives have been developed, and a British Standard has been published on this subject.

Again, however, we find a gap between knowledge gained from scientific research and day to day practice. As so often happens in the building industry, prejudices persist through lack of accurate knowledge, and the architect's job is also

sometimes more difficult because either the builder or the tradesmen themselves interpret too liberally the writing of a specification without really understanding the intention. It would, for instance, be most valuable if the expression "wet rot" could be eliminated from the building industry's vocabulary, so that architects and builders could start on the same footing.

The position in new buildings is undoubtedly improving, both as regards methods of construction, and in the proper use of timber impregnated with wood preservatives under pressure, but, in the meantime, the waste of valuable timber continues at an alarming rate.

It is to be hoped that the present exhibition will bring the latest scientific and technical information to many of those faced with problems of timber preservation, and will help to reduce the needless waste of good timber through premature decay.



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

GATHERING OF THE ARTS

I think it was a triumph on the part of the MARS Group and the Institute of Contemporary Arts to have attracted such a large and attentive crowd to their joint meeting on Friday, especially at so unpromising a time of year. I have seldom seen the RIBA so full. The subject was Collaboration between Architects, Painters and Sculptors, and the meeting celebrated the end of the CIAM Summer School.

Gerald Barry was an urbane chairman who, unlike many chairmen, had plenty to say on the subject himself, and the speakers included practitioners

of all three arts and a couple of distinguished foreign visitors—Ernesto Rogers from Milan, and van Eesteren, from Amsterdam—who had already discussed the same subject at the recent CIAM Congress at Bergamo. If most of the talk was a bit nebulous, I think that was inevitable when a subject of such wide ramifications was being talked about in public for the first time. And there were difficulties of language which even Jacqueline Tyrwhitt's able summing-up could only partially overcome.

But whatever the shortcomings of the speeches, that was much less important than the fact of the meeting having been held at all and the interest taken in it. It proved that architects, painters and sculptors realise the need for closer collaboration and are eager to do something about it. Great things have sprung in the past from such modest beginnings as this. The meeting also served the useful purpose of showing the need for contact between the arts by demonstrating how naively unaware even well-informed art critics can be of the ideas behind modern architecture, and how out of touch the liveliest architects can sometimes be with what painters and sculptors are thinking.

INTERNATIONAL CRIT

Thursday night's criticism of the CIAM International Summer School's completed projects set a standard that

few schools can hope to equal. Led by the AA's Jordan, the jury included Eesteren, Rogers, Maxwell Fry, Jacqueline Tyrwhitt, and many of the participating students. It lasted from 6.30 until midnight, with a concentration and liveliness that even the dinner-break failed to stem. The four programmes were for a theatre, a housing scheme, a traffic junction, and a project for an empty site in Knightsbridge. Allowing for the short time available and the difficulties of unfamiliar languages and local conditions, the general standard of work was high. Much more important, the solutions managed to involve almost every controversial issue facing contemporary architecture today.

So many brilliant yet simply expressed ideas were elaborated that it is impossible to select the most significant. There was Jordan on the technical and æsthetic functions of a living architecture; elaborated in a poetic address by Rogers on unity in design. Fry on symmetry, "the architecture of command," and his analysis of the subconscious forces that have cast contemporary building in an asymmetrical mould. All these, and many minor diversions and exchanges, will remain in one's memory as an outstanding intellectual experience. I am sure that only the atmosphere of



Archibald Blair's Storehouse, a shop in Williamsburg, showing, top, the shop before, and below after restoration. See Astragal's comment.



A typical Williamsburg house, from the book "Colonial Williamsburg: its Buildings and Gardens." See Astragal's comment.

an international gathering can so electrify the intelligence, unlock the tongue, and accentuate all that is valuable in national character while submerging the sense of nationality.

COLONIAL WILLIAMSBURG

Mr. Lawrence Kocher, designer with Albert Frey of a little house perched on steel pipe columns at Long Island, New York, Mr. Dearstyne, who studied at the Bauhaus, and under Mies van der Rohe and taught at Cranbrook Academy, and Mr. Herbert Matter, well known for his contemporary photographs, have collaborated in an act of piety in presenting a book* on America's museum town, Williamsburg, in Virginia.

Looking through the super-glossy photographs of reconstructed Wren, one can only assume that the Americans, being conscious of the fact that they have little history behind them, are anxious to preserve those relics of the past which they have as fully as possible. The decayed foundations of the Capitol and Palace at Williamsburg have now sprouted brand new buildings reconstructed from historical documents with the utmost care and fidelity. The authors state that where antique furniture could not

be obtained in sufficient quantity, it has been made. As a final touch, the inhabitants appear to walk about in powdered wigs and eighteenth century garb. Even the craftsmen at work seem to wear eighteenth century baize aprons.

It is, of course, all rather absurd, and a good many purists will, no doubt, have a good laugh at their expense. But then, purists will laugh at anything. A crowd of them at the SIA's summer school laughed at the mock-Gothic of Wyatt's Ashridge Park. Chinoiserie is also a good joke, and so is the delicious nonsense of building in Roman, Greek or Italian styles, or, indeed, in the clumsy continental cubist style beloved by some modernists.

No, before throwing a stone at this piece of reconstruction in a glass case, one should make sure that there is not too much glass in one's own house. We can be thankful, at any rate, that this expensive and beautifully cared for and executed piece of restoration is not necessary over here—yet. We have plenty of tumbled-down, dying, villages, and many of our fine country houses are splendidly maintained as Ministerial offices, institutes and homes. Only the other day I saw a charming Georgian house, now belonging to the local council, looking

quite splendid with a new interior colour scheme of dark cream, orange and brown.

ASTRAGAL

LETTERS

(R. Nott

H. Meyer

Sydney Redfern, LL.B.

Chas. J. Barker

The New Towns

SIR,—Mr. Betham is right in his letter on town planning in your issue of August 4. Today more than ever it is urgently necessary to be economical in the use of all land which might grow food. Surely, however, not even that need can justify increasing the population of a city which earned and deserved the name of "Wen" when it was half its present size. There is an unsatisfied demand for allotments in most parts of the London area, and Mr. Betham should tackle the national and local allotment associations. These areas could then be left as open spaces, and their produce would largely offset that of the lost farmlands.

For heaven's sake, let the new towns go ahead; they are one of the boldest ideas this country has ever produced, and worth a deal more to their inhabitants than a free health service.

Epsom.

R. NOTT

Architects Registration Act, 1938

SIR,—If a layman is allowed to contradict learned counsel, I venture to refer to a report in your issue of July 14 of answers given by Mr. Sydney Redfern to questions relating to architectural practice.

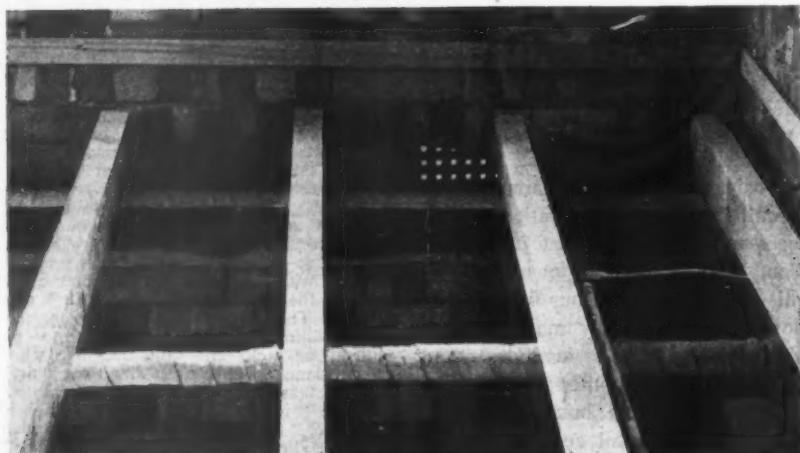
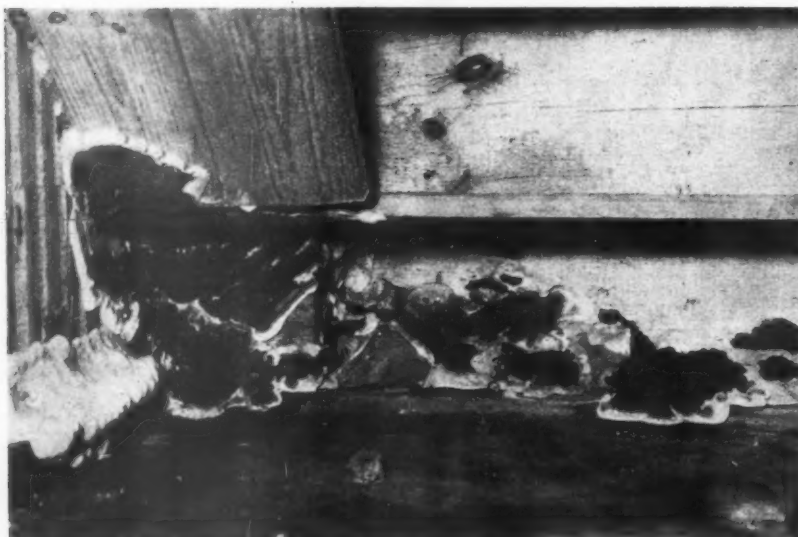
The question to which I refer was whether a non-registered architect might, in the Articles of Agreement, be named as "the architect." In his answer Mr. Redfern, though denying "misrepresentation," contended that a non-registered architect "who allows his name to be put in the contract as the architect . . . is liable to prosecution."

Architect is, no doubt, just an English word which, together with many thousands of others, forms the English language. The Shorter Oxford English Dictionary explains the architect as "one whose profession is to prepare plans of edifices, and exercises a general superintendence over their erection."

Now, a law may perhaps restrict a certain word from being used as a title, but certainly not strike it altogether off the vocabulary. (Nor is there any law to prevent a persons from making architecture his or her "profession.") The difference between the common and the restricted uses of the word—constantly overlooked in the answer referred to—is a very simple one and connected with two equally simple other words: the difference between "an" and "the." The law prevents a certain person from calling or allowing himself to be called "an architect." But everyone who, in pursuance of his profession, has "prepared plans . . . etc." for a particular "edifice" is, by force of the English language, "the architect" of this particular edifice. Thus, a caption under a published

* Colonial Williamsburg: Its Buildings and Gardens. Published by Colonial Williamsburg, Virginia. Price, \$2.75.

AN EXHIBITION OF DRY ROT



Next Monday, an exhibition of dry rot will be opened at the Building Centre, London. Sponsored by the DSIR, the exhibition aims to show, by means of photographs and specimens of timber attacked, the way to deal with dry rot. These photographs show the various stages in the eradication of the rot. Above, first stage, recognition, the appearance of a typical fungus growth. Above, left, the second stage. Having removed and burnt on the site all affected woodwork, the wall surfaces are sterilized by prolonged heating with a blow lamp. This is followed by, left, the third stage: spraying with an antiseptic solution. Bottom, the preventive measure. The source of dampness is removed, and increased ventilation to the infected area ensured. The photographs are Crown copyright reserved, and are reproduced by permission of the Director, Forest Products Research Laboratory. See also pages 241 and 242.

illustration of a building may read: "Offices of Messrs. So-and-so Ltd. Architect: Billie Brown of London Town." The important factor is the colon, because that does the trick. It simply states that Mr. Brown was "the" architect, whereas a caption: "B. Brown, architect" would, of course, imply that he is "an" architect. And a client may, paradoxically, tell an admirer of his new-built residence: "And just imagine, the architect was not an architect."

Who, by the way, is entitled to participate in a competition open to "all architects and architectural students"? Certainly not those still studying, to the exclusion of those having just finished their studies? No, sir, a person who allows him or herself to be named in the Articles of Agreement "the architect" is not liable to prosecution.

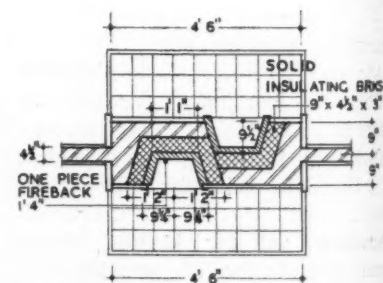
H. MEYER

SIR,—In reply to Mr. Meyer, may I say, first, that I am not "learned counsel," nor am I a court of competent jurisdiction charged with the duty of deciding points of law authoritatively.

Notwithstanding the interesting dialectical arguments put forward by Mr. Meyer, I remain of the opinion that a person (not being a registered architect) who in a building contract describes himself as "the Architect" is committing a breach of Section 1 of the above Act. I believe I am correct in thinking that my opinion is shared by the Architects' Registration Council, although I am not aware of any decided case on the point. It appears, therefore, that the difference of opinion between Mr. Meyer and myself can be resolved only by His Majesty's Judges, if and when the point comes before them.

London

SYDNEY REDFERN



A sketch for the design of a fireplace referred to by Mr. Barker in his letter below.

Fireplace Design

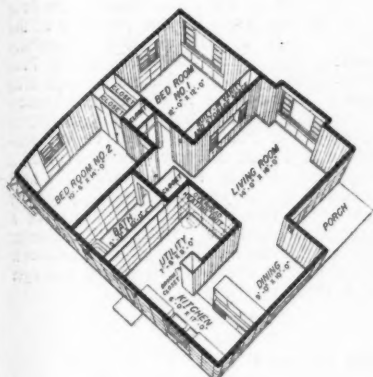
SIR,—Further to a recent discussion in your columns on economy of space and materials in fireplace design, I am reminded of an arrangement I had made some while ago when space was valuable and is shown on the $\frac{1}{4}$ -in. scale sketch enclosed. This it will be observed gives a $\frac{1}{4}$ -in. surround of insulating material all round the fire back.

In my view, for fires of larger size, say, 18 in. or 21 in., 9-in. brick backing (usually in cement mortar) is not adequate. If the breast were 9 in. wider, it would be possible to use a filling of insulation concrete in place of the solid insulating brick. This can be of foamed slag $\frac{1}{4}$ in. to $\frac{1}{2}$ in. 10:1 mix or in clean well burnt broken brick, broken into, say, $\frac{1}{4}$ in. approximately, throwing aside the fines, again with about 8 or 10:1 mix. Care must be taken that there is not too much moisture in the aggregate and that it is only lightly consolidated. Quite apart from the protection this gives to the wall at the back of the fire from being unduly heated, this insulation considerably increases the heating value of the fire.

Stratford-on-Avon

CHAS. J. BARKER

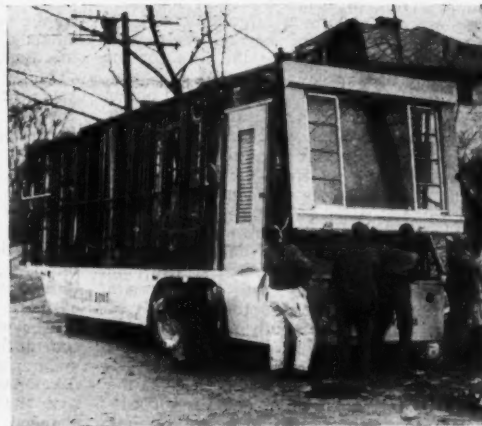
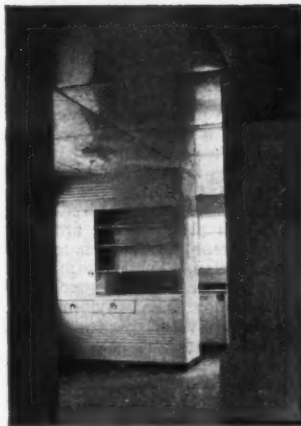
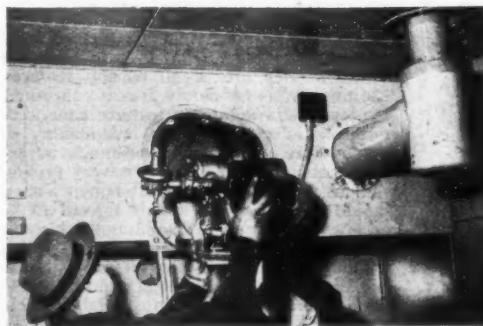
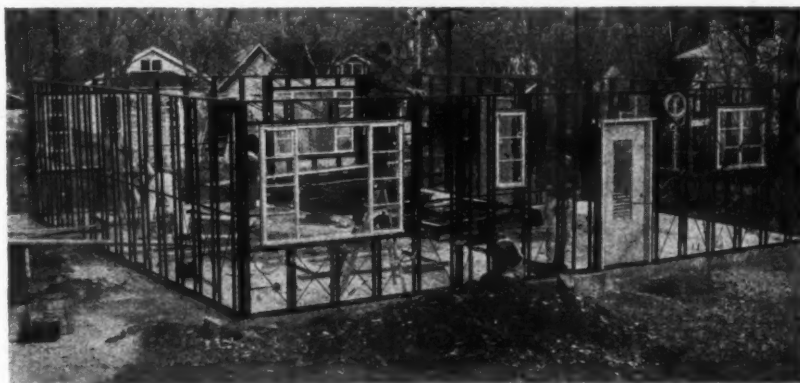
AN AMERICAN STEEL HOUSE

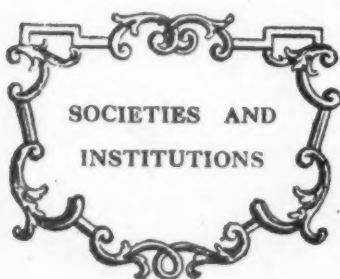


PLAN

This steel prefabricated house has recently been erected in St. Louis, Ohio, USA. Built by Lustron Corporation, it costs \$8,500. The only non-steel parts of the structure are the concrete floor slab, the asphalt tile flooring, the aluminum window frames and the glass window and door panes. It can be erected, after site preparation and the laying of the 35-ft. by 31-ft. floor slab, by four carpenters and one labourer in about 12 days. The construction is of steel wall-frames and trusses which are factory welded. Internal and external walls, the roof and ceilings are clad with porcelain-enamelled steel panels.

Above, the plan, showing the typically American arrangement of rooms. Right, top, the finished house, and, immediately below, the structure five hours after erection has started. The twenty wall sections are bolted to each other and to the floor slab. Some of the electrical wiring and plumbing is done in the factory. Centre, right, an oil-burning unit which warms the air in a chamber over the ceiling of all the rooms, and distributes heat uniformly throughout the house. Centre, extreme right, one of the two-foot square exterior wall panels being put into position. Glass fibre is used for insulation, and the joints between panels are fitted with a resilient waterproof plastic gasket. Right, the dining space as seen from the living room. Extreme right, the house, weighing thirteen tons, is carried by trailer from the factory to the site.





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.

TPI

R. W. Jefford

August 24. Paper on THE PREPARATION OF THE DEVELOPMENT PLAN FOR A CITY, read to members of the Town and Country Planning Summer School, St. Andrews.

R. W. Jefford: In this paper reference is made to Bristol because Sir George Pepler advised me that you would like to hear what we are doing in this matter and because the city is a large one, has suffered serious damage by the ravages of war and forms a good example of the problems that face the planning officer today in a large city with influences spreading far beyond its present boundaries. We feel that the case for the rebuilding of war-damaged towns is urgent, but we feel that the new Cry of London "New Towns for Old" should not be allowed to drown the voices of the damaged cities. This view has not arisen from any envious motive, but from the disappointing results of applications for compulsory purchase orders.

The provisions of the Town and Country Planning Act, 1947, have given us the opportunity to prepare a comprehensive city plan on the widest possible basis, built upon a proper survey and related to the needs of the area. It has been fully realized by my Authority that only by concentrated effort by all concerned will the plan be formulated within the time limit set down in the Act. In this connection one cannot emphasize too strongly the fact that no one

person could hope to be responsible for such a task and that team work is essential. In Bristol a good spirit of co-operation exists between the chief officers of the city. This must be said, however, that in our opinion there should be one officer responsible for co-ordinating the work, and because of this my Authority has appointed a City Planning Officer in charge of a separate Planning Department to carry out the work under the new Act.

STAFF FOR THE JOB

With the formation of the City Planning Department, which, by the way, includes the Local Bye-law and Building Surveyors' Section, it has been found necessary to divide the department into sections, under the control of the City Planning Officer and his Deputy, comprised of the following:—

No. of Authorized Staff.

1	Survey and Research, subdivided into Maps, Factual, Central Area, Sociological and Industrial	27
2	Development Plan	9
3	Reconstruction	8
4	Administrative	17
5	Development Control, including Building Bye-law Staff...	34

Each of these is controlled by a Section Head who is responsible for the output of his section. The object of such a set-up is to ensure that the limited staff is properly apportioned and the work programmed. The Section Heads meet with the City Planning Officer and myself from time to time to discuss matters of mutual interest and in this way no section can work independently of another, nor is any work duplicated.

THE OBJECT OF THE DEVELOPMENT PLAN.

There seems a great danger that with all this planning we may standardize too much the designs for our towns and countryside—and for heaven's sake don't let us do that. May I make a plea that we endeavour to retain the present characteristics of our towns if they are at all worthy features. Fortunately, as far as my area is concerned, the levels and dominant features cannot be seriously affected and the individuality of the town is assured, however much we re-plan certain local areas. It is very provincial in character and should remain so. I should hate to think that if I lived to 80 or 90 years of age I could not get away from my own town and visit an area which is quite different, and thus refreshing to see and explore. We are all familiar with the pride our citizens take in special features such as a beautiful vista of buildings, a central open space, the presence of water in the very heart of the city. It may be a tragedy to so re-plan that these features are altered materially.

Unlike the old "Operative Scheme," the stage which few Authorities fortunately reached with their planning schemes, the Development Plan is now to be reviewed every five years. We are not to base the plan on so limited a period, but have been advised that twenty years' is the longest period for which we can safely forecast the trend of events and needs of our area and this is the time factor upon which to base our Development Plan. There are material difficulties about this, in that much uneasiness and perhaps insecurity may be caused to landowners who have leased land for much longer periods and have paid development charges before commencing the development, unless some assurance is given that the zoning of the land will not be changed. Some development may take place

in the first five years which will seal the character of that area for perhaps 100 years and will influence the zoning of adjoining land.

Another difficulty is that if we cannot foresee the kind of development in certain areas, are we then to leave that part of the area in its existing place for the purposes of the plan? Such a method, unless carefully applied, may make the Development Plan unintelligible, unworkable and perhaps even useless. My opinion is that it will be necessary to prepare two plans, one a Statutory Development Plan which will be the subject of a Public Inquiry, and the other a long term Master Plan showing the final evolution or, if you like, the city of the future. If this is done there would be a basic plan on which to review the shorter term plan each five years and amendments would not be made which might endanger the balance of the plan.

THE SURVEY

Some doubts have been expressed lately about the need for such elaborate statistics as have appeared from time to time, being studies of existing town structures intended as a basis for diagnosing the ills of the town and the remedy necessary to restore its health and vitality and to ensure the happiness and prosperity of its citizens. I believe opinion is hardening to the view that some of the detailed analysis might well be dispensed with. Many of the illustrations of methods recently adopted for surveys of population have related to townships of 60,000 or thereabouts and are impracticable when applied to a large city unless one is fortunate enough to have an army of assistants. One could not successfully conduct a house-to-house survey over the whole of Bristol in reasonable time; the task is too big. The conclusion we have reached on this question of survey is that only the information absolutely essential for the preparation of the outline plan and town plan can be available in the required time.

The first task with which we were faced was the supply of maps for the survey team. We are rather fortunate in having on the staff a team of ex-Ordnance Surveyors who are bringing maps up to date and producing maps equal to Ordnance Survey standard.

Consideration was given to the use of reproduction by aero-photo methods, but no advantage would have been gained in time and the result would not have been so good as our own department's maps, owing to the considerable amount of war damage which is not so easy to portray in built-up areas. The survey team, therefore, have the benefit of accurate maps not only for field work but for plotting in the office. We are grouping the following surveys because it is thought these can be introduced in one survey in the field: (a) Existing land use; (b) age and condition of buildings; (c) net accommodation density.

It may be of interest to quote the classes we have used to ascertain the condition of buildings.

P. (Poor)—Already condemned, or would be scheduled for demolition under Housing Acts if practicable, or extensively war damaged.

F. (Fair)—Undesirable—to be retained for a maximum period of 10 years.

S. (Sound)—Buildings with reasonable life of 10-20 years.

G. (Good)—Buildings with estimated life of over 20 years.

As regards "P" and "F," advice is being sought from the Medical Officer of Health who is making a survey of these classes of buildings which are used as dwellings. The inclusion of buildings listed under "F" is of extreme importance because, when they form into a large block of buildings, it may indicate blight or obsolescence and it would

seem feasible to include some of them in an area to be acquired compulsorily.

Generally speaking, the "Age of Buildings" Map can be completed from the comparison of Ordnance Survey maps issued at specified dates, but care is being taken to note when new buildings have been erected in place of old, but upon the original site area. The dates we have adopted to suit our Ordnance Survey publications are as follows:—Prior to 1883, 1883-1914, and 1915-1949. The field survey will serve as a check on this map, as will also the reference we shall make to our Plan Registers.

OPEN SPACES AND RECREATIONAL FACILITIES

It needs no very detailed survey to reveal the areas in the city which fall short of the standards of open spaces and recreational facilities considered desirable and our survey will relate mainly to these areas. Even in the post-1914 period some housing estates sadly lacked open spaces, but there is little fear of recurrence of this in view of the large demands of the Board of Education for playing fields for certain age groups. It is rather in the application of the survey to the plan that difficulties will arise and I propose to deal with this later on.

Maps are being prepared showing all the existing open spaces and recreational facilities for the recognized groups. Bristol possesses a unique open space in the 400 odd acres which comprise the Downs, situated within comparatively easy access from the city centre and known to most motorists on their way to the south-west from the north and Midlands. This open space will be safeguarded for all time from any building. The city also is at present negotiating for a very large estate just over the border of the city on the west side.

I have now referred to most of the surveys considered essential as a preliminary to the outline plan, but the Ministry also require considerable detail of the reconstruction proposals for the built-up areas and mention must be made of this.

This is where the problem looms large, on matters such as licensed premises, office zones, central shopping area reservation and civic buildings. I could say much about the steps so far taken, but this is not a paper on reconstruction.

Mention must be made of the vexed question of "Floor Space Index" survey. I have heard it said that the monotony of carrying out such a survey is almost enough to upset the section of staff engaged on this task.

The job is a heavy one and the results, while helpful, not always worthy of the work entailed. Bristol has carried out a Floor Space Index survey for the main business centre within the Inner Circuit Road, but much of the information was based on Goad's maps, as being the only source to show where property has been destroyed. It becomes rather complicated when the users are so mixed. Apart from some local centres I do not think this survey is necessary beyond the central area, and to carry it out the concentration of four to six officers over a period of months is necessary.

On the question of licensed premises, perhaps a "refreshing" subject after "Floor Space Index," there is now hope of real progress by the Licensing Planning Committee, the Brewery Companies and the Council, and we hope shortly to reach agreement on the number of houses to be located in new housing estates and in the central shopping area. We expect also to report soon on the position affecting the whole city.

So far I have raised such points as Staffing, Objectives, National Proposals and Survey, and I want to deal briefly with the "Application of the Survey to the Outline Plan."

APPLICATION OF SURVEY TO BASIC MAP

It is hoped to complete the survey in about a year from now, which will allow a similar period to prepare the Basic Map and Programme Map and any comprehensive development area maps which can be completed in this period. Whilst the statutory three-year period applies only to the Basic Map, it is hoped to submit the Comprehensive Development Area Plan for the central area within this period also. In order to be able to show the proposals on the 6-in. scale map, it is necessary to work up the plan on much larger scale maps, even to 1/500 for the central areas, so that much work will lie behind the apparently simple Basic Map.

As a start on the plan, a 6-in. map of the suggested neighbourhood units has been prepared mainly on local knowledge of the area. In all, there are 56 proposed neighbourhoods within the urban fence (which, by the way, does not coincide with the present city boundaries), and in order to arrive at the broad outline it was estimated that 50,000 people will, in the long-term development, form the overspill from the central areas, leaving a gross density of 40 persons per acre. This overspill has been translated into five new neighbourhoods: an attempt has been made to calculate the population of all the neighbourhoods based on reasonable gross densities varying according to their location. Physical boundaries such as railways, roads and open spaces have formed the limits of each area. This map has formed the basis of all discussions and the results of the surveys will reveal how much it needs to be altered and where the outline zoning and reservation should be planned. Our ideas for the main industrial zones have been formulated so that great changes are not anticipated in this direction. For those who have not to deal with the rapidly increasing day-to-day inquiries, and applications for permission to develop, it may seem like "putting the cart before the horse" to carry out your survey afterwards, but when nearly all committees are clamouring for sites for future development and industrialists are seeking land on which to rebuild anew, some guidance is necessary.

In order to keep some control over development taking place as the plan is in course of preparation, a Committee of Chief Officers, representing most of the Corporation Departments, meet periodically to exchange views on the use of land earmarked for various purposes, including land and property on offer to the Corporation, and a measure of agreement is usually reached, enabling the officers concerned to report to their respective committees before seeking the observations and blessing of the Planning and Reconstruction Committee. Another Chief Officers' Committee meets periodically to deal with matters arising out of reconstruction problems. The Planning Officer is the co-ordinator in these discussions, so he is able to safeguard planning interests.

The full significance of the population and accommodation surveys will not be realised until completed, but it is pretty obvious that most of the housing development in the next few years will take place on virgin land because of the need to retain existing housing accommodation as long as is reasonably possible.

Education standards as applied to playing field requirements are one of the demands to be faced seriously, and particularly in built-up areas, needs serious thought. To have to provide an area of 6 or 7 acres for a new central school or an extension to an existing school on land now occupied by houses, poor though they may be, does not seem very practicable; and even where it can be provided, the joint use with the general public at certain hours would seem

an economic solution to the shortage of land in built-up regions where the cost of property is high.

I fail to see where all the land is to come from for school extensions, nursery schools, clinics, fire stations, community centres, open spaces and the like, unless some of the land for school playing fields is reserved on the outskirts of the city.

STAGES OF DEVELOPMENT

The basic plan must be accompanied by a "programme map." Presumably we have to "stage" the development from the date of submission of the Development Plan to the 20-year period. If this is so, the answer is not so obscure, because even assuming a fair improvement in building labour and materials available, it is thought that redevelopment will be very limited in the first ten years, at least, in blitzed cities. The demands upon the finances of the city for reconstruction will tend to exclude the bettering of conditions in obsolete areas unless the projects are sponsored by other Ministerial Departments than Planning—such as Education, Health, Home Office for Police Divisional Headquarters, or where major road improvements are supported by the Ministry of Transport.

Staging of development is not a new matter for cities concerned with reconstruction, because the Ministry have insisted on the submission of details showing the time factor for the rebuilding of areas for which compulsory powers to acquire have been sought.

THE PUBLIC INQUIRY

It is at the Public Inquiry that the value of a well carried out survey will emerge, because opposition may be forthcoming on questions of siting of new roads and widening schemes, the amount of various kinds of zones and reservations, the answers to which are in the findings of the survey. Adequate additional evidence to support the proposal should be at hand if the Inquiry is to proceed satisfactorily to the Council and its Officers, who are responsible for the Development Plan. I have in mind reports on various sections of the plan, to which, as a witness, one can refer when questioned. This proved useful when the Public Inquiry into the Central Area Scheme was held and the same may well be adopted in an Inquiry of this nature.

One other point, arising out of this, before I conclude: it is the question as to how far the public should be taken into the confidence of the local planning authority in the initial stages of the plan and how far they can be allowed to dictate the provisions in the plan.

In Bristol we are perhaps very democratic in our ways, but we feel that the utmost co-operation should take place with all shades of local opinion. Many of them will conflict with the planners' and the Council's views, but on the other hand useful suggestions sometimes appear and, after all, it is the citizens who have to live in the city and it is their money indirectly, if not always directly, which pays for the improvements.

CONCLUSION

This paper appears, perhaps, to labour the magnitude of the job and the problems which beset us, and may sound somewhat superficial, but there has been no time to go into details. I hope an impression has been given of what the preparation of a Development Plan for a large city means and how far we in Bristol have decided our line of action and moved toward our objective.



The main entrance from the south.

SCHOOL AT STEVENAGE

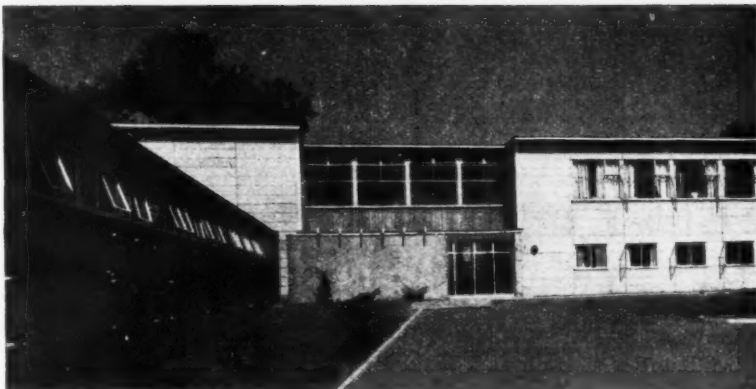
BY F. R. S. YORKE, E. ROSENBERG AND C. S. MARDALL

C. H. ASLIN, COUNTY ARCHITECT, HERTFORDSHIRE

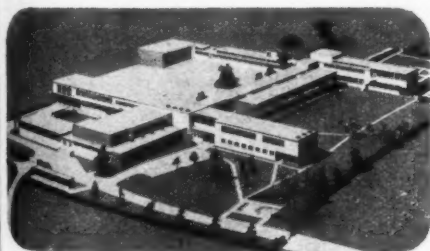
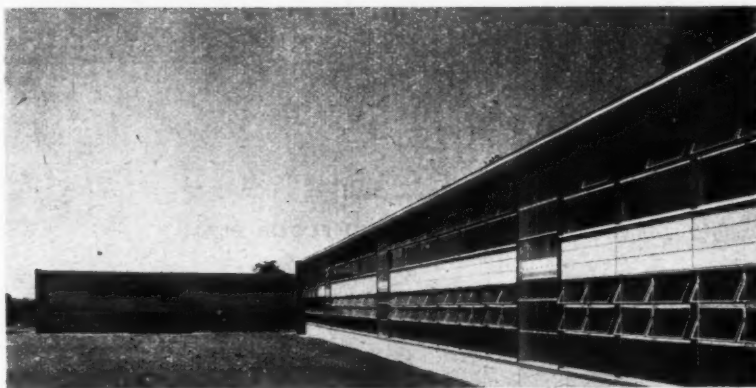
From left to right, the coat room block, part of the entrance hall, and the dining hall, above which will be added another storey for use as a community centre.



From left to right, the green rooms, the entrance and the staff room and library block.



The classroom block, with the staff and library block in the background.

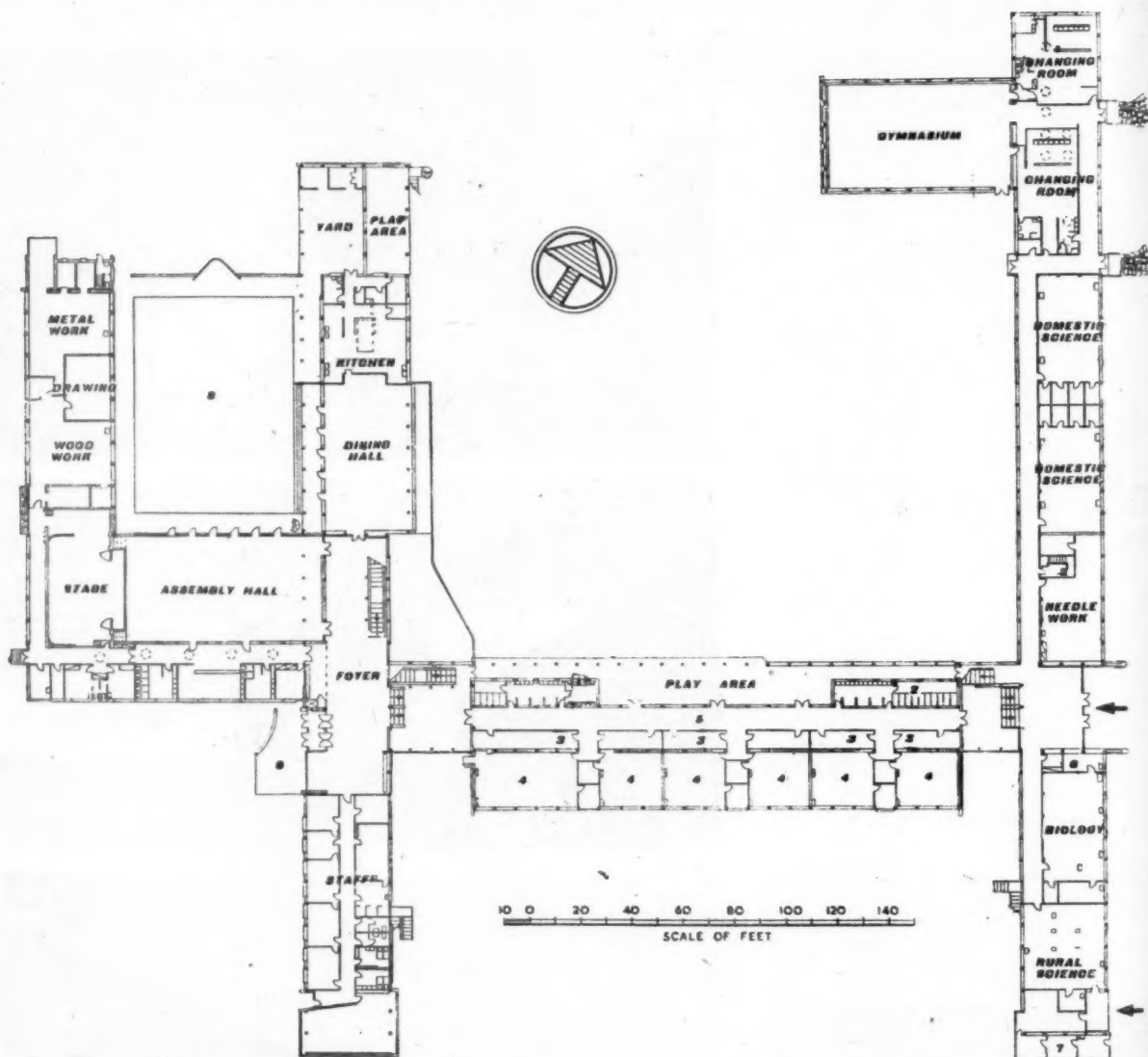


A model of the school. Right, the assembly hall from the north, showing part of the dining room.



GENERAL. — This secondary modern school, designed for the Hertfordshire County Council, to accommodate 450 children also includes a community centre for adults and youths. The assembly hall with a stage seats 500 persons and is planned for use both by the school and the community centre.

[Text continued on page 254]



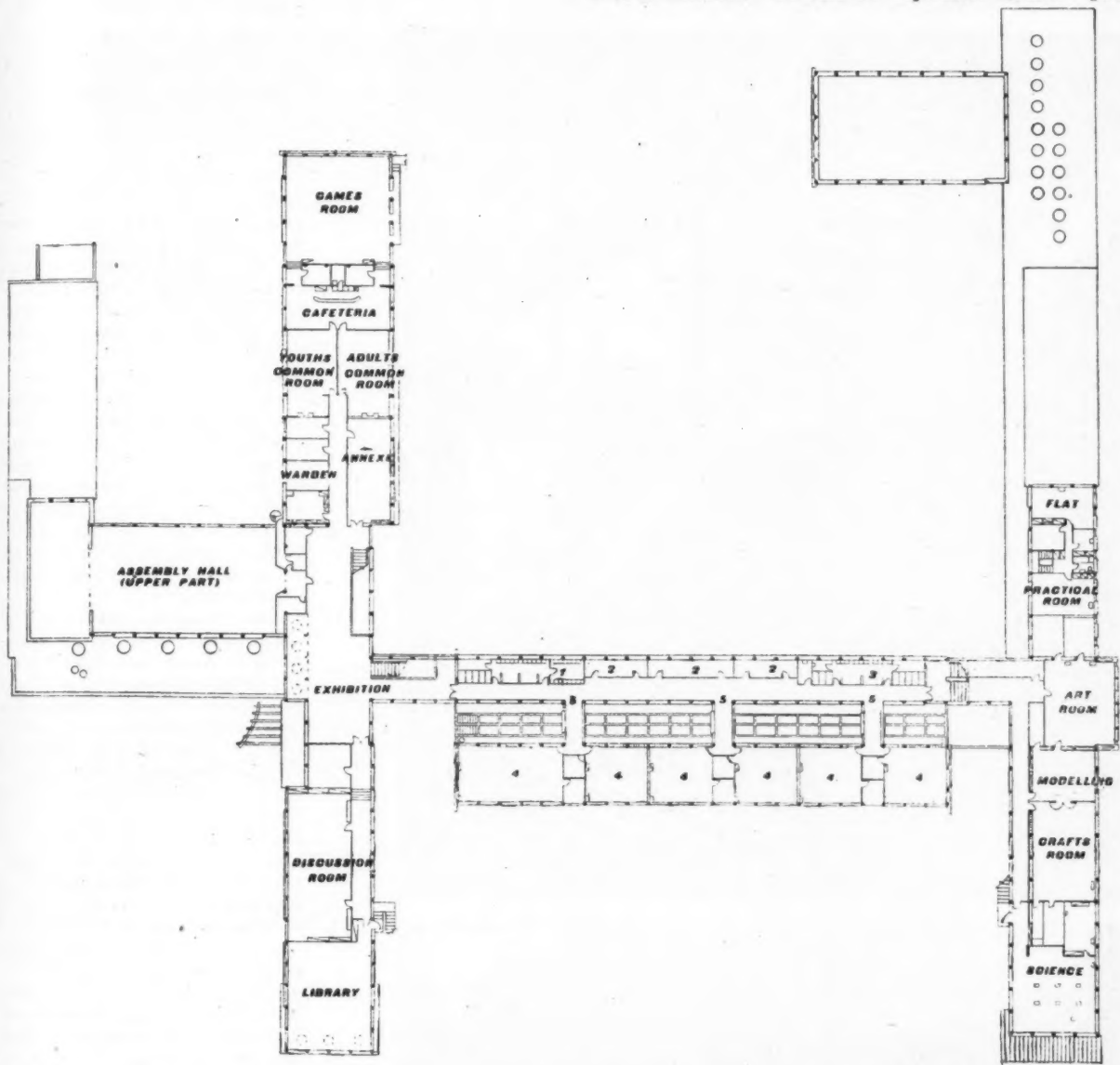
GROUND FLOOR PLAN



KEY :

- | | |
|------------------------|---------------------------------|
| 1 Boys' lavatories. | 6 Dark room. |
| 2 Girls' lavatories. | 7 Greenhouses. |
| 3 Coat rooms. | 8 Open air theatre. |
| 4 Classroom. | 9 Terrace to the main entrance. |
| 5 Transverse corridor. | |

The library on the first floor.

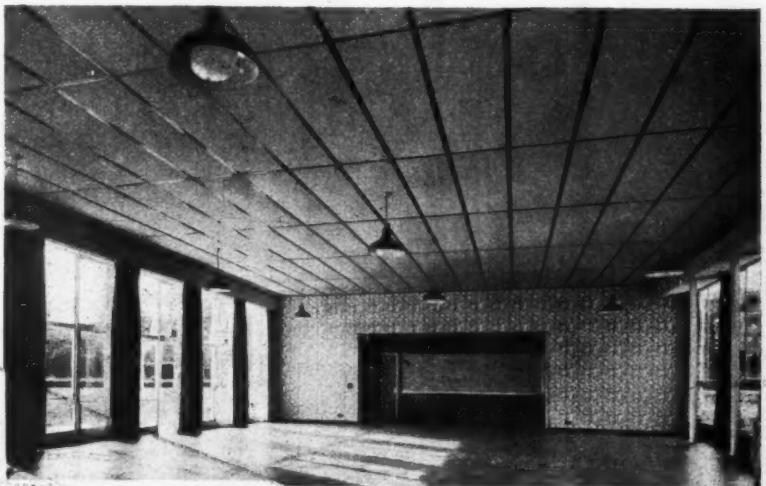


FIRST FLOOR PLAN

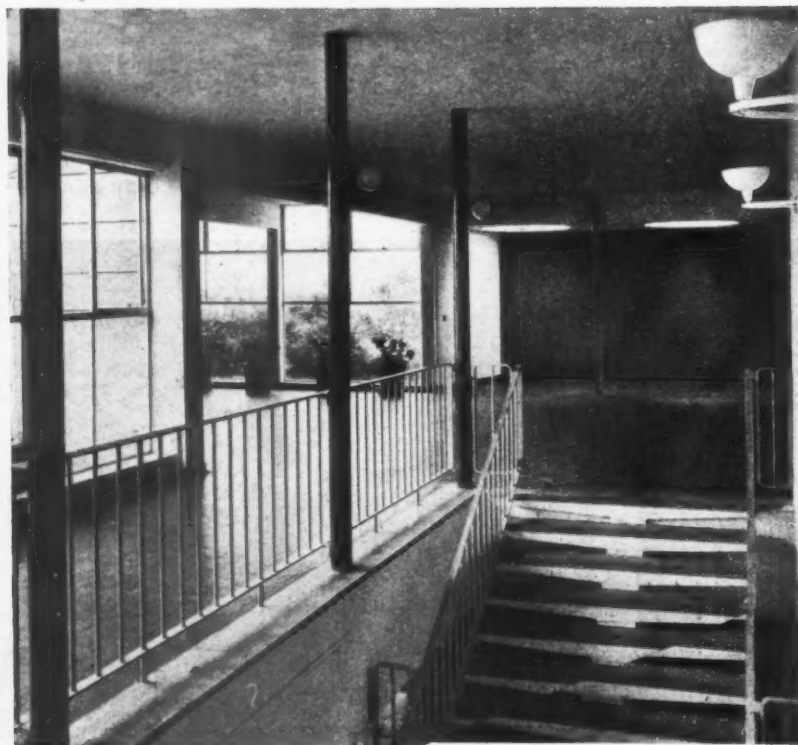
KEY:

- 1 Boys' lavatories.
- 2 Coat rooms.
- 3 Girls' lavatories.
- 4 Classrooms.
- 5 Bridges to the classrooms.

The main dining hall and servery.



BY YORKE, ROSENBERG AND MARDALL



[Text continued from page 251]

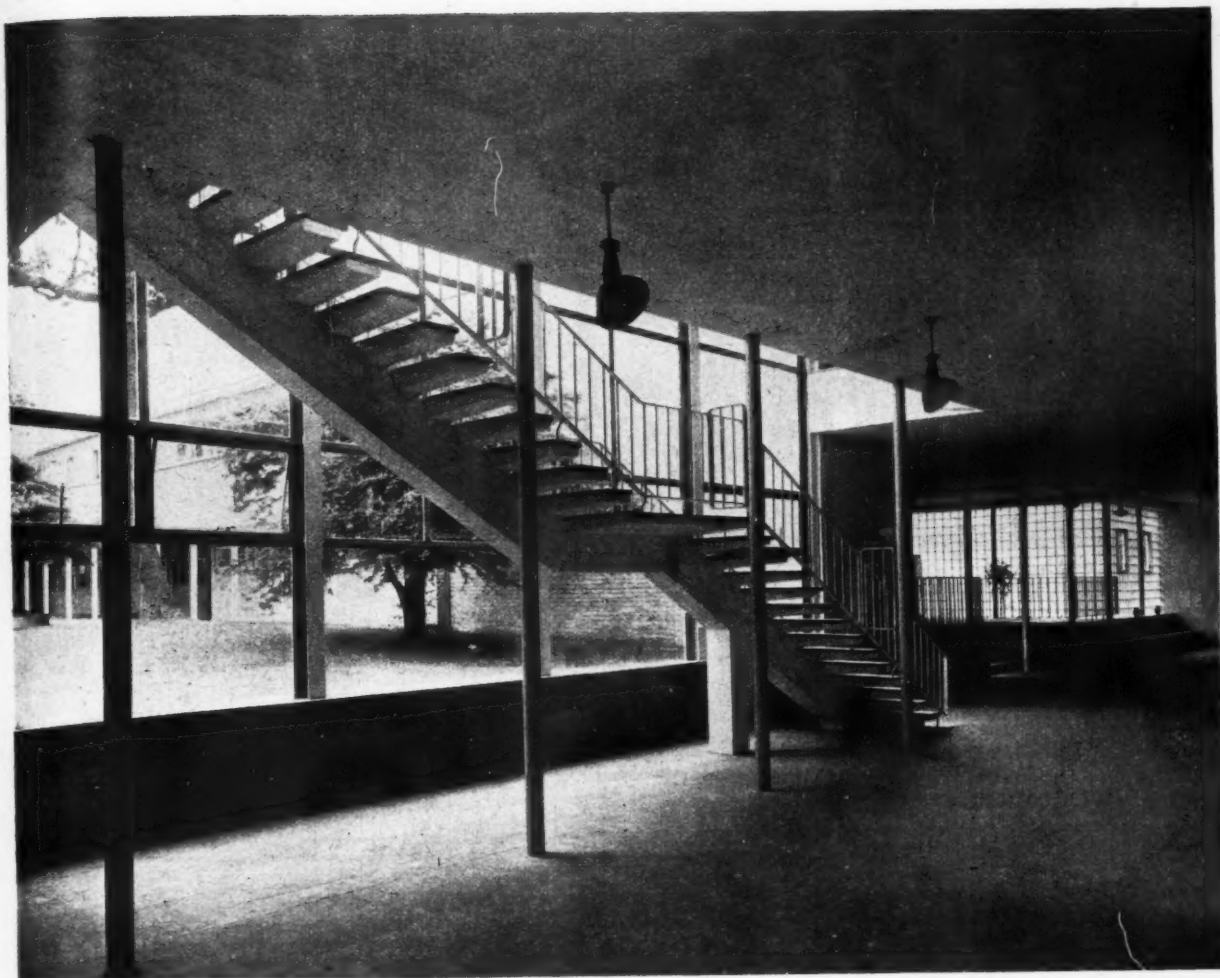
PLAN.—The plan is basically H-shaped with a wing extending towards the western end of the site. This wing contains the assembly hall facing on to an open quadrangle. The metal-work and wood-work rooms are also included in this part of the building as these create a great deal of noise and require to be isolated from the main school buildings. The parts of the school concerned with community activities are approached directly from a staircase in the entrance foyer and the rooms are directly over the dining room and kitchen. The community centre contains a games room, common rooms, a library and a cafeteria; also discussion rooms and exhibition space. The community section of the building can be entered from the main entrance foyer without entering the school departments.

Leading from the foyer, the focal centre of the school, are the assembly hall, dining room, and the administrative block, with the library and discussion room above. The classrooms may also be approached from the foyer, through an intervening lobby, with a change in the level. A two-storey block of classrooms forms the crosspiece of the H-plan. The problem of placing coat rooms and lavatories in close proximity to the classrooms while retaining adequate ventilation and lighting is overcome by building a separate two-storey lavatory block parallel to the classroom block. The intervening space is roofed at first floor level, covering a corridor and the coat rooms, leaving an open area above. On the first floor the area is crossed by three bridges. By this means it has been possible to introduce clerestory windows in the inner classroom walls on both floors.

The eastern leg of the plan contains, on the ground floor, biology laboratories, domestic science rooms and a gymnasium, with changing rooms and showers, well isolated from the classroom block. On the first floor are science laboratories, the art and craft rooms, a practical room and a flat for teaching housecraft.

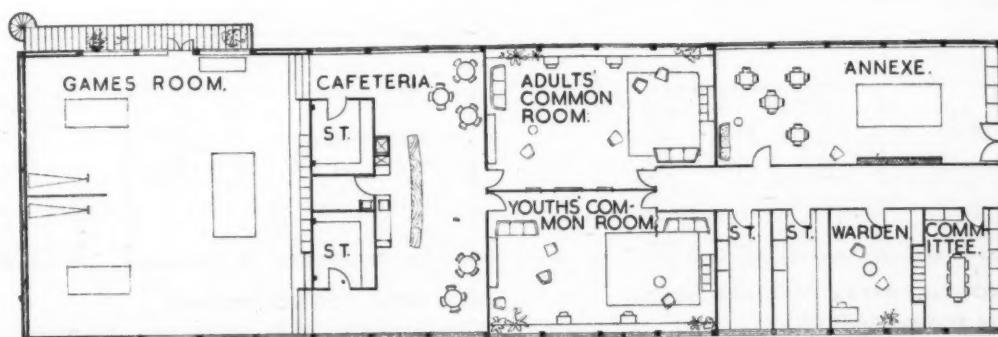
[Text continued on page 262]

Top, left, ground floor foyer, with a staircase to first floor classrooms. Left, the first floor landing and exhibition space.



The entrance foyer staircase.

PLANNING DETAILS AND NOTES



COMMUNITY CENTRE WING: [Scale: 1/4"=1'0"]

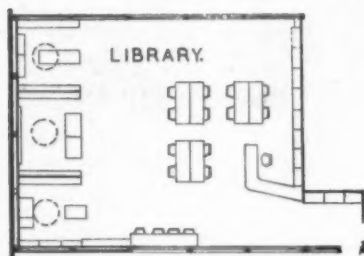
The Youth and Adults Games Room has a billiards table with raised seating for spectators on one side. Table tennis, and other tables are also provided, as well as chairs and settees. There is a balcony with a spiral fire-escape outside the games room. A cafeteria is provided

for supplying light refreshments. This has a service lift from the kitchen.

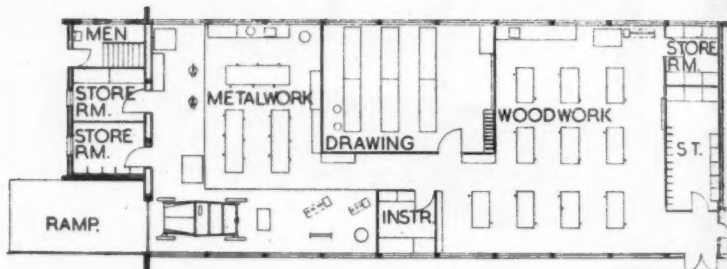
The Annex has a billiards table, and cue racks, shelving, store cupboards and chairs, with an adjacent store room. The wardens' rooms, committee room and filing room are also in this block.

The Discussion Room, beyond an exhibition space on this floor, has provision for lantern or epidiacope shows. Shelving and display cabinets are also fitted. Part of the wall space has corkboard panels for pin-up and exhibition purposes.

BY YORKE, ROSENBERG AND MARDALL

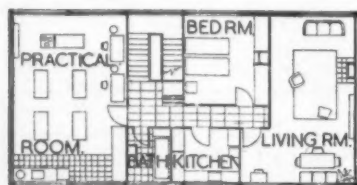
[Scale $\frac{1}{4}$ " = 1'0"]**LIBRARY:**

The Library has 144-ft. run of 12-in. glass-fronted shelving for loan and precious books with cupboards underneath. 360-ft. run of adjustable shelving for reference books with a maximum height of 7 ft. from the floor level. Periodicals are displayed in a special rack with a 10-ft. long reading table under the window. Maps are kept in a plan chest with a glass top for display purposes. A catalogue cabinet, desk and the usual furnishings are provided for the librarian. The lighting is general with no table lamps. There are chairs and study tables for thirty children.

**WOODWORK AND METALWORK ROOM:**

The Metalwork Room contains three tables 9 ft. by 2 ft. 9 in. with six vices on each. One 4-ft. by 3-ft. setting-out table. One metal-topped bench 9 ft. by 2 ft. with two gas points for soldering and to carry one hand shearing machine, one metal-topped bench 6 ft. by 2 ft. to carry one garage vice, one pipe vice, one Smith's leg vice; one brazing hearth 24 in. diameter, with power point for electric blower. One sink 2 ft. by 1 ft. 9 in. by 10 in. Forge bay 3 ft. by 3 ft., two anvils, 4-ft. by 1-ft. 8-in.

lathe, 3-ft. by 1-ft. 8-in. lathe, pillar drill, motorized grinder, power hacksaw. The Woodwork Shop contains ten benches with vices, cupboards for work and tools under, 5 ft. by 2 ft. 6 in. by 2 ft. 6 in. each for two boys. 4-ft. by 3-ft. setting-out bench. 2-ft. run metal-topped bench for glue pots, sink, 4-ft. run for glueing, 4-ft. run for sharpening. Wood-turning lathe, power point. Four sawing stools 3 ft. by 1 ft 6 in. The instructor's room has cupboards for books, special tools, equipment, etc.

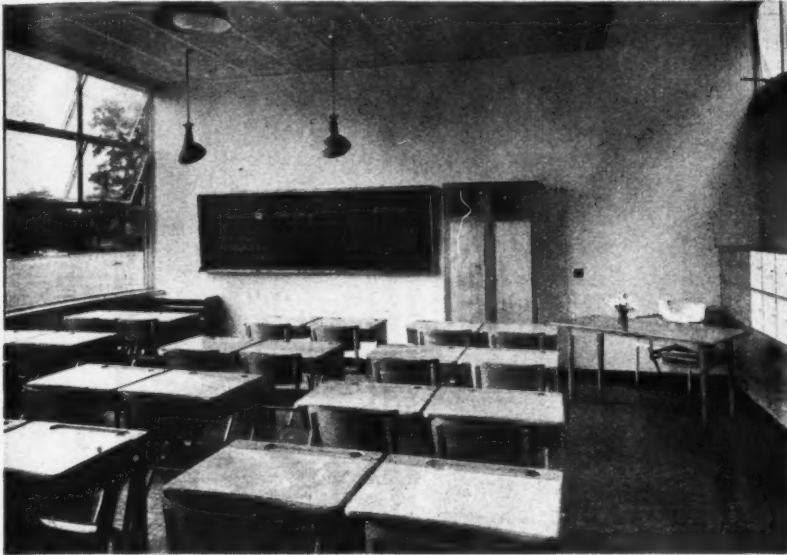
**HOUSECRAFT ROOM AND FLAT:**

The Practical Room contains six work tables, a 4-ft. by 2-ft. demonstration table and gas and electric cookers. There are three deep cupboards and a range of shelves, with lockers and notice board. The Flat has living, bed and bath rooms, with a housemaid's closet and linen cupboards, and is complete with furniture, pictures and carpets.

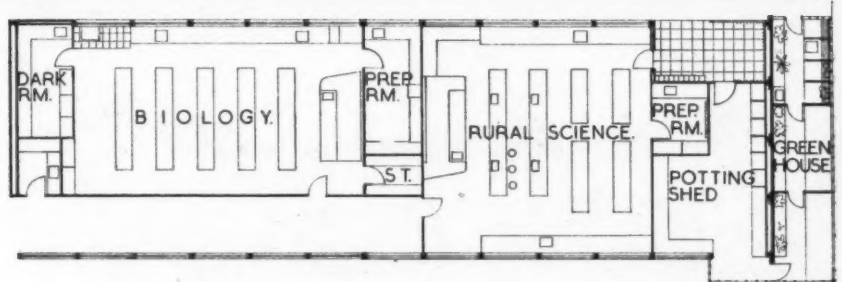
**DOMESTIC SCIENCE ROOMS:**

The Needlework Room contains ten 4-ft. by 2-ft. 3-in. tables, with one collapsible 6-ft. by 3-ft. cutting-out table. Sink with draining boards. 8-ft. run of 2-ft. deep cupboards. Four power points for irons and sewing machines. A fitting alcove screened by curtains, and a store with a 11-ft. run of hanging space, a large cupboard and shelving. The Domestic Science

Room contains the following equipment: three gas cookers, one gas iron heating stove, one gas copper next to the slop sink, three electric cookers, one electric copper, one drying cabinet, one refrigerator, with power points for additional equipment. Ten 5-ft. 3-in. by 2-ft. 6-in. cookery tables with drawers, cupboards, pastry boards, each for two children. One 6-ft. by 3-ft. collapsible table.



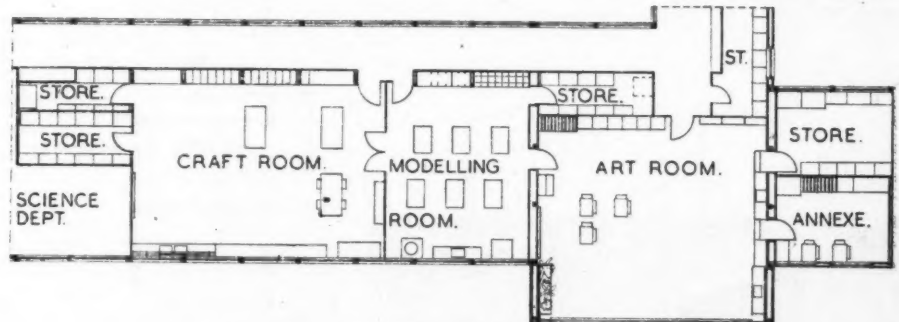
Opposite : left, a typical boys' lavatory block ; right, the staff room. Above : left, a ground floor classroom ; right, a ground floor corridor.



BIOLOGY LABORATORY

The Biology Laboratory has fixed and movable benches, with gas points, a long wall bench, with sinks, and an observation beehive. There is a demonstration bench and blackboard for the instructor. Some of the school meters are in this laboratory for teaching purposes. A screen is provided for slides and filmstrips. Adjacent is the preparation room, containing a refrigerator, with radiator and power points for incubators.

The Rural Science Laboratory has both fixed and movable benches with gas and low voltage power points. There are wall benches with sinks and a demonstration bench. A screen for film strips and a radio loudspeaker are in this room. The preparation room, potting shed and greenhouse are adjacent leading directly to the experimental garden, with its pond, and meteorological station. There are sheds for tools, livestock and fodder compost.



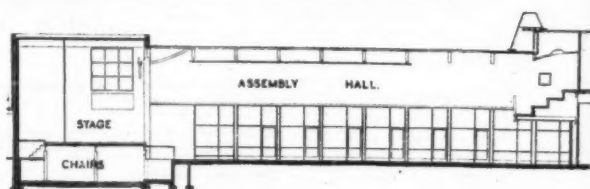
ART AND CRAFT ROOMS

The Art Room has large windows along one wall, with high windows facing south. Two sinks with wood drainers, tiled back with 6-in. shelf over, and pot boards under for palettes and trays. Flower box sunk in floor for plants in pots and jars. Long wall lit by north-west window has cork-board for

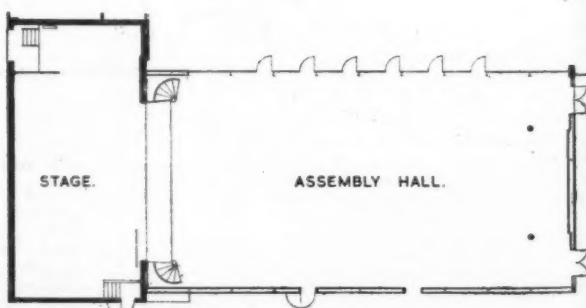
pin-ups from 2 ft. 6 in. to 6 ft. 9 in. high. Flush picture rail over. Drawers, 2 ft. wide and 1 ft. 6 in. deep, are in tray form and pull right out, for pencils, brushes, paints. Racks for drawing boards. Blackboard with white screen over. Tables, easels, stools, stack and move easily.



Above, assembly hall, looking towards the stage; below, looking towards the balcony.



SECTION OF ASSEMBLY HALL



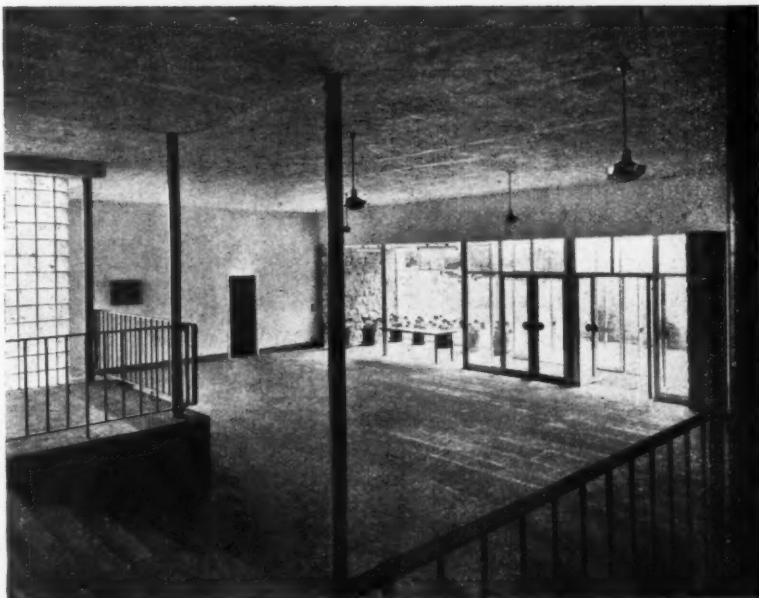
PLAN OF ASSEMBLY HALL [Scale: $\frac{1}{8}'' = 1'-0''$]

Right, entrance to the assembly hall showing a mural by Kenneth Rowntree; bottom, the entrance foyer.

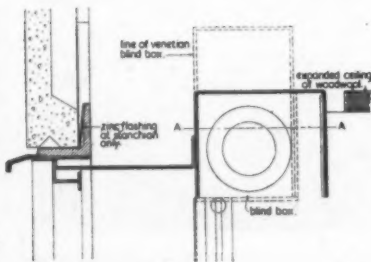
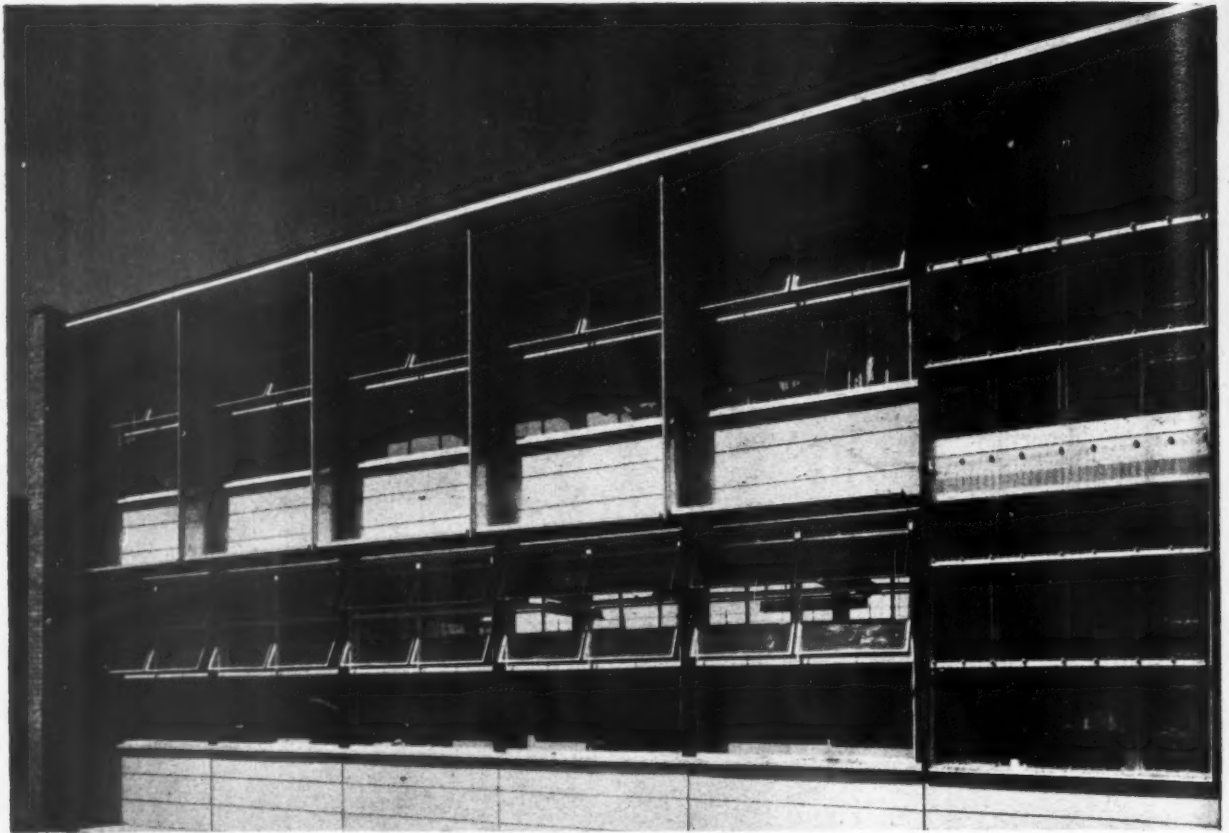


Assembly Hall. 3,000-ft. super to seat about 500, wired for broadcast. Flat floor, flat stage raised 3 ft. from hall floor. Movable nesting chairs to be stored in 6-ft. high space under stage. Foyer, cloakrooms and lavatories for men and women. Lighting for all purposes, including two spot lights for stage, on side walls, some distance from proscenium opening.

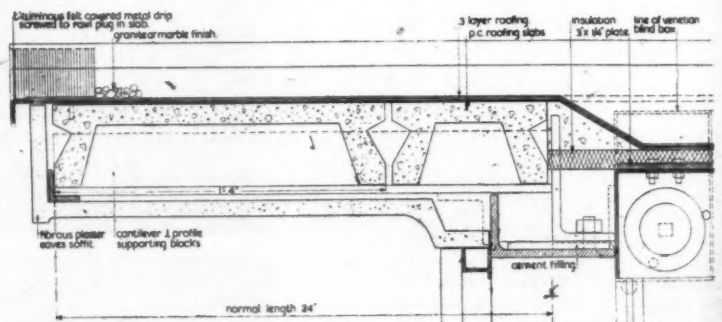
Stage. Proscenium opening 20 ft. wide, 12 ft. high, with higher opening possible for concerts. Stage 24 ft. 6 in. deep with apron 5 ft. wide in front, and 20 ft. wide. Plastered back wall for cyclorama curved at sides. Top 5 in. of apron movable. Steps leading to auditorium built in sections and movable. Lighting battens 3 ft. above proscenium opening and in floor in front of cyclorama. No footlights. Back-stage switch panel, controlling auditorium also. Wings 10 ft. on each side of proscenium opening plus 5 ft. one side and 10 ft. the other, for properties, work on scenery, etc. Wings 15 ft. high. Floor of stage, softwood. Hinged reflector over apron stage adjustable to suit varying uses.



BY TORKE, ROSENBERG, AND MARDALL

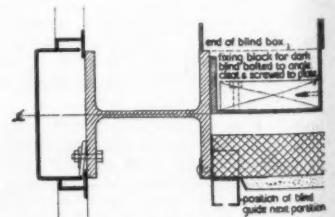
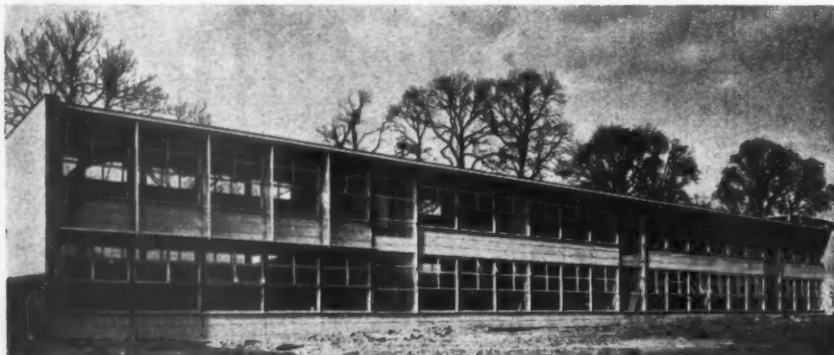


SECTION AT C

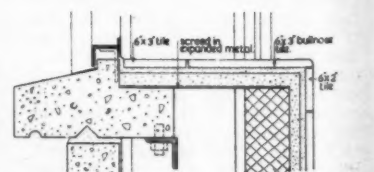


SECTION AT A

Above, detail of the windows, with sunbreakers, in the south-east facade of the classroom block: below the two storey classroom block from the south.



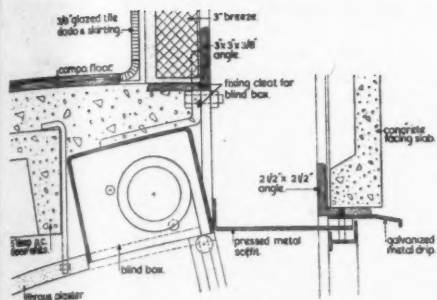
PLAN BETWEEN THE WINDOWS



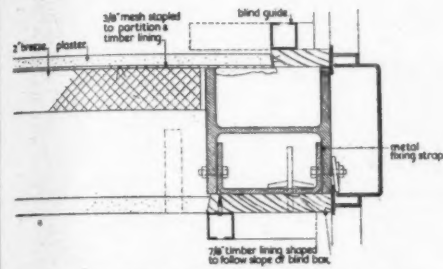
SECTION AT B

[Scale: $\frac{1}{2}$ full size]

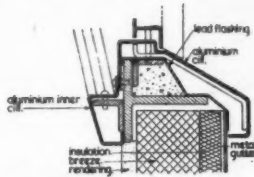
S C H O O L A T S T E V E N A G E



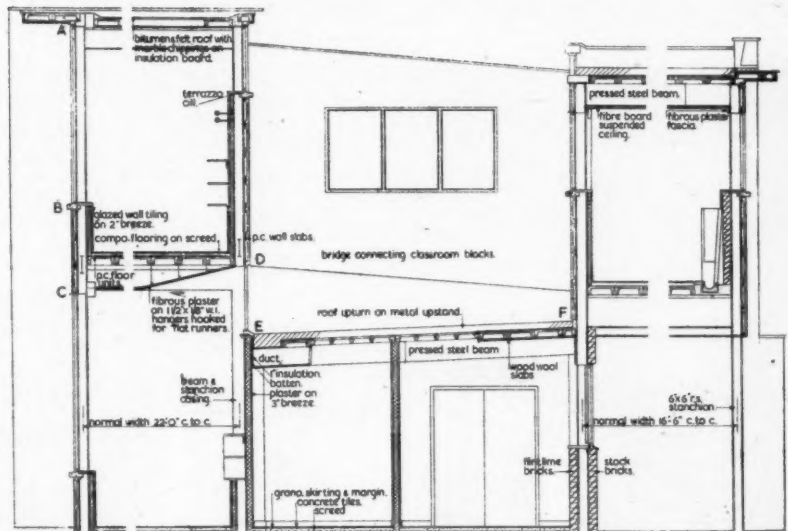
SECTION AT D



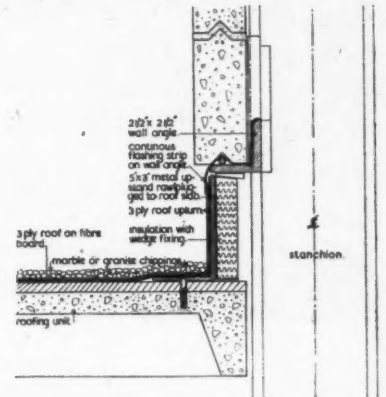
PLAN BETWEEN WINDOWS [Scale: 1/2 full size]



SECTION AT E



SECTION THROUGH THE CLASSROOM BLOCK [Scale: 1/4" = 1'-0"]

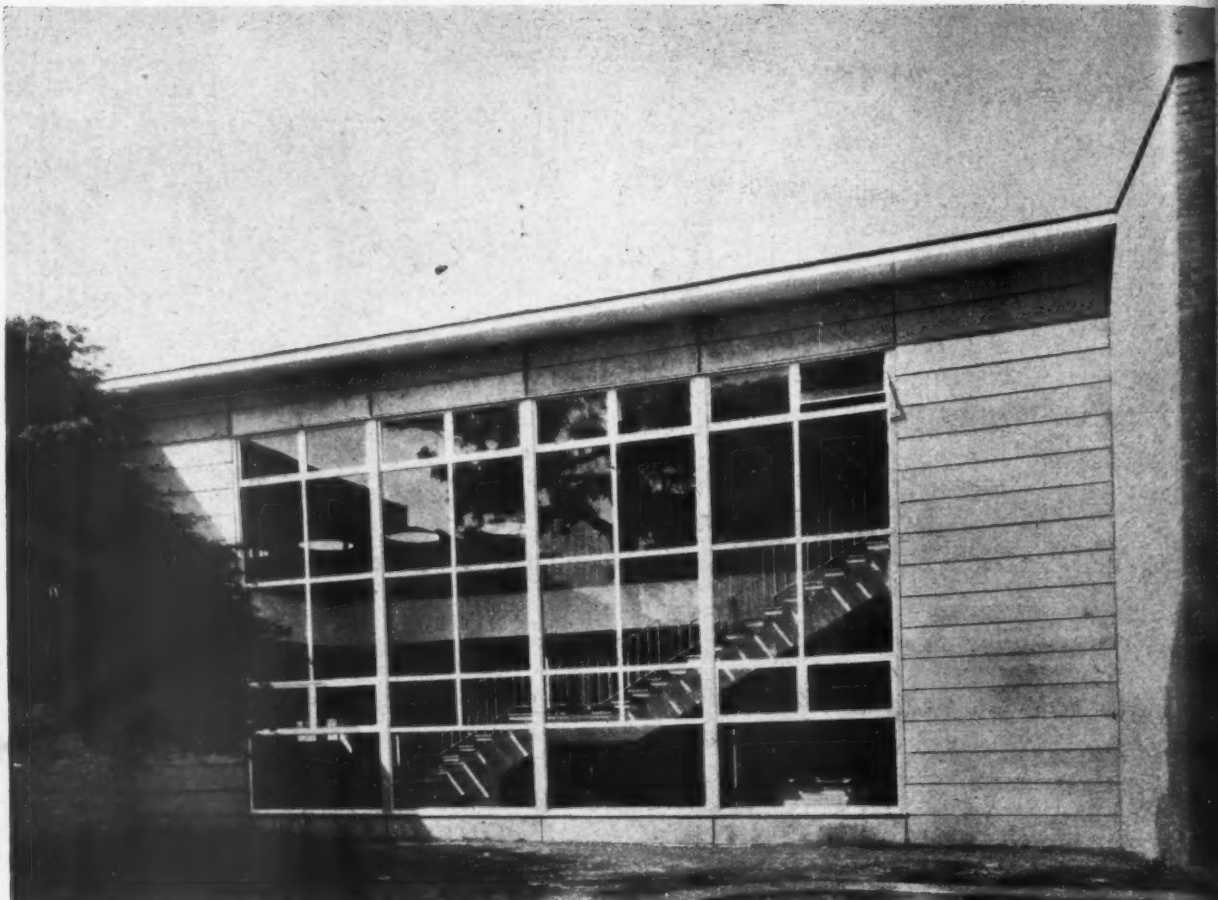


SECTION AT F

The entrance, assembly hall and green room block from the south.



BY YORKE, ROSENBERG AND MARDALL



*The main staircase and
foyer window from the east.*

[Text continued from page 254]

CONSTRUCTION.—The main construction consists of a light steel frame, with welded lattice beams and 6-in. by 6-in. broad flange R.S.Js., designed on a grid of 8 ft. 3 in. Precast concrete slabs are used for constructional flooring and roofs. The roof slabs are covered with three layers of bituminous roofing, laid on insulation boarding, with granite or marble chips as the final covering. The ceilings are wood wool, or fibreboard, placed immediately beneath the roof slabs on the first floor, and under the lattice beams on the ground floor.

The external walls, containing windows, have a 6-in. cavity with an outer cladding of concrete slabs and an inner lining of 3-in. breeze blocks. Flank walls not containing windows are of stock bricks.

INTERNAL FINISH.—*Floors*:—Teaching rooms and corridors: wood fibre composition block. Coat rooms: concrete tiling. Lava-

tories: terrazzo. Entrance hall and foyer: Hornton stone paving. *Walls*: the interior walls in the classrooms have glazed tiling up to cill height, 2 ft. 3 in., with plaster above that level, with cork board on one long wall for pinning up maps, etc. The back walls of each classroom are covered with fabric to protect them from marks caused by chairs. Otherwise the walls are generally finished with lime plaster, except in the lavatories which are tiled to cill height, and the ground floor corridor which has tiled panels on one side with cork board panels for notices, and fair-faced flint-lime bricks on the other. The metal and woodwork rooms have fair-face flint-lime brick walls and movable glazed metal partitions.

SERVICES.—*Electrical services*: These include, besides the normal lighting and power circuits, telephones, clocks and a remote control radio system. All cables are

copper sheathed and laid in heating pipes, ducts or direct in the floor screed. Classroom lighting is by metal reflectors, with opal diffusing bowls and metal angle reflectors for lighting the blackboard. *Heating*: Low-temperature copper coils embedded in the floor screed are heated by thermostatically controlled oil-fired boilers. In addition a higher temperature circuit heats the coat rooms, lavatories, workshops and administrative rooms. A partial air-conditioning system has been installed in the assembly hall, coat rooms and kitchen, foul air being extracted from these sections of the building by electric fans.

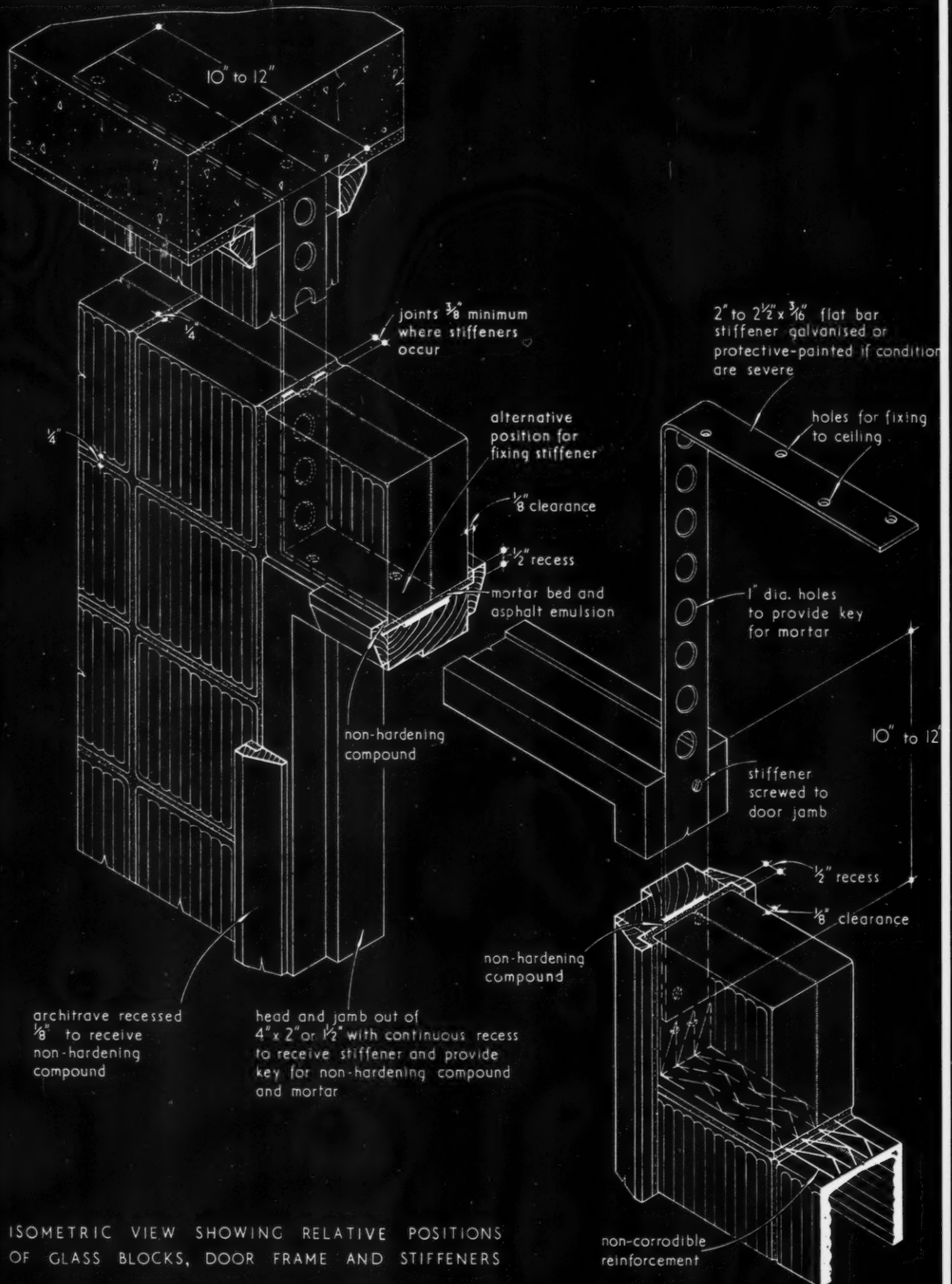
The assistants on the design and construction of the school at Stevenage were T. R. Evans, R. R. Tomalin, C. A. Kitchen and Miss P. Whiting.

The general contractors were Messrs. Gilbert Ash, Ltd. For list of sub-contractors, see page 239.

and
e east.

BUILDING BLOCKS | GLASS | APPLICATIONS**14.N7**

The Architects' Journal Library of Information Sheets 203. Editor: Cotterell Butler, A.R.I.B.A.



ISOMETRIC VIEW SHOWING RELATIVE POSITIONS OF GLASS BLOCKS, DOOR FRAME AND STIFFENERS

14.N7 DOORS AND WINDOWS FIXED IN • INSULIGHT • HOLLOW GLASS BLOCK INTERNAL PANELS

This Sheet describes the fixing of doors and windows in hollow glass block internal panels. Sheet 14.N8 describes the fixing of doors in external panels and Sheet 14.N9 deals with the fixing of windows in external panels. Sheet 14.M1 gives standard shapes and sizes of blocks together with tables of dimensions of openings to accommodate panels up to 20 ft. high or 20 ft. wide, and area not more than 120 ft. super. Sheets 14.N5 and 14.N6 describe the construction of internal panels using hollow glass blocks.

Construction

It is essential that the frames be rigidly connected to the main structure so that shocks caused by slamming and hard usage will not be transmitted to the surrounding glass block panels.

Doors: The overall width of the frame must be calculated as a multiple of blocks with allowance for joints. The height is adjustable at the skirting and the ceiling. Where the sides of the main structure are nearer to the door frame than the ceiling, horizontal stiffeners, preferably at head level, should be used.

Windows: The fixing of windows in internal glass block panels is similar to that for doors and the same principles should be followed.

Panel Sizes

Insulight hollow glass blocks are non-loadbearing units, and although they will carry their own weight safely up to a reasonable height it is necessary because of wind pressure and other stresses to put intermediate support in panels where the height is more than 20 ft., the width more than 20 ft. or the area more than 120 ft. super. These dimensions may be exceeded for internal panels in certain cases.

Fixing

Treatment at head and jambs: In all panels, the head and sides must be built free of the main structure—except for the reinforcement—to prevent panels being subjected to strains due to settlement, building load, or expansion. A $\frac{1}{2}$ in. clearance should be provided which must be kept free of mortar spillings, and filled with a non-hardening compound. Where intermediate support or structural dividing members are introduced into panels the glass blocks must be insulated by clearance joints. In external panels, recesses into which the head and sides are built free of the main structure must be provided, except where

the dimensions of the panel do not exceed 8 ft. high by 2 ft. wide, or 6 ft. high by 3 ft. wide. The recess should be $4\frac{1}{2}$ in. wide by 1 in. deep, allowing $\frac{1}{4}$ in. clearance and $\frac{1}{2}$ in. cover with $\frac{3}{8}$ in. play on either face; the $\frac{1}{2}$ in. clearance should be filled with a non-hardening compound to provide a weatherproof joint. In internal panels, rebate fixing is recommended: in certain cases butt fixing can be used.

Treatment at sill: Before the bottom course is laid, the sill should be coated with an asphalt emulsion or similar material, and the blocks then bedded with mortar as specified below, so as to allow for slight movement without disrupting the mortar bed and thereby preserving the weather-resistance of the panel.

Reinforcement: Reinforcing strips should be built into every third to every fifth course dependent on the size and position of the panel. The ends should pass through the clearance joint and be secured to the main structure. Such a material as "Exmet" $2\frac{1}{2}$ in. wide No. 20 gauge expanded metal has been found suitable for this purpose.

Bedding and pointing: As glass blocks are non-absorbent a fairly dry and fatty mortar should be used. A suitable mix is one part Portland cement, one part hydrated lime (preferably lime putty) and four parts of sand by volume. Clean builders' sand free from gravel (not sea sand) should be used. The face of the joints may be struck back and smoothed during erection. If coloured joints are required they may either be picked out in colour by painting after the mortar is thoroughly dry or raked out at the time of erection and later pointed with coloured cement. The pointing may be of any form or finish; a keyed joint formed with a curved jointing tool is the normal one.

Further Information

The Manufacturers maintain a Technical Research and Information Bureau which is available to answer questions and advise on technical problems dealing with this subject generally.

Compiled from information supplied by:

Pilkington Brothers Ltd.

Head Office: St. Helens, Lancashire.

Telephone: St. Helens 4001.

London Office: 63, Piccadilly, W.1.

Telephone: Regent 4281.

WALPAMUR OIL BOUND WATER PAINT : PAINTING SPECIFICATIONS FOR VARIOUS SURFACES

For the preparation of Walpamur and Petrifying Liquid (or water) mixes see the reverse of this Sheet.

Surface	Preparation	Treatment
New surfaces not dry: lime plaster, hardwall plaster, Portland cement rendering, brickwork.	Remove plaster nibs, efflorescence and all loose material.	1st coat: Walpamur thinned with water. 2nd coat: Walpamur thinned with water.
New surfaces dry and chemically neutral: lime plaster, hardwall plaster, Portland cement rendering, brickwork, masonry, rough cast mortar, asbestos-cement sheets.		1st coat: Walpamur thinned with Walpamur Petrifying Liquid. 2nd coat: Walpamur thinned with Walpamur Petrifying Liquid. If surface is very porous specify one coat Walpamur Primer and two coats Walpamur thinned with Walpamur Petrifying Liquid. If two-coat work on a porous surface is re- quired omit third coat and specify Walpamur Tinted Primer for 1st coat.
New surfaces dry but still alkaline: Portland cement rendering, asbestos-cement sheets.		1st coat: Alkali-resisting Primer. Allow to dry thoroughly. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 3rd coat: Walpamur thinned with Walpamur Petrify- ing Liquid.
New surfaces dry and chemically neutral: Keene's cement, Parian cement, fibrous plaster.		1st coat: Walpamur Primer. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 3rd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. On Keene's and Parian cement the Walpamur Primer should be reduced to a very thin consistency with turpentine (approximately 1 to 1½ pints turpentine to 1 gallon of Primer).
Water painted surfaces (all types) in bad condition.	Wash down with warm water. Scrape to remove loose material. Remove grease. Allow to dry. Glass-paper where flaking has occurred to merge edges and dust down.	1st coat: Walpamur Primer. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 3rd coat: Walpamur thinned with Walpamur Petrify- ing Liquid.
Water painted surfaces (all types) in good condition.	Wash down with warm water. Re- move grease. Allow to dry.	1st coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid.
Size-bound distempered or lime- washed surfaces (all types).	Scrape thoroughly and wash off with warm water to remove loose material. Remove grease. Allow to dry.	1st coat: Walpamur Primer. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 3rd coat: Walpamur thinned with Walpamur Petrify- ing Liquid.
Oil painted surfaces (all types) old and without elasticity.	Wash down with warm water and rub down wet. Remove grease. Allow to dry.	1st coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid.
Papered surfaces with paper firmly adhering. Colour of paper not likely to bleed.	Brush down to remove dust.	1st coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. If very absorbent, prime with Walpamur Tinted Primer and follow with one or two coats of Walpamur thinned as above.
Papered surfaces with paper firmly adhering. Colours liable to bleed, e.g., red, green, mica, gold, etc.	Brush down to remove dust. Treat bleeding colours with one thin coat Stop Tar Knotting No. 5075. Allow to harden.	1st coat: Walpamur Tinted Primer. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. If the whole of the surface is coated with Stop Tar Knotting omit Walpamur Primer and apply two coats of Walpamur thinned as above.
Woodwork and/or wallboards: unpainted.	Glass-paper to remove loose particles. Treat knots one coat No. 5014 genuine shellac knotting. Allow to harden.	1st coat: Walpamur Primer. 2nd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. 3rd coat: Walpamur thinned with Walpamur Petrify- ing Liquid. If two coats only are required omit third coat and specify Walpamur Tinted Primer for priming coat.

38.B1 WALPAMUR OIL BOUND WATER PAINT

This Sheet describes Walpamur Oil Bound Water Paint and ancillary materials and sets out in tabular form the appropriate specifications for treating a number of types of surface.

General

Walpamur Oil Bound Water Paint is prepared for use by thinning with Walpamur Petrifying Liquid or water. Correctly thinned and applied it produces a smooth matt finish, which is hygienic, durable and fire-retarding. Walpamur is generally used for interior work but a special quality is made in suitable colours for exterior use. Exterior quality Walpamur must be specified to be thinned with Walpamur Petrifying Liquid. It should not be applied during damp or frosty weather.

Materials

Walpamur: The basic material, in paste form, is supplied in a wide range of colours all of which are intermixable. It should be protected from frost and extreme heat during storage.

Walpamur Petrifying Liquid: Used as a thinner for Walpamur this liquid adds to its durability and tends to improve its appearance by checking surface porosity. It also increases smoothness of working and thus enables greater spreading capacity to be obtained than when thinned with water. Walpamur Petrifying Liquid is intended only as a thinner for Walpamur and not as a preparatory or priming coat to be used alone.

Walpamur Primer: This is a specially prepared oil medium possessing properties which enable it to penetrate porous surfaces and seal loosely bound particles remaining after removal of lime-wash, size-bound distempers, etc. It stops surface porosity and provides a satisfactory foundation for Walpamur.

It is supplied in transparent form and also in a range of tints suitable for use with standard tints of Walpamur.

Walpamur Stainers: These are manufactured for producing special tints which cannot conveniently be obtained by intermixing standard tints of Walpamur. No other form of stainer should be used. These stainers possess powerful staining properties and can be used alone for decorative work, such as picking out, stencilling, etc.

Preparation and Application

Brushing: Coats should be liberally applied and laid off evenly; a 7 in. flat distemper brush is most suitable for general use. At least 24 hours should be allowed between coats. The Walpamur paste should be

thinned slowly with Petrifying Liquid or water in the following approximate proportions (overthinning should be avoided):—

2½ gallons Walpamur Petrifying Liquid to 1 cwt. Walpamur, or 1½ gallons water to 1 cwt. Walpamur.

Spraying: Coats should be liberally applied, and the first coat allowed to dry before the next is applied. The Walpamur paste should be thinned slowly with Petrifying Liquid or water in the following approximate proportions (avoiding overthinning):—

3 to 3½ gallons Walpamur Petrifying Liquid to 1 cwt. Walpamur, or 2 to 2½ gallons of water to 1 cwt. Walpamur.

Stippling: For general work, Walpamur does not require stippling but the finishing coat may be so treated if desired.

On no account should any surface be sized prior to the application of Walpamur.

Spreading capacity: On normal smooth surfaces 1 cwt. of Walpamur thinned with Walpamur Petrifying Liquid will cover approximately 350 sq. yards, in two coats, by brushing process. Considerable porosity or roughness of surface naturally decreases the spreading capacity.

Further Information

The manufacturers maintain an Advisory Department which is available for advice on technical problems relating to paints and painting and the preparation of specifications and colour schemes. "Paint Specifications," a booklet containing fully detailed specifications and useful technical information is available from the manufacturers.

Compiled from information supplied by:

The Walpamur Company, Ltd.

Head Office, Works and Advisory Department: Darwen, Lancs.

Telephone: Darwen 662.

London Office: 125, High Holborn, London, W.C.1.

Telephone: Holborn 4615.

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

TECHNICAL SECTION

MIXED METALS

One of the most serious objections to the use of metals is the danger of corrosion. There are a number of broad categories into which corrosion problems can be divided, such as atmospheric corrosion, chemical attack when metals are in contact with certain other materials in the presence of moisture, and other such obvious examples as liquids or gases from trade processes. A little more obscure is the type of corrosion which sometimes occurs from galvanic action when two different metals are in contact.

This galvanic action can occur in many ways in buildings, as, for example, in the mixing of metals for flashings, gutters and rainwater pipes but one of the most frequent sources of trouble is in small heating and hot water systems such as normally occur in domestic work.

As the reasons for corrosion of this type have not always been very clearly understood it is useful to note that Building Research Station Digest No. 8* explains clearly the results of investigations into this subject by the British Non-Ferrous Metals Research Association.

It is clear that the most common defect is the corrosion of galvanized steel hot water tanks and that this occurs chiefly where they are fed by copper pipes or copper boilers. The formation of scale from hard waters may be sufficient to give protection, and this accounts for the rather mystifying variability of attack in some districts. The temperature of the water affects the rate of corrosion as also does the type of water supply. The BRS note elucidates all these variable factors but having done so, makes it fairly obvious that, in general, it is wise either to construct the whole system in copper or, alternatively, to have it all in galvanized steel with a cast-iron boiler. Which of these alternatives is to be chosen must depend upon the characteristics of the local water supply and advice should usually be obtained from the supply company.

Failures of a similar kind are less common in cold water cisterns but they do sometimes occur and the BRS Digest also refers to these.

The whole note makes a brief and clear statement of immediate and direct practical interest to architects and builders and is an excellent example of the boiling down of facts resulting from a considerable period of detailed research and investigation.

* The use of Copper and Galvanized Steel in the same Hot Water System. See Information Centre 12.36.

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.

4.52 planning: urban and rural

PLANNING, EAST BENGAL

Review of First Year's Progress in Civic Planning: East Bengal, Pakistan. E. C. Hicks. (The Author, Government of East Bengal, Dacca, Pakistan. 1949.)

Duplicated typescript accompanied by maps and diagrams. Notes on preparatory planning work under difficult conditions owing to absence of accurate maps and lack of qualified planning staff. Description of tentative planning schemes for Dacca, Pakistan.

The author, who is consulting architect and town planner to the Government of East Bengal at Dacca, begins his review of planning activities with a description of the administrative background. His planning department was set up in February, 1948, as a sub-division of the Department of Architecture, Communications, Buildings and Irrigation of the Government of East Bengal. The staff consisted of two Muslim valuers acting as planning officers and recruited from the Calcutta Improvement Trust, some junior draughtsmen, and office boys. A planning sub-committee was formed to act as the co-ordinating body.

The initial planning programme included the selection of sites in Dacca for the housing of government clerical staff, for industrial development to an extent of about 500 acres, and for the provision of commercial and business premises. Proposals for the location of these sites had to be submitted within 3½ weeks. They were based on a study of existing land-ownership maps which had been compiled 35 years ago, and were presented in the form of a new map showing land utilization together with land-ownership. A skeleton replanning scheme was then submitted to the planning committee which involved 30 square miles of development. It included proposals for trunk and secondary roads, railway diversions and new stations, aerodrome development, zones for heavy, medium and light industries and for business, commercial and administrative areas, open spaces, residential areas, and, lastly, for land resettlement areas and those land areas where building operations were to be prohibited owing to monsoon flooding.

The author's report contains detailed explanatory remarks concerning the background to the planning proposals and the actual progress of work. An aerial survey of Dacca is being carried out in order to have accurate data for the final master plan. In the meantime, tentative development plans for various areas have been worked out, mostly to a scale of 66 feet to an inch. These developments are all confined to rural areas outside the Dacca municipal boundaries, as 23 per cent. of the town is subject to flooding, as it has an existing density of 300 persons to the acre and no public open spaces. Residential, industrial and business sites, as well as new public buildings, are all to be laid out on uncultivated rural land, the policy being not to demolish a single permanent building for reasons of compensation and lack of accommodation.

Work on three of the development projects has already started. They concern an industrial area, a housing estate for private citizens, and a commercial and business area. An illustrated description of these schemes and their progress is provided.

Other work undertaken by the planning department includes re-drafting of building bye-laws, the preparation of new legislative measures, and the formation of an Improvement Trust.

Finally, the author draws attention to the serious problem of shortage of trained planning staff and refers to the necessity to accept offers for qualified assistance from France, Belgium and Italy unless local advertisements for staff meet soon with sufficient response.

In addition to the illustrations already noted, the report contains a chart comparing the time taken in the preparation of plans in East Bengal with that in England. The progress over 18 months, in spite of all the difficulties encountered, is remarkable.

11.17 materials: general

ADDENDUM TO BS HANDBOOK

BS for Building Materials and Components for Housing. P.D.905. Addendum No. 2, 1949, to BS Handbook No. 3, 1947. (British Standards Institution. 5s.)

Summaries of 25 new BS's and 18 revisions. Supersedes Addendum No. 1 and with the original Handbook gives all essential information for day-to-day purposes of 265 BS's current on December 31, 1948.

This addendum together with Handbook No. 3 (which is still available at British Standards Institution, price 21s.) is essential to all architects who are not subscribers to the Institute but wish to keep abreast with recent developments. They provide at a moderate price a valuable and convenient source of reference.

Although the selection of the specifications was made primarily for housing, the majority apply equally to other building types. For example, this addendum includes summaries of new BS's for pitch mastic flooring and coloured pitch mastic flooring (1450:48 and 1375:47 respectively), similarly plain and coloured mastic asphalt flooring (1410:47 and 1451:47), also metal lathing (1369:47), copper tubes for underground use (1386:47), steel tubulars (1387:47) and metal window sub-frames, etc. (1422:48).

Rainwater goods of aluminium are included (1430:47) and of wrought copper and zinc (1431:48). Of the revisions 381C/48 gives the latest colour range for ready mixed paints but unlike the Handbook the actual tints are not shown. This is unfortunate as the full BS is out of print until October.

12.36 materials: metal

CORROSION OF HOT WATER TANKS

The Use of Copper and Galvanized Steel in

the same Hot Water System. (Building Research Station Digest No. 8, 1949.)

Brief but complete explanation of dangers of corrosion in hot water systems where copper and galvanized steel are used in conjunction.

This Digest gives an excellent analysis of the causes of corrosion failure in hot water systems, and especially in storage tanks, resulting from the mixture of copper and galvanized iron.

Certain types of water dissolve minute amounts of copper. Some of the copper is then deposited on the zinc when electrolytic action takes place causing very rapid attack on the zinc.

In practice a number of factors affect the rate of attack and the Digest explains these clearly. The conclusion reached is that it is rarely safe to mix copper and zinc in the same hot water system. Attack in cold water systems is comparatively rare but the cold cistern sometimes suffers if a hot water overflow is incorrectly placed.

The Digest is a most useful explanation of a rather obscure but all too common defect in buildings, especially domestic buildings.

13.45 materials: timber

MOULDING PLYWOOD

The Moulding of Plywood. W. Nichols. (Timber News, June, 1949, pp. 245-7.)

Description of methods of moulding wood veneers to shapes of composite curvature, including construction of moulds, application of heat and pressure and types of adhesive.

Veneers may be from 0.01 to 0.05 inches thick and may be moulded by application in strips, each layer at right angles to the next, to a radius not greater than 75 to 80 times the thickness of veneer.

14.25 materials: concrete

CONCRETE PUMP

New Concrete Pump. (Building Digest, Aug., 1949.)

Description, with photographs, of portable two speed heavy duty Blow Knox Concrete Pump. Capacity, 15/20 cu. yards per hour. Range up to 1,000 ft. horizontally or 100 ft. vertically.

16.52 materials: miscellaneous

REINFORCED BRICK BEAMS

Danish Mass-production of Prestressed Steel-reinforced Brick Units. (Building Digest, June, 1949, p. 205.)

Illustrated note on development of shallow reinforced brick beams or "planks."

These are manufactured out of brick-like blocks, 2½ in. deep containing channels in the upper part. These are laid end to end and prestressed reinforcing wires are grouted in the channels. Various lengths and widths are possible. "Planks" are used as lintols, permanent shuttering for concrete floors, etc., and as roof units.

17.62 construction: general

BUILDING ENCYCLOPEDIA

The Building Encyclopedia. Third revised and enlarged edition in 4 volumes. (The Waverly Book Company, Ltd., London, 1949. £7.)

A handbook of modern building practice for the working builder.

The Building Encyclopedia aims at presenting to the working builder a comprehensive but concise account of and guide to all his general activities.

HOPE'S *Steel* DOOR FRAMES *now being supplied to:*



CITY OF BIRMINGHAM CORPORATION
BIDDULPH URBAN DISTRICT COUNCIL
CITY OF EXETER CORPORATION
CITY OF GLASGOW CORPORATION
CITY OF LIVERPOOL CORPORATION
CITY OF PLYMOUTH CORPORATION
HARROGATE CORPORATION
MIDDLESEX COUNTY COUNCIL
NORTHAMPTON RURAL DISTRICT COUNCIL
STAFFORDSHIRE COUNTY COUNCIL
THINGOE RURAL DISTRICT COUNCIL
WEST LANCASHIRE RURAL DISTRICT COUNCIL
WILLENHALL URBAN DISTRICT COUNCIL
COUNTY BOROUGH OF HASTINGS
DURHAM RURAL DISTRICT COUNCIL
NIDDERDALE RURAL DISTRICT COUNCIL
STOKE-ON-TRENT CITY & COUNTY BOROUGH
SCOTTISH SPECIAL HOUSING ASSOCIATION
ST. PANCRAS METROPOLITAN BOROUGH
ENFIELD URBAN DISTRICT COUNCIL
WATFORD RURAL DISTRICT COUNCIL
WALTHAMSTOW MUNICIPAL CORPORATION
BLAYDON URBAN DISTRICT COUNCIL
WEDNESBURY MUNICIPAL CORPORATION
SWAFFHAM RURAL DISTRICT COUNCIL
CITY OF BRISTOL CORPORATION
CITY OF SOUTHAMPTON CORPORATION

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

HILLS LANTERN LIGHTS



LET IN NATURAL LIGHT and reduce electricity costs

“OVERHEADS” become assets when Hills Lantern Lights are installed in flat roofed buildings. Hills Lantern Lights are scientifically designed to provide maximum benefits of natural lighting, and controlled ventilation. Installation is simple and cost is quickly recovered by the saving in artificial lighting. Available in a wide range of standard sizes, or made to specific dimensions. All exposed steelwork can be rust-proofed by hot dip galvanising.

Our Technical experts are at your service on all lighting and ventilating problems. Architects, Builders and Factory Maintenance Managers are invited to write for fully descriptive literature.

HILLS [WEST BROMWICH]
LIMITED

ALBION ROAD · WEST BROMWICH · STAFFS · Telephone: WEST BROMWICH 1025 [7 lines]

LONDON OFFICE: 125, HIGH HOLBORN, W.C.1 Telephone: HOLBORN 8005-6

The great demand for this type of publication is demonstrated by the fact that the Encyclopedia appears now in its third edition, the second war-time edition having gone rapidly out of print. The third edition, which has been thoroughly revised and enlarged, comprises over 1,576 pages with over 3,700 illustrations. The list of contributors contains 67 names.

The standard of the contributions is not at an even level. Some of the articles, mainly those relating to legal questions (by the late W. T. Creswell) and to traditional building materials and methods are very well written, whereas materials of more recent origin, such as steel and concrete, have not been treated in an adequate manner. More recent developments, like prestressed concrete, are ignored, and welding, although described in a short contribution, is not shown in any practical application. The rigidity of welded joints is enumerated among the "disadvantages" of welding. The short article on lightweight concrete does not give a proper picture of the manifold applications of this material and does not contain any cross reference to foamed slag concrete. The arrangement of reinforcement as shown in Fig. 17 on p. 335 and Fig. 35 on p. 680 is bad practice which cannot be excused by the fact that it is frequently adopted.

Some of the theoretical articles are rather confusing. While on p. 1,346 it is correctly stated that "strain is measured by the ratio of the augmentation of length to the original length" (i.e., in. per in.), on p. 1,353 a numerical example is worked out in which the term "strain" is used for "increase in length," i.e., measured in in. On p. 336 the working stress of the reinforcement is referred to as "tensile strength of the steel." All examples are based on a working stress in the steel of 16,000 lb./sq. in. (p. 334-336) although the LCC By-Laws 1937 (p. 993G) allow 18,000 lb./sq. in. In the article headed "frame or truss" a rigid frame is described as an "incomplete" frame because "the frame would tend to collapse under any unusual system of loading." It is strange to read about a certain type of precast concrete floor that its cost "may be generally considered prohibitive except where virtually necessary in big work."

Inaccuracies are not confined to "modern" materials, e.g., Durham Cathedral is quoted as characteristic of the Early English style (p. 68).

Similar examples could be quoted in abundance. The principle that "proprietary articles are not mentioned by name in the text" is often unnecessarily violated. Although the Encyclopedia is addressed to the craftsman and not to the specialist and designed for general reference only, not for advanced information, precision in the text is a fundamental requirement.

It is a pity that this comprehensive work, containing a vast amount of useful information and many excellent illustrations, is marred by a number of misleading and inaccurate articles and that it lags far behind technical development.

20.141 construction: complete structures HYPERBOLIC-PARABOLOID CONCRETE ROOFS

Hyperbolic-Paraboloid Concrete Roofs in Czechoslovakia. K. Hruban. (Concrete and Constructional Eng., Aug., 1949, pp. 247-251.)

Reinforced concrete hyperbolic-paraboloid thin-slab vault roofs.

In the past five years more than 400,000 sq. ft. of factory floors in Czechoslovakia have been covered by reinforced concrete hyperbolic-paraboloid thin-slab vault roofs. The thickness of the curved slab does not exceed 2½ in.

The article describes a building of 197 ft. width and 900 ft. length divided into three bays of 67 ft. 8 in. The columns are at intervals of 16 ft. 5 in., and the interior columns support reinforced concrete beams carrying crane rails. The total weight of high-tensile steel is 3.65 lb. per sq. ft. of floor area. The roof comprises a number of shallow troughed elements spanning each bay as parabolic arches. The middle surface of each element is a part of the surface of a hyperbolic paraboloid, with the crown at the middle of the span and the axis vertical. The springing lines of the troughed elements are parabolic curves concave upwards. The horizontal reactions are resisted by reinforced concrete ties, supported by hangars, at the eaves. On the extrados, the edges of adjacent elements are thickened to form arched ribs. The soffit of the roof is a series of curved surfaces unbroken by ribs, but the ties and hangars project below the roof. The shuttering for the soffit is more complicated than that required for a

cylindrical vault. Roof lights are provided between the elements, and asphalt cork slabs are laid on the slab to provide thermal insulation; the cork slabs are later covered with waterproof paper. The building is divided by transverse expansion joints into nine parts each about 100 ft. long, and the joints extend through the roof and columns.

The article also describes north light roofs composed of precast hyperbolic-paraboloid elements of 1½ in. thickness.

20.142 construction: complete structures PRESTRESSED CONCRETE

The Variety of Applications of Prestressed Concrete. M. Lalonde. Translated from the French and issued as No. 7 of the CACA Library. (Cement and Concrete Association.)

Description of applications of the Freyssinet system already referred to in Inf. Centre. (See 20.119:14.4.49.) Now available in English.

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

3000 RIGHT OF LIGHT

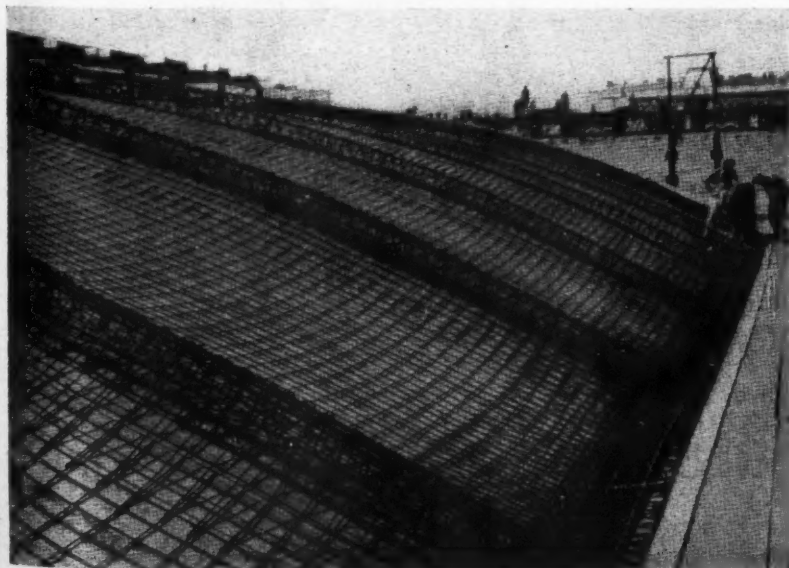
Q A client of mine, who has a chemist's shop which is one of a terrace built about thirteen years ago, built an addition to his living accommodation on the ground floor only some three years ago. A few months back he had plans prepared, submitted to the local Council, and approved, for a further addition on the first floor above the original extension.

Before starting work he received an objection from his neighbour that the proposed addition would block the light to his windows on the ground and first floors, and he was threatened with legal action if he proceeded with his proposals. He approached a solicitor and could get no definite advice, save that it would be best to get the written agreement of his neighbour to the proposals. This, of course, is impossible.

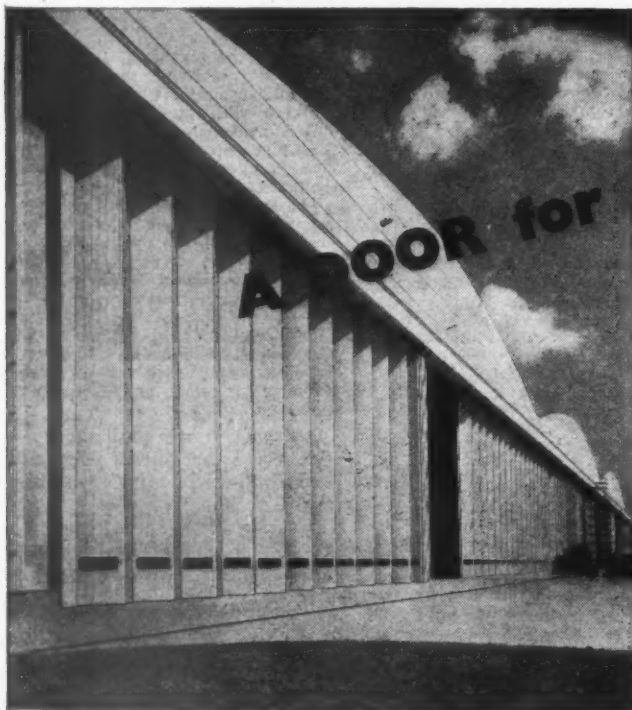
I presume that the neighbour is claiming ancient lights for his windows, but believe that the windows must have had twenty-one years' uninterrupted light before this can be claimed. As the property has been built only thirteen years, I maintain that my client will be in order to proceed with the work, despite his neighbour's threats. Is this so?

A It takes twenty years' uninterrupted enjoyment of light to a window in order to acquire a right to light, and as it is stated that the neighbour's windows have only been in existence thirteen years, they have not, therefore, acquired any rights of light. The proposed extension of the chemist's premises could not be prevented on this ground.

It is stated that the houses are terrace houses, and it would be advisable to examine the deeds of the property so as to be certain that there are no restrictions which would prevent the proposed extension. This would be quite apart from the position under rights of lights.



Reinforcement in slabs and ribs of hyperbolic-paraboloid concrete roofs. See 20.141.



A DOOR for the BRABAZON

The largest door Man has yet built... 200 tons of it, 25 feet longer than "The Queen Mary" 65 feet 9 inches high, with each of its three sections opening centrally or from either end at 80 feet a minute. It is the door of the vast new hangar for the Bristol 'Brabazon'. Such a supreme feat of design typifies the adaptability of Esavian engineers and the Esavian principle of slide and fold... a principle that has proved its complete success for a hundred uses, from schoolroom partitions to 'bus garage doors'. Your own 'closure' problem may not call for a door larger than an Atlantic liner but it does call for a talk with Esavian.

Architect:—Eric Ross, A.R.I.B.A.

Consulting Engineers:—Brian Colquhoun & Partners.

Aluminium alloy Extrusions, castings and sheet by Northern Aluminium Co., Ltd.

ESAVIAN
LIMITED

181 High Holborn, London, W.C.1 Tel: Holborn 9116.
101 Wellington Street, Glasgow, C.2. Tel: Central 2369



PRINCIPLE

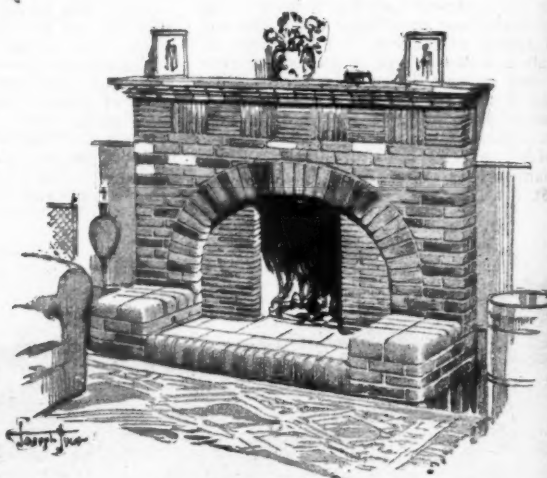
FOR DOORS, WINDOWS, PARTITIONS & FOLDING SCREENS

WPD/43A

A Special Service for Architects

In addition to supplying a wide range of Old English Fireplaces, Claygate will execute individual orders to clients' own specifications.

An experienced staff is maintained solely for this purpose, and designs will be faithfully reproduced, with all the skill and attention to detail for which Claygate is famous.



★ The latest catalogue of original Claygate designs for fireplaces is profusely illustrated and contains all essential information for architects. A copy will be sent post free on request. Quotations for special designs readily supplied.

Claygate Old English Fireplaces

CLAYGATE FIREPLACES LTD., 7, CLAYGATE, SURREY
SCOTTISH WORKS: BARRIE ROAD, HILLINGTON, GLASGOW, S.W.2.

This feature covers both the production and marketing of new materials and designs of equipment, as well as the general trend of developments within the Building Industry.

THE INDUSTRY

By Brian Grant

PLASTIC FLOOR TILES

New plastic floor tiles made with a p.v.c. base are now being produced by De La Rue Floors and Furnishings at their Tyne-mouth factory, and the marketing and laying of the tiles is in the hands of Semtex Ltd.

The tiles are flexible, 9 in. square and $\frac{1}{4}$ in. thick, and are available, plain and mottled, in cream, buff, black, dark blue, mid-red, grey and green. They are resilient and have a remarkable recovery from all marks and dents. By virtue of the special materials used in their manufacture, and of the careful attention paid to dimensional stability, they have almost unlimited resistance to wear; they will not support combustion, have virtually no water-absorption, and are impervious to

acids, oils, alkalis and alcohol. Price, laid, in areas of between 200 and 300 square yards, and within ten miles of the many Semtex depots, is 37s. 6d. to 40s. a yard. (De La Rue Floors and Furnishings, Ltd., 84, Regent Street, London, W.1, and Semtex Ltd., 185, Finchley Road, London, N.W.3.)

SOCKETS FOR RING MAINS

Reference has been made from time to time in these notes to the post-war method of wiring with a ring main circuit feeding a series of 13 amp. (3 kilowatt) sockets, all of which must be fitted with fused plugs. The appropriate B.S.S. (No. 1363/1947) relates solely to a fused plug and sunk-type socket for mounting, in the appropriate iron or steel box, in a main wired in conduit. A demand has arisen, however, for variations of the basic socket, and, to supply the needs of architects and wiring contractors who want something different, Sanders of Wednesbury have introduced a surface socket and also a switched version for the sunk mounting type (B.S.S. 1363 is for sockets which are not switched) both of which are for use with the fused plug demanded in the specification. The switch is of the slow make-and-break type suitable only for A.C. supplies, and can be accommodated in the standard (B.S. 1299 or 1361) sunk box. The surface socket is, of course, primarily intended for old installations which are to be re-wired with a ring main circuit.

Both these developments seem logical enough, and it is conceivable that B.S. 1363 may be revised to allow for sundry variations of this kind; at the moment,



A socket with switch for ring mains, made by Sanders of Wednesbury.

however, these sockets can only be described as complying to the specification so far as it is applicable. (William Sanders & Co. (Wednesbury), Ltd., Falcon Electrical Works, Wednesbury, Staffs.)

UNIT FURNITURE

The illustration on this page shows a typical example of the sort of unit which can be built up from Fisher and Ludlow's new Flowstyle steel equipment.

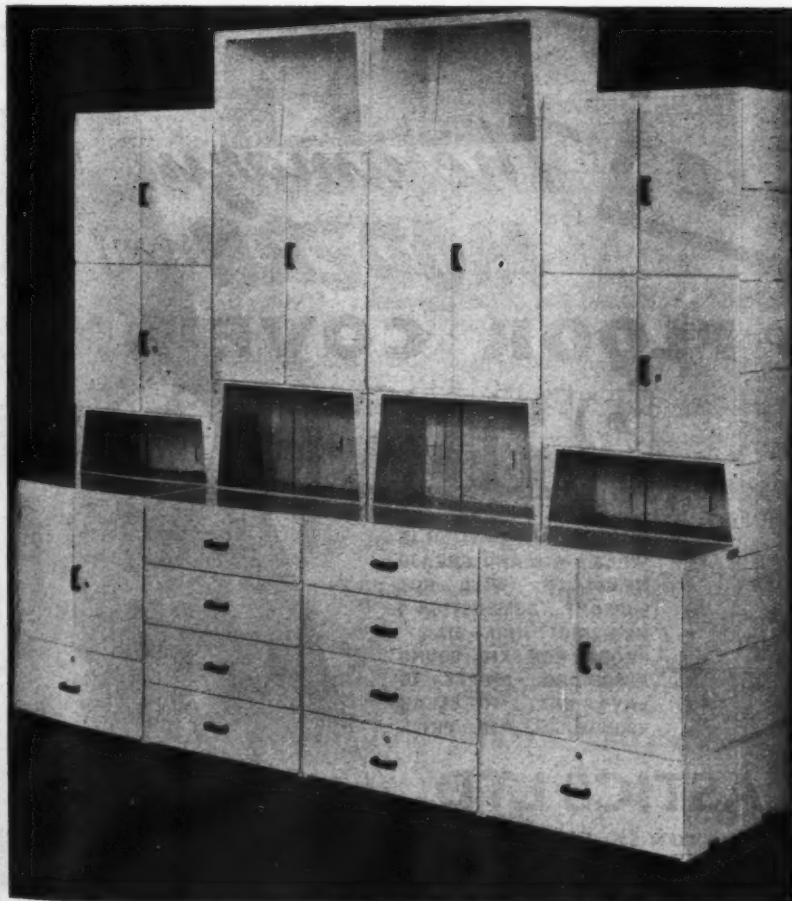
A great variety of desks, tables, cabinets, cupboards, lockers, shelving units, bookcases, shop counters, display cabinets, chests of drawers, stools and so on can be rapidly assembled from multiples of a simple shelf unit with the addition of special components according to the purpose of the furniture.

For example, stacks of shelves fitted with glass panels and glass doors make up into a series of display cabinets for high class store fitting. Libraries are offered open shelves, together with glass doors with locks for special sections, with the opportunity of using drawers or cupboards in any sections required. Counter assemblies with doors, drawers and glass or metal panels can be arranged with knee-hole spacings permitting assistants to sit. There is a range of work tops for counters of any length, and these are obtainable in stove enamel finish or covered with linoleum, plastic, glass or other suitable materials. There are tops in similar finishes for desks and tables. There are sets of drawers supplied complete with runners and ties for easy assembly within a shelf unit. These and other components, such as leg units for tables or single pedestal desks, make a versatile set of furniture units and further components are being developed.

Practically every requirement for office furniture is covered, and the system allows combinations of files, books, etc., in complete assemblies instead of scattered units. For schools, the addition of special drawers (four per set) meets the requirements for individual storage for each pupil, and as all items are interchangeable it is possible to introduce a wide range of different colours so that the youngest pupils can identify their own.

The units are constructed from high-grade steel sheet, and components are bonderized before painting to ensure a rustproof finish and are stove-enamelled in a wide choice of colours.

As all the interlocking units are fixed together by means of insert clips, every assembly becomes a firm structure which can be moved, if required, *en bloc*. (Fisher & Ludlow Ltd., Bordesley Works, Birmingham, 12.)



A typical example of a cupboard unit built up from Fisher and Ludlow's new Flowstyle steel equipment.

PRICES

This regular feature, prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors, summarises basic prices for materials and gives labour rates for the London District and Grade Classifications outside London. Detail prices of materials are given quarterly.

BASIC MATERIALS	BASIC PRICES AND RATES OF WAGES, 1949					
	Mar.	Apr.	May	June	July	Aug.
Portland cement (6 tons and over) per ton	60/6	60/6	60/6	60/6	60/6	60/6
Paper bags	11/-	11/-	11/-	11/-	11/-	11/-
2-in. unscreened ballast per yd. cu.	14/5	14/5	14/5	14/5	14/5	15/5
Fletton bricks per 1,000	85/-	85/-	85/-	85/-	85/-	85/-
Stoneware drain pipes (British Standard, 2 tons and over). Standard List +	42½%	42½%	42½%	42½%	42½%	42½%
Roofing tiles (ex works) per 1,000	189/-	189/-	189/-	189/-	189/-	189/-
Steel joists (basic sections ex mills) per ton	£17 16s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.	£20 3s. 6d.
Grey or white hydrated lime (inc. bags) ..	—	—	89/6	89/6	89/6	89/6
Sheet lead (5 cwt.-1 ton lots)	£142 10s.	£124 10s.	£112 5s.	£99	£99	£104 15s.
Iron rainwater goods and soil pipes	—	—	—	—	—	—
White lead paint List 3100 AB + per gallon	70% 48/3	71½% 46/3	71½% 43/6	72½% 41/6	72½% 41/6	72½% 43/6
RATES OF WAGES (LONDON)—						
Within 12 miles radius						
Craftsmen per hour	2/11½	2/11½	2/11½	2/11½	2/11½	2/11½
Labourers	2/4½	2/4½	2/4½	2/4½	2/4½	2/4½
From 12 to 15 miles radius						
Craftsmen	2/11	2/11	2/11	2/11	2/11	2/11
Labourers	2/4	2/4	2/4	2/4	2/4	2/4

Prices of materials above include for delivery to site in the Central London Area, and the rates of wages are for London only.

Current rates of wages outside London are as follows: Liverpool and District, Craftsmen, 2/11½; Labourers, 2/4½.

GRADE CLASSIFICATIONS

	A	A ¹	A ²	A ³
Craftsmen	2/10	2/9½	2/9	2/8½
Labourers	2/3½	2/3	2/2½	2/2

T. A. Davis

F.R.I.C.S., F.I.Arb.

NOW AVAILABLE The amazing **MODERN** TESTED **FLOOR COVERING** **PHENCO**

This new floor covering has been subjected to searching tests and has been found capable of withstanding the most severe wear placed upon it. PHENCO on floors will ensure a hard wearing trouble-free covering at an economical price.

Available in 12 yard Rolls, 36 ins. wide, 3/32 ins. thick, or in tiles 12 ins. x 12 ins. x 1/8 in. thick, in an attractive range of Plain and Marbled colours.

Order NOW for immediate delivery

ORDERS AND ENQUIRIES TO:

SEE OUR
EXHIBIT AT

THE BUILDING CENTRE

USE THE



9 CONDUIT STREET W1

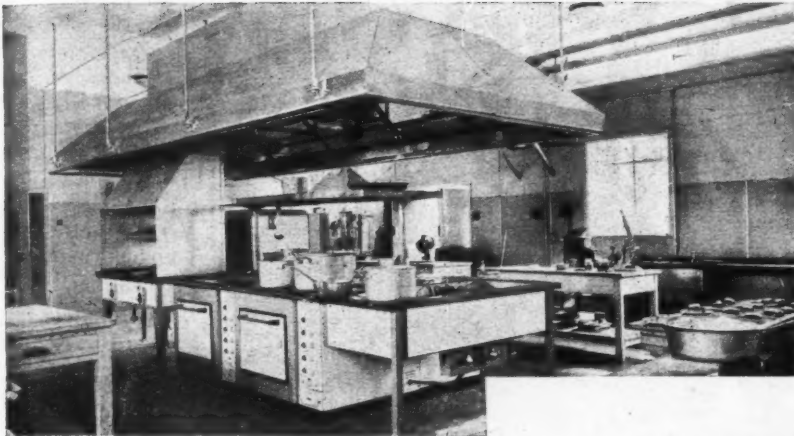
G. R. L. PLASTICS LTD.

5-8 ST. ERMIN'S (West Side), CAXTON ST., LONDON, S.W.1

Phone: WHitehall 1878-9

Grams: ELGARCON, SOWEST, LONDON

**DURABLE AND LASTING IN
WEAR: OIL AND GREASE
RESISTANT: WILL NOT
SUPPORT COMBUSTION:
HYGIENIC AND DAMP
PROOF: NON-SKID: SOUND
ABSORBING: SIMPLE TO
LAY: EASY TO CLEAN
ECONOMICAL IN PRICE**



Left: All-electric kitchen equipment at Messrs. Britannic Electric Cable and Construction Co. Ltd., Iwer.

Below are views of some of the gas and steam] equipment of British Nylon Spinners Ltd., new factory at Pontypool. Sir Percy Thomas, P.P.R.I.B.A., Architect.

Diversity in Cooking Appliances

The illustrations show a variety of Benham kitchen fittings, including a "Heavy Duty" central electric range, steam and gas heated bain-maries, electric and gas fish fryers, steam boiling pans, gas grills, gas pastry



ovens and gas roasting ovens. For economy of production certain gas and electric fittings—pastry ovens, for example—have similarity of details, but in other respects design of these fittings is special for each fuel. Attention is drawn to our specialist kitchen planning service and to facilities at our works for manufacture of wooden kitchen joinery of all descriptions, stainless steel tables and sinks, and vitreous enamelling.

SERVICE to Architects

Manufacture of gas, electric, steam, oil and solid fuel Cooking Appliances. "Hercules" steam and gas heated Dishwashing Machines.

Manufacture of Sinks, Drainers and Tables in stainless steel and timber. Kitchen joinery.

KITCHEN PLANNING

KITCHEN VENTILATION

HEATING & VENTILATION

AIR CONDITIONING*

*In hand: New House of Commons air conditioning apparatus.

Benham & Sons Ltd., 66 Wigmore St.,

London, W.1 Tel.: Welbeck 9253 (12 lines)

BOURNEMOUTH, BRIGHTON, BIRMINGHAM, CARDIFF,
MANCHESTER, GLASGOW, DUBLIN, JOHANNESBURG



Right on time

STYLES
(CONTRACTORS) LTD.
9, QUEENS ROAD, WIMBLEDON, LONDON, S.W.19.
Telephone WIMBLEDON 7187

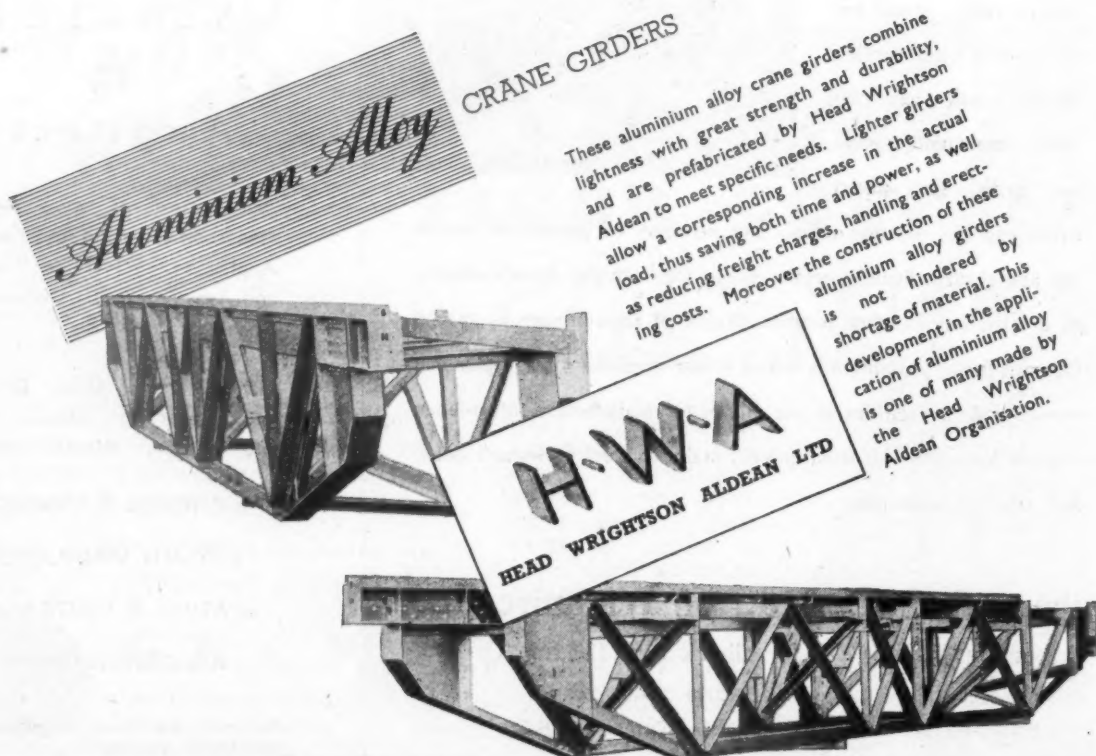
HOUSING
SCHEMES

WAR DAMAGE
REBUILDING

FACTORIES

SCHOOLS
ETC.

A R A W L I N G S B R O S C O M P A N Y



Aluminium Alloy

CRANE GIRDERS

These aluminium alloy crane girders combine lightness with great strength and durability, and are prefabricated by Head Wrightson Aldean to meet specific needs. Lighter girders allow a corresponding increase in the actual load, thus saving both time and power, as well as reducing freight charges, handling and erecting costs. Moreover the construction of these aluminium alloy girders is not hindered by shortage of material. This development in the application of aluminium alloy is one of many made by the Head Wrightson Aldean Organisation.

H-W-A
HEAD WRIGHTSON ALDEAN LTD

HEAD WRIGHTSON ALDEAN LTD., 61 WINDSOR ROAD, SLOUGH, BUCKS. Telephone : SLOUGH 2216

THE FLOOR GUARANTEED TO GIVE GOOD AND LASTING WEAR

- ★ Hard Wearing yet Pliant
- ★ Insulating and Comfortable
- ★ Waterproof and Washable
- ★ Quiet and Non-Tiring

ROFLEX

Regd. Trade Mark

- ★ Non-Slip and Non-Dusting
- ★ No Sweating or Condensation
- ★ Acid and Alkali Resistant
- ★ Colour—Interesting variety

OFFICES
Construction in one instance on low lying ground near River Thames.

LAID IN MANY LONDON DISTRICTS

Factories
On new concrete, unscreeded, ground level.

Factories
(a) On suspended old wooden floor.
(b) On suspended asphalt floor.

Factories
(a) On suspended old wooden floor.
(b) On suspended old concrete floor, unscreeded.

LABORATORIES
(a) On filler joist concrete floor, screeded.
(b) On suspended old wooden floor.
(c) On old concrete floors—ground level.

CANTEENS
LAID IN MANY LONDON DISTRICTS

"ROFLEX" FLOORING is original and unique in character. It does NOT contain any magnesite, bitumen, pitch, sawdust or wood-flour. It is something different. It can be applied in a variety of colours which are permanent because the pigment is mixed into the compound before laying. "ROFLEX" components, of which a special grade of RUBBER-LATEX forms a most valuable part, are mixed on the site and laid cold. Its remarkable adhesive properties permit a revolutionary innovation in floor laying; a thin layer of $\frac{1}{4}$ -in. thickness only is laid direct on to concrete, wood, asphalt, tiles, metal, etc., without any fear of cracking or lifting. A reasonably level surface is desirable but minor undulations can be made up without difficulty. Alongside are examples of work undertaken.

The cost for areas of 200 sq. yds. and over is approximately 17s. 6d. per sq. yd., laid complete in LONDON and SUBURBS. Smaller areas at slightly increased cost. Specific quotations on application.

"ROFLEX" FLOORING is laid by specially trained men resident in London. As "out-of-town" work must carry the expense of men's fares, time-travelling and lodgings, etc., enquiries are invited, particularly in connection with Factory Maintenance within a radius of 25 miles from Charing Cross.

Proprietor : **L. FISHBURN** (Registered Flooring Contractors) **31 COURTHOUSE GARDENS, FINCHLEY, N.3.**

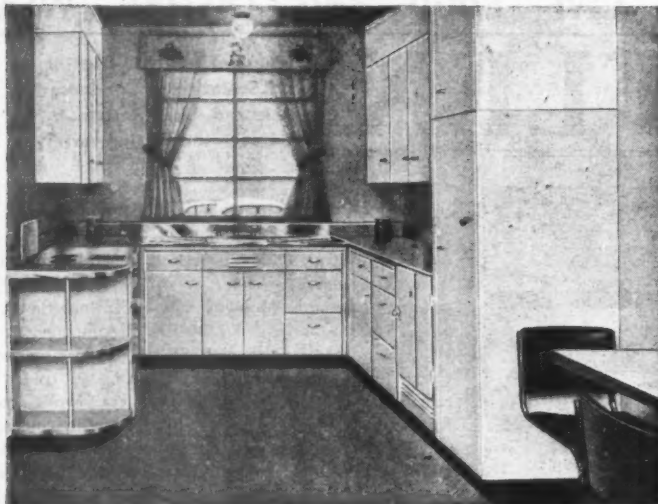
Phone: FINCHLEY 3526

ARCHITECTURAL JOINERY AND CABINET MAKING AND INTERIOR DECORATING

Fredk. DONNELLY LTD

Office : 47, KENDAL STREET, W.2
PADDINGTON 9373

Works : ADRIAN JOINERY WORKS, ADRIAN AVENUE, HENDON, N.W.2.
GLADSTONE 8446



AN EZEE KITCHEN FOR OLD OR NEW HOUSES



EZEE
FOR THE
HOUSEWIFE

The flush fitting double panelled Doors and Drawer fronts are sound deadened and the smooth baked enamel finish cleans easily.



EZEE
FOR THE
ARCHITECT

The sinks, counter units and wall cabinets are supplied to standard height and depth, but in various widths to fit any size or shape of room.

3 inches
MAKE A BIG DIFFERENCE

Ezee Kitchen sinks and counter units are 24in. deep from back to front (not 21in. or even 18in.), and so provide ample working and storage space.

Ezee Kitchen units are not loose pieces of furniture which allow dust to collect at their backs, but are secured to the wall and fixed together to form one flush-fitting unit extending for any length of wall space. In view of their close-fitting nature, they can be supplied without backs and so free of Purchase Tax.

Ezee Kitchen units are superior in design, construction and quality to any other British-made kitchen units.

AN EZEE KITCHEN HAS BEEN AWARDED A DIPLOMA BY THE COUNCIL OF INDUSTRIAL DESIGN

Visit our showrooms or send for our latest Brochure T.I. and name of nearest Distributors and discover for yourself why all other "modern" Kitchens are now outmoded.

EZEE KITCHENS LTD
341a SAUCHIEHALL ST., GLASGOW

[Telephone: Douglas 4956]

See our Exhibit, **SCOTTISH INDUSTRIES EXHIBITION, BLOCK 9. STAND D. SEPTEMBER 1-17, 1949.**

FLOORS

ACID & NON-ACID PROOF

(BY SPECIALISTS OF
22 YEARS' EXPERIENCE
TO SUIT EVERY CONDITION

GRANOLITHIC: all types. DIAMONITE: hardened grano. PRODORDUR MACHINE FACED FLOOR
TILES: coloured, non-slip, hard-wearing. FERRO-GRAN STEEL FACED FLOOR FLAGS. CONSOL STEEL ANCHOR FLOOR PLATES.



HEAD OFFICE & WORKS:
WEDNESBURY, STAFFS
Telephone: 0284 (5 lines)
London Office:
Artillery Row, S.W.1.
Telephone: Abbey 1547-8

& WALL SURFACES

Celcure WOOD PRESERVATIVE

Write for the folder which tells you
all about Celcure and gives instances
of its outstanding effectiveness

Timber immunised by Celcure over 20 years ago against rot and insect attack is still in excellent condition though often used under most exacting conditions. There has been no known case of failure where Celcure has been applied under vacuum and pressure.

CELCURE LIMITED

ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2.
Telephone: Holborn 8421 (9 lines)

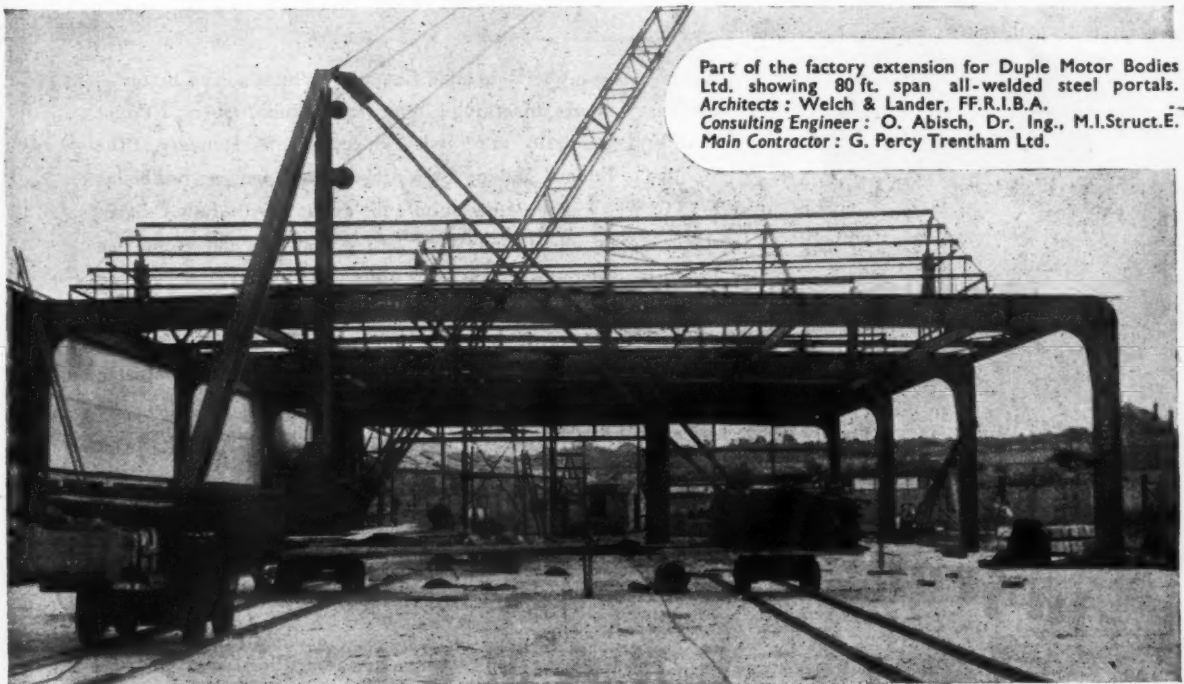
CELCURE & CHEMICAL CO. LTD.

300, BEARSDEN ROAD, GLASGOW, W.3.
Telephone: Scotstoun 3351

The Celcure Plant Organization

LONDON: Gabriel, Wade & English Ltd., Aldwych House, Aldwych, W.C.2. Telephone: Holborn 8421
Christie & Vesey Ltd., Christies Wharf, Charlton, S.E.7. Telephone: Greenwich 3784
HULL: The Kingston Creosoting Co. Ltd., Southam Chambers, Waltham Street. Telephone: Central 15443
SOUTHAMPTON: Gabriel, Wade & English, Ltd., Drivers Wharf, Northam. Telephone: Southampton 2261-2
DUNSTON-ON-TYNE: Palmer Hall Timber Co. Ltd. Telephone: Dunston-on-Tyne 84204-5-6
WIDNES (Lancs) Southern Ltd., Tanhouse Saw Mills, Warrington Road. Telephone: Widnes 2633-4

CARDIFF Robinson, David & Co. Ltd., 15/16, Herbert Street, Telephone: Cardiff 2611
MIDLANDS The Timber Fireproofing Co. Ltd., Market Bosworth, near Nuneaton. Telephone: Mkt. Bosworth 217.
BERWICK Allan Brothers, Ltd., Tweed Saw Mills, Berwick-on-Tweed. Telephone: Berwick 443
GLASGOW Robinson, Dunn & Co. Ltd., Temple Saw Mills, W.3 Telephone: Scotstoun 3351
GRANGEMOUTH: Christie & Vesey, Ltd., Grange Dock. Telephone: Grangemouth 545
BELFAST: James P. Corry & Co. Ltd., Prince's Dock Telephone: Belfast 43281



Part of the factory extension for Duple Motor Bodies Ltd. showing 80 ft. span all-welded steel portals.
Architects: Welch & Lander, F.F.R.I.B.A.
Consulting Engineer: O. Abisch, Dr. Ing., M.I.Struct.E.
Main Contractor: G. Percy Trentham Ltd.

Constructional Steelwork by **WESTWOODS**

JOSEPH WESTWOOD & CO., LTD., NAPIER YARD, MILLWALL, LONDON, E.14. TEL. EAS: 1043

Bridge & Constructional Engineers. Manufacturers of Pressed Steel Work, Mechanical Grabs and Sheet Metal Equipment, Steel Stock Holders.



FLATS FOR THE HOLBORN BOROUGH COUNCIL, W.C.I.
 Architects :—
 Hening & Chitty, F.R.I.B.A., A.M.T.P.I., 20 Gower St., W.C.I.
 Contractors :—
 Messrs. William Moss & Sons Ltd., North Circular Rd., N.W.2

BRICKWORK SET IN CEMENT/**LIME**/SAND MORTAR

Throughout the country are numerous examples of modern buildings where this Mortar, based on Draft Codes of Practice, has been adopted and proved the ideal bonding medium.



Full details of Cement/Lime/Sand mixes will be sent on application to:—
THE SOUTHERN LIME ASSOCIATION
 HANOVER HOUSE, 73-78 HIGH HOLBORN, LONDON, W.C.I. Tel: Holborn 5434

25



**It's back
 -in front**

"As good as pre-war Robbialac Enamel? Why it's even better — and that's saying something! Who am I to talk? Sorry, I forgot to introduce myself. I'm Ted Willden, recently Manager of the Robbialac Enamel Making Department. Been making Robbialac for 51 years so I do know quite a bit about it. I admit I didn't think there could be anything better than the old Robbialac Enamel. But the war taught us quite a lot and that experience has gone into the *New* Robbialac Enamel. But don't take my word for it. Try it out on your next painting contract — particularly for the outside. And don't forget to use Robbialac Undercoating for a perfect job!"

ROBBIALAC

ENAMEL



JENSON & NICHOLSON LTD · JENSON HOUSE · STRATFORD · LONDON · E.15



It's a good job..

HELLIWELL

**METAL WINDOWS
will be installed . . .**

Whether they are required for a large undertaking or small . . . whether they are Standard or Purpose-made . . . HELLIWELL Metal Windows complete the building with elegance allied to strength and unobtrusive but positive reliability and endurance . . . specify Helliwell for a thoroughly good job.

HELLIWELL & CO., LTD.,
Brighouse, Yorkshire & 68 Victoria St., London, S. W. I.

The Beauty of the Derbyshire Dales



*Is reflected in the new
Millersdale Cabinet*

W. H. PAUL LTD.

BREASTON DERBY ENGLAND

Telephone: DRAYCOTT 354/5 Grams: "STAINLESS, BREASTON"
Code: BENTLEY'S 2ND. EDITION

A selection of Architectural Press BOOKS

BUILDINGS AND PROSPECTS by JOHN PIPER

A collection of articles on architectural and topographical subjects illustrated with photographs and drawings by the author. 146 pages with 136 illustrations. Size 9½ in. by 7¼ in. 18s., postage 9d.

GARDENS IN THE MODERN LANDSCAPE by CHRISTOPHER TUNNARD, Associate Professor City Planning, Yale University. (*Second, revised edition.*)

The only book that deals with contemporary garden design as a parallel movement to that which has inspired contemporary ideas in architecture, with which it is closely connected. 184 pages with 190 illustrations. Size 9½ in. by 6½ in. 18s. 6d., postage 9d.

A HISTORY OF THE ENGLISH HOUSE by NATHANIEL LLOYD, O.B.E.

This is the most authoritative and exhaustively illustrated history of the English house ever published. 498 pages with 900 illustrations. Size 12¼ in. by 9 in. £3 13s. 6d., postage 1s. 1d.

THE MODERN SCHOOL by C. G. STILLMAN, F.R.I.B.A., and R. CASTLE CLEARY, A.R.I.B.A.

This book examines the contemporary architectural problem in relation to the Education Act and deals with each special aspect of school design in detail. 152 pages with 120 illustrations. Size 9¼ in. by 7½ in. 21s., postage 7d.

NEW WAYS OF BUILDING edited by ERIC DE MARÉ, A.R.I.B.A.

A new book on building construction which acts as an appendix to existing standard works. It is written by a group of authors, each a specialist in his own subject, on whose knowledge the general practitioner can rely. 236 pages with 200 illustrations. Size 9¼ in. by 7½ in. 30s., postage 9d.

OXFORD REPLANNED by THOMAS SHARP, D.LITT.

The official presentation of Dr. Sharp's replanning proposals for the City of Oxford, accompanied by pictorial sections depicting the city's character and potentialities from the point of view of appearance as distinct from convenience. 224 pages including over 200 illustrations, many of them in colour. Size 9¼ in. by 7½ in. 15s., postage 9d.

EXETER PHOENIX, A Plan for Rebuilding by THOMAS SHARP, D.LITT. (*Second Impression.*)

150 pages with over 140 illustrations, many of which are in colour and include 8 folding plates and many full-page photographs and engravings of the City and Cathedral. Size 9¼ in. by 7½ in. 10s., postage 9d.

NEWER SARUM, A Plan for Salisbury by THOMAS SHARP, D.LITT.

This book officially presents the planning proposals which Dr. Sharp has been commissioned to prepare for the Salisbury City Council. 84 pages with two folding plates and many photographs, plans and drawings in colour. Size 9¼ in. by 7½ in. 10s., postage 5d.

CONCERNING TOWN PLANNING by LE CORBUSIER. (*Second Impression.*)

An English edition of this celebrated French writer and architect's most important post-war book, translated by Clive Entwistle. Illustrated by over 60 drawings by the author. 128 pages. Size 8½ in. by 5½ in. 10s. 6d., postage 4d.

THE HOME OF MAN by LE CORBUSIER and FRANÇOIS DE PIERREFEU. From the French *La Maison des Hommes*.

M. de Pierrefeu contributes the introductory text, in which he outlines the principles that should be followed in planning the new world so that the resources of science are fully applied to providing the best environment for the ordinary man. Le Corbusier's illustrations follow the same theme. They form the principal contents of the book and are accompanied by his own commentary. 156 pages, including over 120 drawings by Le Corbusier. Size 8 in. by 5½ in. 10s. 6d., postage 4d.

TOWARDS A NEW ARCHITECTURE by LE CORBUSIER. Translated from the thirteenth French edition by Frederick Etchells. (*Second Impression.*)

A book of great historical importance which has probably had as great an influence on English architectural thought as any publication of the last fifty years. 272 pages including a large number of illustrations many of which are drawings by Le Corbusier. Size 8½ in. by 5½ in. 15s., postage 7d.

THE CITY OF TOMORROW by LE CORBUSIER.

A new impression of the first English translation by Frederick Etchells, published in 1929, containing all the original illustrations chosen by M. Le Corbusier. The book was first published in France in 1924 under the title of *Urbanisme*. 312 pages. Size 8½ in. by 5½ in. 15s., postage 7d.

THE MODERN FLAT by F. R. S. YÖRKE, F.R.I.B.A., and FREDERICK GIBBERD, F.R.I.B.A. (*Second, revised edition.*)

The purpose of this book is to survey the position of the new type of flat in its relation to social requirements, to illustrate the evolution of its plan, and to bring together a series of carefully chosen examples built in recent years by well-known architects in sixteen countries. The illustrations include scale plans, photographs of exteriors and interiors, details, diagrams and tabulated information. 208 pages, with over 590 half-tone and line illustrations. Size 11½ in. by 8½ in. 35s., postage 9d.

a catalogue will be sent on application:

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

THOMAS

which
the
plates
four.

IER.

and
d by
y the
e 4d.

COIS
mes.

which
d in
ence
t for
y the
book
ages,
8 in.

IER.
erick

ably
ught
ding
vings
e 7d.

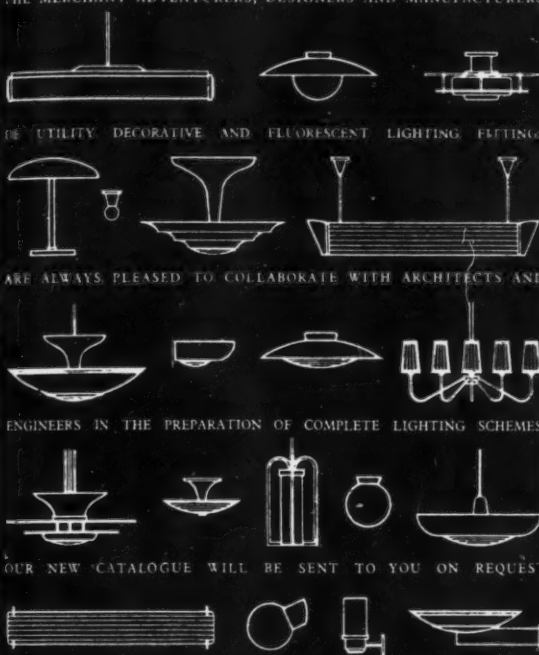
by
the
book
e of
e 7d.

and
vised

the
, to
ther
ears
llus-
and
ion.
ons.

D.
V.1

THE MERCHANT ADVENTURERS, DESIGNERS AND MANUFACTURERS



UTILITY DECORATIVE AND FLUORESCENT LIGHTING FITTINGS

ARE ALWAYS PLEASED TO COLLABORATE WITH ARCHITECTS AND

ENGINEERS IN THE PREPARATION OF COMPLETE LIGHTING SCHEMES

OUR NEW CATALOGUE WILL BE SENT TO YOU ON REQUEST

MA Lighting Fittings
MERCHANT ADVENTURERS LTD
11 PORTLAND ROAD, WILMINGTON, WILTS. TELEPHONE 4100

= FORESIGHT = PATENT - GRATES

The ROSSLYN



OVEN - OVER - FIRE
ALL - NIGHT - BURNING
COMBINATION GRATE

Outstanding among the many remarkable features of this model are those which facilitate:—

CONTINUOUS BURNING at extremely low cost. Normal consumption being 1lb. of coke per hour

UNLIMITED SUPPLIES OF HOT WATER DAY AND NIGHT with the minimum of attention.

A UNIFORM OVEN TEMPERATURE at all times thus making the oven available for immediate use.

MAXIMUM EFFICIENCY and ACCURATE CONTROL maintained by single Damper and Spin Wheel.

The ROSSLYN is a soundly constructed, self-contained, all-purpose cooker capable of amazing performance, and can be supplied in the following Porcelain finishes—SPRING GREEN, SANDRINGHAM, MOTTLE BROWN, BLACK.

This model has recently undergone severe efficiency tests.

Further details, prices and sizes will readily be sent on request.

SAMUEL SMITH & SONS, LTD.,
BEEHIVE FOUNDRY, SMETHWICK 41 STAFFS

Good News

about the latest cut in timber supplies

Despite the cut in timber supplies recently foreshadowed by the Chancellor of the Exchequer, Shuttering work need not be curtailed or delayed

because

ACROW STEEL SHUTTERING

entirely eliminates
timber

If necessity forces you to change from timber to ACROW STEEL SHUTTERING, experience will convince you that the proposed cut in timber supplies can be converted to your advantage,

for

ACROW STEEL SHUTTERING

also minimises labour
costs

ACROW STEEL SHUTTERING has already proved its superiority on many important contracts. Give it your personal test to know why ACROW STEEL SHUTTERING is in increasing demand

ACROW (ENGINEERS) LTD.

LONDON . . . 33, Catherine Place, S.W.1

LEEDS Lupton St., Hunslet

GLASGOW . . . 130, Coventry Drive, E.1

BRISTOL 22-24, City Road, 2.

'Phone: VIctoria 0693

'Phone: Leeds 76514

'Phone: Bridgeton 1041

'Phone: Bristol 24595

... for all electrical installations

F. H. Wheeler

& CO., LTD.

Head Office : 39 Victoria Street, London, S.W.1. Tel : ABBey 8080 (18 Lines)

Branches : Manchester, Bournemouth, Glasgow, Birmingham, Hull, Southampton, Hereford, Sheffield, Thetford, York, Bristol, Edinburgh, Aberdeen.

Stelcon

BICYCLE PARKING

A
SIMPLE
AND
ORDERLY
SYSTEM.

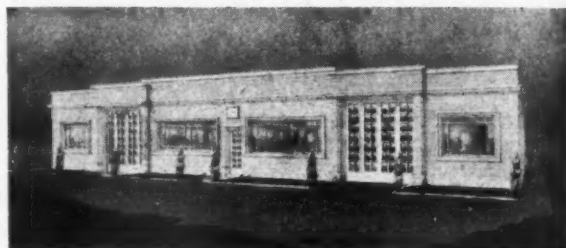


Concrete shed
units can also
be supplied to
form suitable
cover.

British Patent
No. 425265

STELCON (INDUSTRIAL FLOORS) LIMITED
CLIFFORD'S INN LONDON, E.C.4.

Telephone : HOLBORN 2916



Pre-cast

CONCRETE

Cast Stone

Granolithic

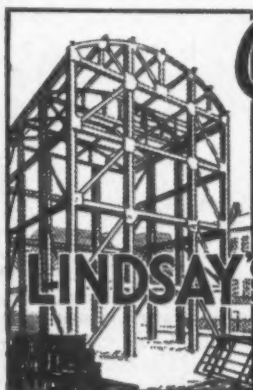
Terrazzo

EBOR

RAPID DELIVERIES OF
FENCING
PAVING
WALLING
BLOCKS
AND PRE-FAB
STRUCTURES
IN MANY SIZES

CONCRETES LTD. URE BANK, RIPON

Telephone: Ripon 202

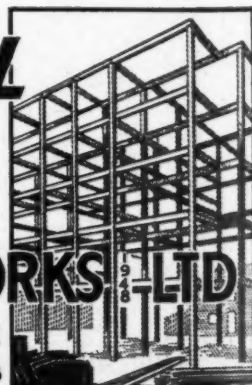


CONSTRUCTIONAL ENGINEERING

LINDSAY'S PADDINGTON IRONWORKS LTD

41 NORTH WHARF RD., PADDINGTON, LONDON, W.2

Telephone: PAD 8486/7 Telegrams: LINDSAY'S PADDINGTON 8486



Stainless Steel METAL WORK

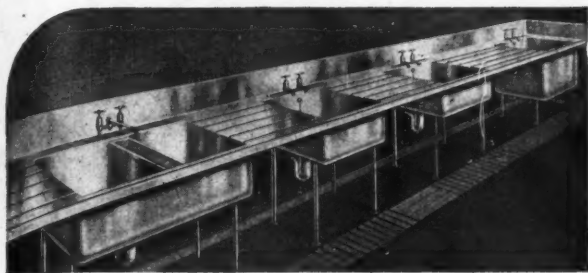


Illustration shows a range of Stainless Steel Sinks installed in a famous club

We are Specialists in
STAINLESS STEEL METAL WORK

FOR
Institute, Hospital, Hotel, Ship and
Domestic Use

**STAINLESS STEEL SINKS, SINK UNITS,
SINK RANGES, TABLE TOPS, SHELVINGS,
TANKS, PIPING, ETC.**

Can be made to suit special requirements

This equipment is non-corrosive and hygienic
Catalogues post free from

Associated Metal Works
(GLASGOW) LTD.
30 ST. ANDREW'S SQUARE GLASGOW, C1.

THE MIDLAND BRICK CO.
(Wellingboro) Ltd.

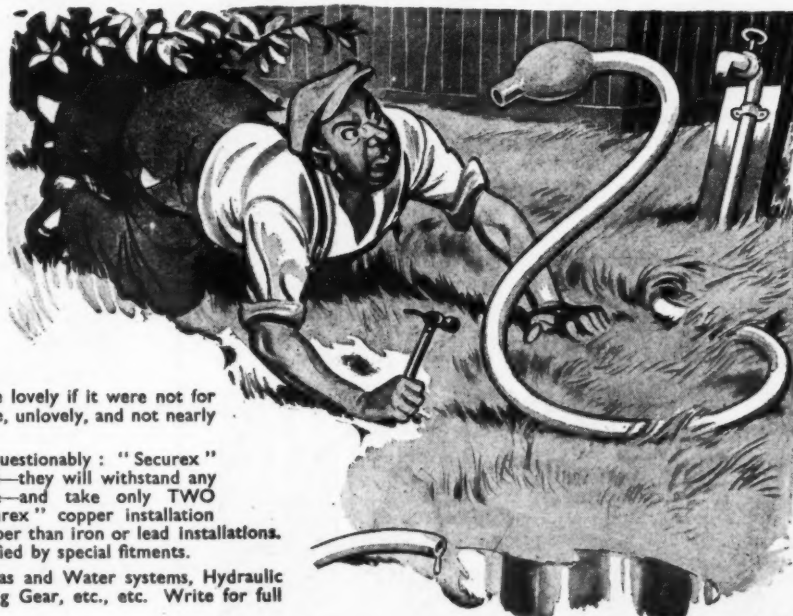
are now producing a

RED WIRECUT ENGINEERING BRICK

Civil engineers, contractors and
builders are invited to send their
enquiries through their usual
merchant or direct to us. Copy
of test certificate and samples
will be gladly sent on request.

THE MIDLAND BRICK CO. (WELLINGBORO) LTD.
STATION ROAD, LONG BUCKBY, NORTHANTS
Phone: Long Buckby 284 Est. 1899

Snake
in the grass.



Everything in the Plumber's garden would be lovely if it were not for the soldered joint. This is both costly in time, unlovely, and not nearly so efficient as it should be.

Is there an alternative which is better? Unquestionably: "Securex" joints are neat in appearance, efficient in use—they will withstand any side strains or variations in temperature—and take only TWO MINUTES to assemble. Moreover a "Securex" copper installation will neither rust nor fur and is infinitely cheaper than iron or lead installations. Difficult angles too and 'T' joints are simplified by special fittings.

"Securex" installations are available for Gas and Water systems, Hydraulic Control Gear, Steam Heating, Ship's Steering Gear, etc., etc. Write for full particulars.

Sole Manufacturers:

JAMES H. LAMONT & Co. LTD., Engineers, Brass Founders.
GYLEMUIR WORKS, CORSTORPHINE, EDINBURGH, 12, SCOTLAND.

Telephone: CORSTORPHINE 66641-2.

London Office: NORFOLK HOUSE,

Telephone: MANSION HOUSE 5700

Telegrams: "SOLDERLESS, EDINBURGH"

LAURENCE POUNTNEY HILL, E.C.4

Telegrams: "YUTAKA CANNON LONDON"

SECUREX
SOLDERLESS COMPRESSION
JOINTS

SEE OUR EXHIBIT, SCOTTISH INDUSTRIES EXHIBITION. BLOCK 9 STAND D. SEPT. 1-17, 1949

Lxv

The Clock with 600 FACES

At Paddington Station they tell the time by a clock with six hundred faces. In the hotel rooms, offices, signal boxes, and on the platforms there are over six hundred Gent's "slave clocks" each of which is really one dial of a Gent's Master Clock, as shown below, which is installed in the Station Telephone Exchange.

Each slave dial tells precisely the same time . . . controlled by the Master Clock . . . Immune from mains fluctuations or power cuts.

What a boon to a large establishment . . . or a small one for that matter.

Gent's Controlled Clock System is used in business establishments large and small, schools, offices, hotels, public buildings and even whole towns, in all parts of the world.

The same system can incorporate Workmen's Time Recorders, Programme Instruments for sounding start and cease work signals, Watchman's Tell-Tale Clocks and other time equipment.

May we send you a copy of Book 5 Section I?



ELECTRIC IMPULSE CLOCK SYSTEM



GENT & CO. LTD. Faraday Works. LEICESTER

London Office: 47 VICTORIA STREET S.W.1

NEWCASTLE ON TYNE, TANGENT HOUSE, LEAZES PARK ROAD.



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

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

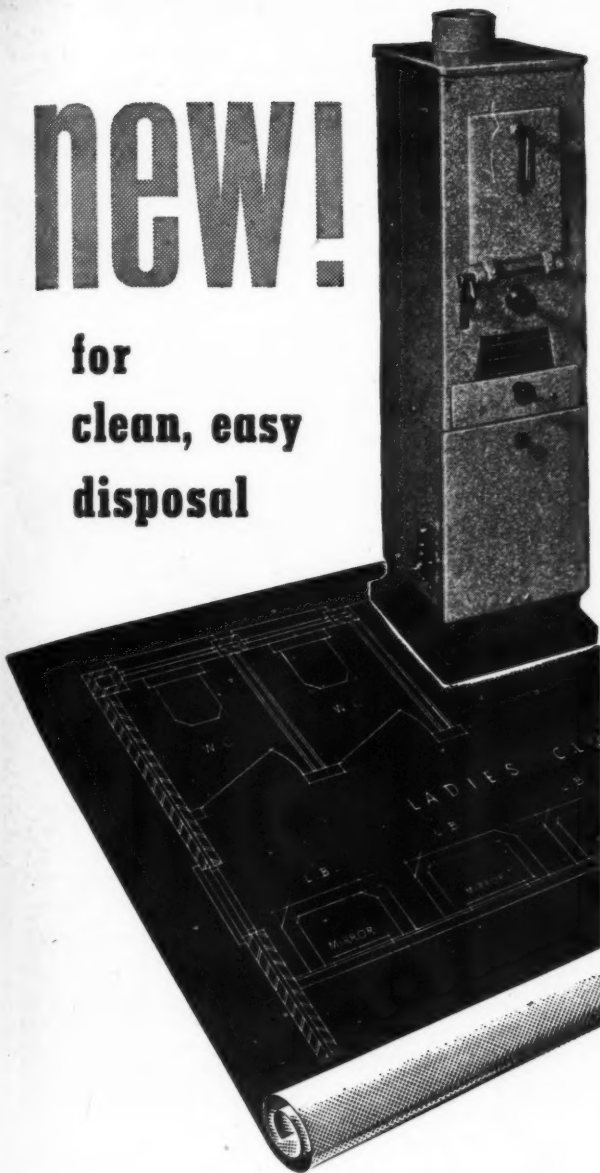
Limited quantities of TRIANCO TELESCOPIC CENTRES are now available for use in connection with suspended floors of all types. Write or phone without delay.

SMITH'S FIREPROOF FLOORS

SMITH'S FIREPROOF FLOORS LTD. (Dept. A)
HBER COURT, EAST MOLESEY, SURREY. Phone: Emberbrook 3300 (4 lines)

new!

for
clean, easy
disposal



The solution of the disposal problem is an essential part of modern planning in Hospitals, Stores, Office blocks and Public Buildings, Sugg gas-fired Incinerators are filling the need in hundreds of buildings — one famous hospital having installed no less than fifty of these appliances. A new "Sugg" model is now available — a floor-based model in which the automatic cut-off device is enclosed, thereby preserving smooth, clean design. Sanitary towels, dressings, etc. can be quickly and hygienically destroyed. The action of opening the incinerator door automatically ignites the burner which, after the pre-set period of from 10-120 minutes, is extinguished by the control device, thus ensuring economy in gas consumption. The problem of drain clearance is solved by the installation of this appliance. It also proves of considerable personal benefit where large female staffs are employed.



gas
incinerator

WILLIAM SUGG & COMPANY LTD. CHAPTER STREET, WESTMINSTER, S.W.1 • VIC 3211



Versil can be fixed by unskilled hands easily and quickly. For small but important insulations where sub-contracting would be too costly — Versil blankets and mattresses provide an ideal material. It can be supplied already finished with an appropriate covering, i.e., weatherproofed or reinforced, supplied in bulk and cut to fit on site with a knife or shears without difficulty or trouble.



For help and information on any *thermal insulation* project, write to Versil Ltd., Rayner Mills, Liversedge, Yorks.



CFW

DUNBRIK

THE PRECISION FACING BRICK

Introduced in 1934 and since specified by Government Departments, Local Authorities, Leading Architects, Builders, etc. Buildings faced with Dunbriks include Houses, Schools, Factories, Hospitals, Drillhalls, Cinemas, Flats, Office Blocks, etc.

Dunbriks are Manufactured by:—

London and Home Counties

DUNBRIK LIMITED 35, Gloucester Square, London, W.2. Phone: Paddington 2471/2

Suffolk, East and Central Essex

ALPHAMSTONE BRICK & TILE CO. LTD.
Alphamstone, near Bures, Suffolk. Phone: Twinstead 229

Dorset, S.W. Hants and S. Wilts.

W. E. MASTERS, Brick Manufacturer, Lytchett Minster, near Poole, Dorset. Phone: Lytchett Minster 291/2

Oxon, Berks, N. Wilts and N. Glos.

THE COTSWOLD BRICK AND TILE CO. LTD.,
47, Market Square, Witney, Oxon. Phone: Witney 390

East and West Ridings, Yorkshire

DUNBRIK (YORKS) LTD., Stanley Ferry, near Wakefield, Yorks. Phone: Wakefield 3694

Northumberland and Durham

SAMUEL TYZACK & CO. LTD., Monkwearmouth, Sunderland. Phone: Sunderland 4854/5

Scotland

SCOTTISH DUNBRIK LTD., 250, Alexandra Parade, Glasgow, E.1. Phone: Bridgeton (Glasgow) 1818; Dundee 81673

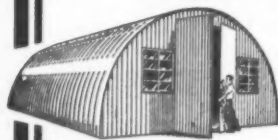
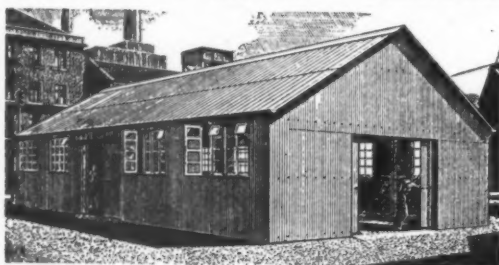
Ulster

DUNBRIK (ULSTER) LTD., Doagh Station, Co. Antrim, N. Ireland. Doagh 59.

Beauty · Economy · Permanence · Uniformity

THORNS INDUSTRIAL BUILDINGS

for
WORKSHOPS — STORES — GARAGES
FACTORIES — OFFICES — CANTEENS



Nissen-type Huts



Asbestos Covered Buildings

Thorns range of industrial buildings includes designs to suit every purpose. They are constructed of unlicensed materials and are easily erected with a minimum of site labour. Prompt dispatch. Free lorry delivery 250 miles.

Write, phone or call for full details and specifications. Please state type and size of building required.

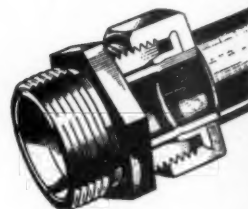
J. THORN & SONS LTD.
BOX 105, BRAMPTON ROAD,
BEXLEYHEATH, KENT

Telephone: Bexleyheath 305.

BD 256

Titex
'one of the Good
Compression Joints'

THE ORIGINAL AND
BEST OF ITS TYPE



The instantaneous joint with the indestructible sealing ring. Unsurpassed for use with copper tubes BSS.659/44 and conforming to BSS.864.

U.G

(FOR UNDERGROUND USE)

'one of the Good
Expanded Joints'



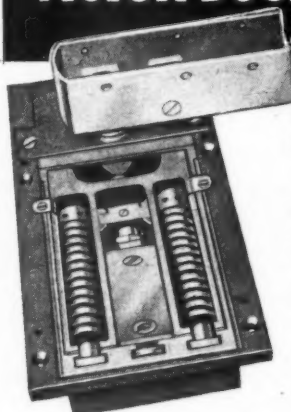
A finely engineered product built for a specific purpose for use with copper tubes BSS.1386 and conforming to BSS.864. Can just as easily be used overground with tubes BSS.659/44.

COMPRESSION JOINTS LTD.

TYBURN ROAD, BIRMINGHAM, 24

Have you seen the NEW VICTOR DOOR SPRINGS

WITH THE SELF-CONTAINED CHECK



A GREAT ADVANCE
giving reliable, powerful
silent service

No. 21 "Sceptre Victor."
Patent double action Floor Door Spring. Self-contained hydraulic check action unit. For medium size doors.
No. 22 for extra large or heavy doors.

The elimination of back pressure in this No. 21 "Sceptre Victor" ensures that there is no free oil in the box.

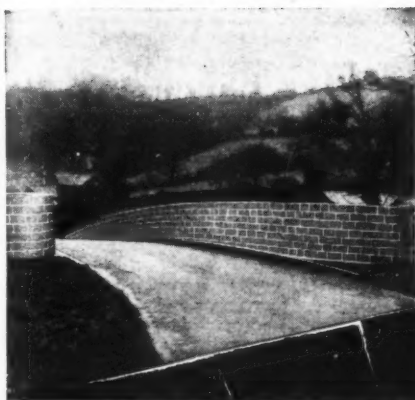
Sceptre Victor No. 21



ROBERT ADAMS
ROBERT ADAMS (VICTOR) LIMITED

139, STAINES ROAD, HOUNSLOW

Telephone: HOUNSLOW 5714



Cast Stone

TO SPECIFICATIONS

Having had long experience in the production of Cast Stone Facings for both Building and Works Engineering, we are in a position to execute work of this nature to the fine limits required by Engineers. In addition, the manufacture of flumes, weirs, ducts, etc. is undertaken on a large scale. Send for a copy of the new catalogue of Johnston Brothers productions.

Johnston Brothers

(CONTRACTORS) LTD.

DOSELEY QUARRIES, DAWLEY, SALOP.
London Office: Ibex House, Minorities, E.C.3.

L.G.B.

PLANNED HEATING AND VENTILATING



**HEAT & POWER
ENGINEERS
LTD.**

33, MAIDEN LANE, LONDON, W.C.2.
Tel: TEMple Bar 5292/3 CODE: BENTLEY'S SECOND
GLASGOW OFFICE: NORTH HILLINGTON, GLASGOW, S.W.2.
TEL: HALF WAY 3 3 2 1 / 4

**AND
PIPEWORK
CONTRACTORS**



**THE TEMPLE
VARNISH CO. LTD.**

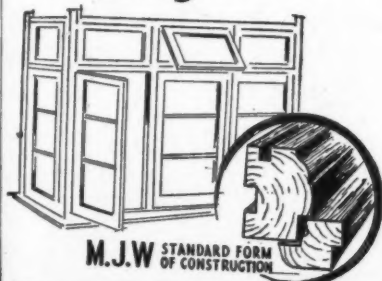


People in the know will tell you that the Temple Varnish Company have been making good paint for forty years. They will also tell you that Temple Products are completely abreast of the most modern and scientific developments in paints and finishes. Names to remember are 'Guardian', Hard Enamel Gloss Paints and 'May-fair' Flat Wall Enamels, both of which are giving entire satisfaction to an ever increasing number of users. Ask your stockist or write to:—

The Temple Varnish Company Ltd. 43 Aldwych London W.C.2
Temple Bar 9935

CVS-17

Light... on BETTER WINDOWS



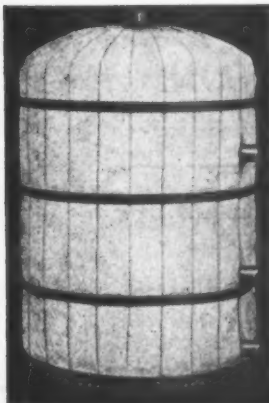
Customers often take the trouble to tell us we make very good windows, and whilst design is important, craftsmanship should be pre-eminent. It certainly is with us!

Thus we confidently invite
your orders and enquiries.



Established 1921

'Phone: Burton 3685 (3 lines)



EETO HEAT CONSERVING CYLINDER JACKETS

TO FIT ALL STANDARD TYPES OF DOMESTIC CYLINDERS & SQUARE OR RECTANGULAR TANKS

Eeto jackets maintain and increase hot water supply with reduced fuel consumption. Specified in large numbers by architects and heating engineers for housing schemes, and extensively for use with immersion heaters in conversion schemes. Literature with details of official tests available on request.

- Finest materials only
- Permanent heat insulation
- Low initial cost.

Patent No. 328472.

Sole Makers

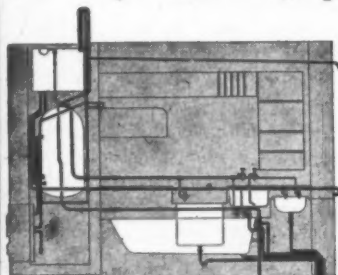
EETO INSULATIONS, RIVER ST., BOLTON



**AIROH
HOUSES'
KITCHEN
and
BATHROOM
UNIT**
fitted with



'BRANDA'
PREformed
HOUSE
PLUMBING



Consult our Technical Department and learn with what speed and accuracy BRANDA "Preformed" House Plumbing can be adapted and applied to Architectural Designs for quantity production.

TUNGUM SALES COMPANY LIMITED

BRANDON HOUSE • PAINSWICK ROAD • CHELTENHAM • GLOS.

AN ADAPTABLE POLICY

The adaptable policy recommended by the A.B.S. involves only a small annual cost to provide a substantial tax free income for dependents, or on retirement a cash sum or pension for life.

For example a man of 30 years next birthday can provide cover for dependents to the extent of £6,250 for an annual premium of only £35 6. 8.

Special rebate for Architects and Architects' Assistants.

Particulars from :

**The Secretary,
A.B.S. INSURANCE DEPARTMENT
66, Portland Place, London, W.1.
(Tel. : WELbeck 5721)**

Unistuc
Liquid Stone

The modern economical treatment for the preservation and decoration of cement, stone, concrete, brick and plaster surfaces.

THE UNITED PAINT CO. LTD

15, St. Helens Place, London, E.C.3

LIVERPOOL

NEWCASTLE-ON-TYNE

CARDIFF, ETC.

Every foot confirms its comfort and economy

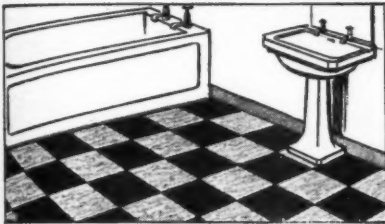


The durability of IOCO Rubber flooring is greater than either stone or cement. In fact, it is practically indestructible in ordinary wear and is, unquestionably, the most economical floor covering you can lay. In addition it is soft and resilient to the foot, eliminates noise and is absolutely non-skid.

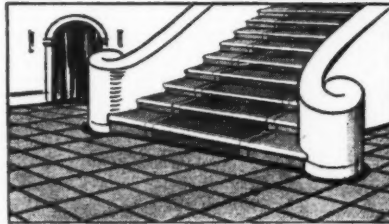
IOCO designers are at your service in the preparation of drawings to suit any scheme of decoration and, of course, IOCO experts carry out the laying operations anywhere in Great Britain. Write for 16 page booklet "IOCO Rubber Flooring".

- ★ Available either as flooring or inlaid tiling in a variety of plain and marbled effects.
- ★ Ideal for stairways where combined treads and nosings are recommended and with which a variety of contrasting effects can be obtained.
- ★ IOCO Rubber Flooring is manufactured entirely at the Company's Works to the standard specification of the Rubber Growers' Association, thus ensuring uniformly high quality.

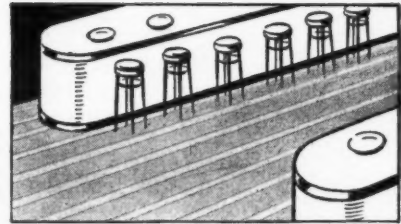
IOCO rubber flooring



For Kitchens, Bathrooms, Hallways, etc.



For Hotels, Cinemas & Public Buildings



For Restaurants, Cafes, Snack Bars, etc.



IOCO LIMITED • Netherton Works • Anniesland • Glasgow • W.3.

CONSTRUCTORS

STEEL EQUIPMENT



SEND FOR CATALOGUE AJ/47
PLEASE QUOTE ITEM NUMBERS

CONSTRUCTORS LTD

TYBURN ROAD • BIRMINGHAM 24 TELEPHONE: ERDINGTON 1616 • TELEGRAMS: EQUIPSTONS-BIRMINGHAM, 24

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.

Available only to applicants excepted from the Control of Engagement Order, 1947.

Public and Official Announcements

21s. per inch; each additional line, 2s.

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, WARREN PARK, WHITELEAF. Tel.: Uplands 0935. 991

LONDON COUNTY COUNCIL.
Applications are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

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. Preference will be given to candidates holding a recognized professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required, and quote Ref. G.R.3). Canvassing disqualifies. (2269) 1046

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, Grade II, at a commencing salary of £420 per annum, rising by annual increments of £15 to a maximum of £465 per annum, plus London allowance of up to £30 per annum, according to age.

Applicants should be of good general training and give full details in their applications.

It is desirable that applications should be accompanied by a small sample of the applicant's work.

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than the 17th September, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND Clerk of the Council.

County Hall, Kingston-on-Thames. 1974

THE CO-OPERATIVE WHOLESALE SOCIETY, LIMITED, ARCHITECT'S DEPARTMENT, LONDON.

FOUR ASSISTANT ARCHITECTS. Salary £490-£555 per annum. Applicants should have a sound knowledge of building construction and Architectural design, capable of preparing working drawings and details under supervision.

TWO ASSISTANT ARCHITECTS. Salary £420-£485 per annum. Applicants should be good draughtsmen, having a sound knowledge of construction.

WORKERS-UP with thorough knowledge of Abstracting and Billing required in Quantity Surveyor's Section.

These appointments are permanent and offer prospects of Up-Grading.

Successful candidates will be required to undergo a medical examination for a compulsory Superannuation Scheme. Applications, stating age, experience and qualifications, to be addressed to the Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 2001

CANTERBURY EDUCATION COMMITTEE.
COLLEGE OF ART.

School of Architecture.—Required as soon as possible, two full-time **STUDIO MASTERS** for work in connection with the Finals Course. The College is approved by the R.I.B.A. as a Listed School. Candidates must be Associates or Fellows of the R.I.B.A., preferably school trained and with some professional experience in Architecture. Previous teaching experience is desirable but not essential. Salary scale: £300-£15 to £555, together with appropriate additions for training or degree; up to ten increments may be allowed for suitable professional experience.

Applications, giving full particulars of training, qualifications and experience, should be sent to the Principal as soon as possible.

N. POLMEAR, Chief Education Officer. 1988

78, London Road, Canterbury.

LONDON COUNTY COUNCIL.
VACANCIES FOR ARCHITECTS, GRADE III, AND TECHNICAL ASSISTANTS IN THE ARCHITECT'S DEPARTMENT.

Applications are invited for the following vacancies in the Architect's Department:—
ARCHITECT, GRADE III. Salary £550 to £700 a year.

TECHNICAL ASSISTANTS. Salary £440 to £580 a year, Section (a).

TECHNICAL ASSISTANTS. Up to 167s. 6d. a week, Section (b).

Required for the preparation of schemes, working drawings, specifications and estimates for works at schools and other buildings.

Commencing rate according to qualifications and experience. Successful candidates are required to contribute to the Council's Superannuation and Provident Fund and are subsequently eligible for permanent appointment and for advancement to higher positions according to merit. Candidates for Grade III position should possess appropriate professional qualifications.

Application forms may be obtained from the Architect to the Council (AR/P/A), County Hall, Westminster Bridge, London, S.E.1, enclosing stamped addressed foolscap envelopes. Canvassing disqualifies. (992). 1899

THE CO-OPERATIVE WHOLESALE SOCIETY, LIMITED, ARCHITECT'S DEPARTMENT, BRISTOL.

Applications are invited for the following:—

1. **ASSISTANT ARCHITECT.** Salary £490-£555 per annum. Applicants should have a sound knowledge of building construction and Architectural design, capable of preparing working drawings and details under supervision.

2. **ASSISTANT ARCHITECT.** Salary £420-£485 per annum. Applicants should be good draughtsmen, having a sound knowledge of construction.

These appointments are permanent and offer prospects of Up-Grading.

Successful candidates will be required to undergo a medical examination for a compulsory Superannuation Scheme. Applications, stating age, experience and qualifications, to be addressed to the Chief Architect, Co-operative Wholesale Society, 99, Leman Street, London, E.1, who will interview applicants in Bristol. 2000

BOROUGH OF MANSFIELD.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of **TWO ARCHITECTURAL ASSISTANTS** at a salary of £390-£435 (A.P.T. I).

Applications, on forms which will be supplied on application to the Borough Engineer, Carr Bank, Mansfield, must be delivered to the undersigned not later than Monday, 12th September, 1949. Canvassing will disqualify.

A. C. SHEPHERD, Town Clerk.

Carr Bank, Mansfield. 17th August 1949. 1978

BEDFORDSHIRE COUNTY COUNCIL.
ASSISTANT COUNTY ARCHITECT.

Applications are invited for the post of Assistant County Architect, at a consolidated salary of £850 to £1,000 p.a. (A.P.T., X). The duties will primarily be in connection with the Educational Building programme, and will include the commissioning of privately practising Architects.

Candidates should be Registered Architects and members of the R.I.B.A. They must have had extensive organising and administrative experience, be able in School design, and competent to handle building contracts.

The Council have adopted a scheme of providing rented flats for staff, or alternatively, to pay special allowance if unable to find accommodation for family.

Forms of application to be obtained from the undersigned and returned not later than 17th September, 1949.

Canvassing, either directly or indirectly, will disqualify.

J. B. GRAHAM, Clerk of the County Council.

Shire Hall, Bedford. 22nd August, 1949. 1992

LONDON COUNTY COUNCIL.
QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors in the Housing and Valuation Department, for work in connection with the development of cottage estates and the construction of multi-storey dwellings, at salaries of up to £700 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

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

Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required), quoting Q.S.1.

Canvassing disqualifies. (2140) 758

THE EDINBURGH AND EAST OF SCOTLAND COLLEGE OF AGRICULTURE.

The Governors invite applications for the post of **ADVISORY OFFICER IN FARM BUILDINGS.** The successful candidate will be required to advise in all matters pertaining to Farm Buildings and carry out investigations of new developments and techniques. Applicants should be graduates with Engineering or Architectural qualifications, and have experience of Farm Building Construction.

Salary: Grade II, £780-£850-£980.

The post will be superannuable. Forms of application may be obtained from the undersigned and must be lodged by 22nd September, 1949.

J. A. JOHNSTON, Secretary. 2022

13, George Square, Edinburgh. 8.

CUMBERLAND COUNTY COUNCIL.
Applications are invited for the following appointments on the permanent establishment of the Architect's Department:—

(a) **SENIOR ASSISTANT ARCHITECT—Grade VIII, A.P.T. Division** (£685-£750 p.a.).

(b) **SENIOR ASSISTANT ARCHITECT—Grade VII, A.P.T. Division** (£635-£710 p.a.).

(c) **ARCHITECTURAL ASSISTANT—Grade IV, A.P.T. Division** (£480-£525 p.a.).

(d) **JUNIOR ARCHITECTURAL ASSISTANT—Grade III, A.P.T. Division** (£450-£495 p.a.).

Applications for posts (a) and (b) are required to be Associate Members of the R.I.B.A. and capable of a high standard of design. Preference will be given to those candidates who have had experience in the control of staff.

Applicants for post (c) should have passed, or attained the equivalent standard of the R.I.B.A. Final Examination.

Applicants for post (d) should have passed, or be preparing to take the R.I.B.A. Intermediate Examination.

The appointments 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, on forms obtainable from John E. Haughan, F.R.I.B.A., County Architect, 15, Portland Square, Carlisle, should be delivered to him not later than Monday, 19th September, 1949, together with copies of not more than three recent testimonials.

G. N. C. SWIFT, Clerk of the County Council. 2021

August, 1949.

COUNTY BOROUGH OF BRIGHTON.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF CHIEF CLERK OF WORKS.

Applications are invited for the appointment of Chief Clerk of Works, salary to be in accordance with Grade A.P.T., Division V (£520-£570), plus car allowance.

Applicants must have had a sound practical training and possess an extensive knowledge of all building grades and be competent to supervise the erection of large scale housing contracts and other public buildings. Experience in Direct Labour Building Schemes would be an advantage.

The appointment is an established post on the permanent staff and is subject to the provisions of the Local Government Superannuation Act, 1937. The appointment will be terminated by one month's notice on either side, and the successful applicant will be required to pass a medical examination.

Applications stating age, qualifications and experience, and the names and addresses of three persons to whom reference may be made, must be sent to the Borough Engineer and Surveyor, D. J. Howe, Esq., M.I.C.E., M.I.Mun.E., 26/30, King's Road, Brighton, not later than Monday, 19th September, 1949. 1999

BRECONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments (Male or Female) in the County Architect's Department.

(a) **ONE ASSISTANT ARCHITECT, Grade V.** £520-£570 per annum.

(b) **ONE ASSISTANT ARCHITECT, Grade IV.** £480-£525 per annum.

(c) **TWO ARCHITECTURAL ASSISTANTS, Grade III.** £450-£495 per annum.

(d) **TWO ARCHITECTURAL ASSISTANTS, Grade II.** £420-£465 per annum.

(e) **ONE LAND SURVEYOR, Grade III.** £450-£495 per annum.

(f) **ONE QUANTITY SURVEYOR, Grade VII.** £635-£710 per annum.

Applicants for the appointment under (a) above must be registered Architects.

The appointments will be subject to (i) the National Scheme of Conditions of Service, (ii) the provisions of the Local Government Superannuation Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written notice on either side.

Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.

Applications must be made on a form to be obtained from the County Architect, Mr. H. C. W. Strickland, F.R.I.B.A., Watton Office, Brecon, South Wales, and must be received by the undersigned not later than 24th September, 1949.

No housing accommodation can be provided by the Council for the successful applicants.

C. M. S. WELLS, Clerk of the County Council. 1999

County Hall, Brecon.

WEST WALES HOSPITAL MANAGEMENT COMMITTEE. CLERK OF WORKS.

Applications are invited for the post of Clerk of Works to the above Committee. The Committee controls 13 hospitals in the Counties of Carmarthen, Pembrokeshire and Cardiganshire. The person appointed will be required to reside in Haverfordwest or its environs. The Clerk of Works will be responsible to the Management Committee, through its Secretary, for the maintenance of the buildings in the group (except engineering works), preparation of specifications, estimating, etc., and where necessary fulfil the duty of Clerk of Works in small capital works projects.

Preference will be given to applicants who have served an apprenticeship in one of the building trades and who are experienced in the various branches of building construction. The person appointed will be expected to be fully conversant with working drawings, bills of quantities, etc. The salary for the post will be Grade IV of the A.P.T. scales, viz., £480-£525, but the Committee will be prepared to consider a higher grade salary in the case of a specially well qualified applicant.

The appointment is subject to the National Health Service Act (Superannuation) Regulations. The successful candidate, if a non-transferable officer within the meaning of the National Health Service Act, will be subject to medical examination. Application forms can be obtained from the undersigned, and should be returned duly completed not later than first post on Monday, 19th September.

A. W. YOUNGS,

Secretary.
2036

Glangwilli, Carmarthen.

COUNTY BOROUGH OF WOLVERHAMPTON. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments in the Town Planning Section of the Department:—

(a) PLANNING ASSISTANT. Grade A.P.T. III (£450 to £495 per annum).
(b) PLANNING ASSISTANT. Grade A.P.T. II (£420 to £465 per annum).

(c) JUNIOR PLANNING ASSISTANT. Grade A.P.T. I (£390 to £435 per annum).
(d) JUNIOR PLANNING ASSISTANT. Grade A.P.T. I, Misc. II (£375 to £420 per annum).

(e) DRAUGHTSMAN OR DRAUGHTSWOMAN. Grade Misc. I (£315 to £360 per annum), or Misc. II (£365 to £420 per annum).
(f) JUNIOR DRAUGHTSMAN OR DRAUGHTSWOMAN. General Division. Salary according to age—£135 at age 16 (male) or £108 (female), to £385 and £308 respectively, at age of 32.

(g) CLERK (Male or Female). General Division. Salary according to age—£135 at age 16 (male) or £108 (female), to £385 and £308 respectively, at age of 32.

Candidates for appointments (a) or (b) should have had previous experience in a Town Planning office. Candidates for (c), (d) or (e) should be good draughtsmen, preferably with experience in a Town Planning, Architects' or Surveyor's office. For appointment (f) consideration will be given to applicants without previous experience if educated to School Certificate standard. For (g) preference will be given to applicants having previous clerical experience.

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

The Council cannot undertake to provide housing accommodation, but successful applicants may, if married, qualify for a subsistence allowance until they are able to find accommodation.

Applications, with not more than 3 testimonials or names for reference, should reach the undersigned in suitably endorsed envelopes not later than Monday, the 12th September, 1949. Candidates should state clearly for which appointment they are applying.

J. BROCK ALLON,

Town Clerk.

Town Hall, Wolverhampton.
24th August, 1949.

2023

COUNTY BOROUGH OF DONCASTER. BOROUGH SURVEYOR AND WATER ENGINEER'S DEPARTMENT.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited from practical and experienced men for a temporary appointment of Clerk of Works, to supervise works to be carried out by Contract.

Applicants must have had considerable experience of Reinforced Concrete and Brick Construction, and be capable of supervising the laying of water mains.

The duties will necessitate the setting out of works, measuring quantities of materials used, submission of progress reports, and the ability to supervise contract work on the site.

The inclusive salary will be £12 12s. per week, subject to one month's notice on either side.

Applications, stating age, details of experience, accompanied by copies of two recent testimonials, and endorsed "Clerk of Works" must be delivered to the Borough Surveyor and Water Engineer's office, 2, Priory Place, Doncaster, not later than 17th September, 1949.

H. S. ESSENHUGH,

Town Clerk.

1 Priory Place, Doncaster.

2020

COUNTY BOROUGH OF GREAT YARMOUTH. BOROUGH ENGINEER'S DEPARTMENT. APPOINTMENT OF TWO SENIOR ASSISTANT ARCHITECTS.

Applications are invited for the appointment of Two Senior Assistant Architects for:—
(1) Housing and General Work.
(2) Schools.

The salaries will be in accordance with A.P.T. Grade VI (£595-£660 per annum) of the National Conditions of Service.

Preference will be given to Associates of the Royal Institute of British Architects and, in the case of appointment 2, to applicants who have had previous experience in modern school design.

Applicants need not have had previous Local Government experience.

The appointments 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 the names of three persons to whom reference can be made, should be enclosed in an envelope endorsed "Senior Assistant Architect Housing" or "Senior Assistant Architect Schools," and must reach me not later than Monday, 19th September, 1949.

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

FARRA CONWAY,

Town Clerk.

Town Hall, Great Yarmouth.

24th August, 1949.

2018

COUNTY BOROUGH OF HALIFAX. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments:—

(1) CHIEF ARCHITECTURAL ASSISTANT (General). Salary in accordance with Scale VII, A.P.T. (£635-£710).

(2) ARCHITECTURAL ASSISTANT (General). Salary in accordance with Scale V, A.P.T. (£520-£570).

(3) ARCHITECTURAL ASSISTANT (Schools). Salary in accordance with Scale V, A.P.T. (£520-£570).

(4) ARCHITECTURAL ASSISTANT (Schools). Salary in accordance with Scale III, A.P.T. (£450-£495).

(5) BUILDING INSPECTOR. Salary in accordance with Scale I, A.P.T. (£390-£435).

(6) CLERK OF WORKS (General). Salary £9 5s. per week.

Candidates should possess appropriate technical qualifications, and will be required to pass a medical examination. The appointments will be subject to the conditions of service adopted by the Corporation and to the Local Government Superannuation Act, 1937.

The Corporation are negotiating for the purchase of property with the object of converting it into flats, which might be made available at a later date to candidates appointed to the Architectural positions.

Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, appropriately endorsed, should be delivered to the undersigned not later than Saturday, 17th September, 1949.

RICHARD DE Z. HALL,

Town Clerk.

Town Hall, Halifax.

25th August, 1949.

2019

STAFFORDSHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Appointment of:—

(a) ARCHITECTURAL ASSISTANT. A.P.T. V.

(b) ARCHITECTURAL ASSISTANT. A.P.T. II.

(c) ASSISTANT BUILDING INSPECTOR. A.P.T. II.

Applications are invited for the above at commencing salaries for appointment (a) within the range of £520-£570 per annum, and for appointments (b) and (c) within the range of £420-£465 per annum, according to experience and qualifications.

The appointments will be subject to the scheme of conditions of service of the National Joint Council and 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 for the appointment of Assistant Building Inspector should have a thorough practical knowledge of the building trade and experience as Clerk of Works or General Foreman. They should be good specification writers and able to make clear concise reports. The successful candidate will be required to reside in or near Stafford and to provide a car for the performance of his duties, for which travelling allowances will be payable in accordance with the County scale.

Applications, stating clearly which appointment is applied for, and giving full details of experience and qualifications, age, etc., together with three recent testimonials, should be delivered to the County Architect, Martin Street, Stafford, not later than Saturday, the 24th September, 1949.

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.

30th August, 1949.

2041

COUNTY BOROUGH OF CARLISLE. CITY ENGINEER'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) CHIEF ASSISTANT ARCHITECT (Grade VIII), £685-£760.

(b) PRINCIPAL ASSISTANT ARCHITECT (Grade VII), £635-£710.

(c) SENIOR ASSISTANT ARCHITECT (Grade VI), £595-£660.

(d) CHIEF ASSISTANT ARCHITECT (Grade VIII), £685-£760.

(e) PRINCIPAL ASSISTANT ARCHITECT (Grade VII), £635-£710.

(f) ARCHITECTURAL ASSISTANT, up to Grade V. Salary according to qualifications.

Applicants for appointments (a), (b), (c), (d) and (e) should be Members of the Royal Institute of British Architects, and applicants for (f) should have passed the Intermediate examination of the Royal Institute of British Architects.

Steps are being taken to provide housing accommodation for successful applicants, if required.

Forms of Application and Conditions of Employment may be obtained from the City Engineer, 15, Fisher Street, Carlisle, to whom applications should be returned not later than Friday, 23rd September, 1949.

H. D. A. ROBERTSON,

Town Clerk.

15, Fisher Street, Carlisle.

2033

COUNTY BOROUGH OF CARLISLE. APPOINTMENT OF PRINCIPAL ASSISTANT TOWN PLANNING OFFICER (GRADE A.P.T. VII).

Applications are invited for the above appointment on the permanent staff of the City Engineer and Surveyor and Planning Officer, at a consolidated salary of £635, rising by annual increments of £25 to £710 per annum.

Applicants should be Corporate Members by examination of the Town Planning Institute and/or the Institutions of Civil or Municipal Engineers or the Royal Institute of British Architects, and should have had previous Town Planning experience.

It is considered likely that the Council will, if required to do so, provide the successful applicant with a modern house.

Application Forms may be obtained from the City Engineer, 15, Fisher Street, Carlisle, and completed forms should be returned to me not later than Monday, 19th September, 1949.

H. D. A. ROBERTSON,

Town Clerk.

The Town Clerk's Office, Fisher Street, Carlisle.

2031

COUNTY BOROUGH OF BARROW-IN-FURNESS. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following permanent appointments:—

(a) SENIOR ASSISTANT ARCHITECT (Grade VII), £635-£710 p.a.

(b) ASSISTANT ARCHITECT (Grade VI), £595-£660 p.a.

(c) ASSISTANT ARCHITECT (Grade III), £450-£495 p.a.

(d) BUILDING SURVEYOR (Grade Va), £550-£610 p.a.

Candidates for post (a) must be Associates of the R.I.B.A. For other posts the possession of a recognized professional qualification will be an advantage.

The Council has accepted the principle of providing housing accommodation.

Further details of the posts, conditions of appointment, and forms of application may be obtained from the Borough Engineer and Surveyor, to whom completed applications must be returned not later than Monday, 26th September, 1949.

Canvassing in any form will disqualify.

W. L. ALLEN,

Town Clerk.

2025

THURROCK URBAN DISTRICT COUNCIL. ENGINEER & SURVEYOR'S DEPARTMENT.

ARCHITECTURAL ASSISTANT (GRADE III). A vacancy occurs in the Council's Architectural Staff for an Assistant on Grade III of the A.P.T. Division of the National Scale of Salaries, viz., £450-£515-£495 per annum.

General architectural experience is necessary, and previous success in some part or parts of the Examination leading to the qualification A.R.I.B.A. will be an advantage.

The Council may consider housing accommodation if required by the successful candidate residing more than 20 miles from Thurrock Urban District.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and it will be necessary for the selected candidate to pass a medical examination.

Applications, stating age, qualifications, and experience, with copies of not more than three testimonials, endorsed "Architectural Assistant, III," should reach the undersigned not later than 1st post on Tuesday, 27th September, 1949.

Canvassing will disqualify, and applicants must disclose in writing any relationship to any member or senior officer of the Council.

A. E. POOLE,

Clerk of the Council.

Council Offices, Whitehall Lane, Grays.

25th August, 1949.

2024

NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.

Applications are invited for the following appointments in the Architect's Department. This Department is responsible for the actual preparation and supervision of schemes for building hospitals for acute sick, mental, mentally defective and tuberculous patients, including staff housing schemes, and for extensions and adaptations to existing hospitals and other premises in the Region which covers the whole of Bedfordshire and large areas of Hertfordshire, Middlesex, London, Berkshire and Buckinghamshire.

(i) ASSISTANT ARCHITECTS. Grade A.P.T. VI, £595 to £660 per annum. Seven vacancies. Applicants should be Members of the R.I.B.A. or about to take their Final examination. Good general experience in design and construction is essential. Knowledge of Hospital work is desirable.

(ii) JUNIOR ARCHITECTURAL ASSISTANT. Grade A.P.T. V, £520 to £570 per annum. One vacancy.

Applicants should have passed the Intermediate examination of the R.I.B.A. Good general experience in design and construction, and a knowledge of Hospital work is desirable.

(iii) ASSISTANT QUANTITY SURVEYORS. Grade A.P.T. VI, £595-£660 per annum. Two vacancies.

Applicants should hold an approved qualification of the R.I.C.S., or should be about to take their Final examination. Good general experience in the preparation of specifications for public buildings, ability to make structural surveys and reports, and a good working knowledge of contract procedure are essential. A knowledge of Hospital work is desirable.

(iv) TRAINEE. General Division, £135 at age 16, rising by annual increments to £220 per annum at age 21. One vacancy.

Applicants should possess School Certificate and should have an aptitude for draughtsmanship and/or a keen interest in building, surveying, etc. The successful applicant will be expected to pursue a course of study leading to the Final qualification of an appropriate institution.

London weighting £10 at age 16, £20 at age 21, and £30 at age 26 is payable in addition to the above salaries.

Appointments, which are subject to conditions of service prescribed by the Ministry of Health for such posts, and to the National Health Service (Superannuation) Regulations, 1947/8, will be terminable by one month's notice.

Applications, giving details of experience, together with names of two referees, should be addressed to the Secretary of the Board, 11a, Portland Place, W.1, not later than 24th September, 1949. 2035

BOROUGH OF LUTON. BOROUGH ENGINEER'S DEPARTMENT. ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of Architectural Assistants, in salary grades ranging between A.P.T. I (£390-£435) and A.P.T. IV (£480-£525), according to qualifications and experience. Applicants must have made some progress in obtaining architectural qualifications, and have had Municipal experience, with particular reference to housing and school works.

The appointments will be subject to the Local Government Superannuation Act, 1937, to the National Scheme of Conditions of Service, and to the successful candidates passing a medical examination.

Applications, appropriately endorsed, giving details of age, qualifications, experience, present appointment and salary, and accompanied by names of three persons to whom reference may be made, should be sent to:

**THE BOROUGH ENGINEER,
Town Hall, Luton.**

not later than first post on Monday, the 19th September, 1949. Canvassing will disqualify. Applicants must disclose if they are related to any member or senior officer of the Council.

W. H. ROBINSON, Town Clerk.

Town Hall, Luton. 27th August, 1949. 2017

HUNTINGDON COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. SENIOR ARCHITECTURAL ASSISTANT (GRADE VI).

ARCHITECTURAL ASSISTANT (GRADE II). TECHNICAL ASSISTANT (Grade IV-V).

Applications are invited for the appointment of (a) Senior Architectural Assistant, salary Grade VI, A.P.T., £595-£660 per annum; (b) Architectural Assistant, salary Grade II, A.P.T., £420-£465 per annum; (c) Technical Assistant, salary Grade IV-V, A.P.T., £480-£570 per annum.

Applicants for (c) should have experience in connection with schemes and specifications for Heating and Domestic Hot Water Installations, and a knowledge of Electrical Installation is desirable.

Applications should be sent to S. J. Hands, A.R.I.B.A., County Architect, County Buildings, Huntingdon, to be received not later than first post on Monday, 26th September, 1949, and should be accompanied by two recent testimonials or the names of two persons to whom reference may be made.

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.

**JOHN KELLY,
Clerk of the County Council,
County Buildings, Huntingdon.
8th September, 1949. 2049**

COUNTY BOROUGH OF DUDLEY. ARCHITECTS.

Applications are invited for the following posts on the established staff:-

(a) TWO ASSISTANT ARCHITECTS. Grade V, £520-£570.

(b) ONE JUNIOR ARCHITECTURAL ASSISTANT. Grade II, £420-£465.

Applicants for (a) must have a good general experience of design and construction, and must be capable of preparing sketch plans, working drawings and details of schools, housing schemes, and public buildings of contemporary design.

Preference will be given to Members of the Royal Institute of British Architects, or those holding equal qualifications.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination, and to the termination of each appointment by one month's notice in writing on either side.

Applications, stating qualifications and experience, together with the names of three persons to whom reference may be made, are to reach me not later than Tuesday, the 27th September, 1949.

P. D. EADSWORTH, Town Clerk.

The Council House, Dudley. 30th August, 1949. 2054

COUNTY BOROUGH OF BURY. CLERK OF WORKS.

Applications are invited for the position of Clerk of Works for the erection of the Elton Secondary Modern School. Salary £420 per annum.

Candidates must have practical knowledge of all branches of the Building Trade and be experienced in the supervision and erection of buildings.

The appointment is subject to the Local Government Superannuation Act, 1937, and medical examination.

Applications, stating age, qualifications and experience, together with names and addresses of two persons to whom reference might be made, must be forwarded to me not later than the 24th September, 1949.

EDWARD S. SMITH, Town Clerk.

Municipal Offices, Bank Street, Bury. 31st August, 1949. 2045

MONMOUTHSHIRE COUNTY COUNCIL.

Applications are invited for the following posts in the County Architect's Department:- Two Permanent PRINCIPAL ARCHITECTURAL ASSISTANTS, at a salary in accordance with Grade VIII (i.e., £685 per annum, rising by annual increments of £25 to a maximum of £760 per annum), of the Administrative, Professional and Technical Division of the National Joint Council's Scale.

Consideration will be given to the payment of a temporary lodging allowance to selected candidates, who are maintaining a home elsewhere, pending their obtaining suitable accommodation.

Forms of application, particulars of the post, and conditions of service, can be obtained from the undersigned. Applications, together with copies of three recent testimonials, must be forwarded to Mr. Colin L. Jones, F.R.I.B.A., County Architect, Queen's Hill, Newport, Mon., not later than the 17th September, 1949.

Canvassing in any form will be a disqualification.

**VERNON LAWRENCE, Clerk of the Council,
County Hall, Newport, Mon. 2051**

ESSEX EDUCATION COMMITTEE. SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, FOREST ROAD, WALTHAMSTOW, E.17.

Required immediately, part-time day STUDIO MASTERS IN ARCHITECTURAL DESIGN, in the Department of Architecture and Building of the College, for work in connection with the full-time day courses for the examinations of the Royal Institute of British Architects. The times of instruction can be arranged to suit applicants. Applications (no forms), giving full particulars of qualifications, training and experience, should be sent to the Clerk to the Governors at the College.

D. N. BUNGEY, Acting Chief Education Officer.

County Offices, Chelmsford. 2050

BRIERLEY HILL URBAN DISTRICT COUNCIL.

APPOINTMENT OF SECOND ASSISTANT ARCHITECT.

Applications are invited from suitably qualified persons for the appointment of Second Assistant Architect, in the Architect and Housing Director's Department, at a salary in accordance with Grade VA of the A.P.T. Division (£550 x £20 to £610 per annum) of the National Scales of Salaries.

Candidates should be experienced in general Municipal work, including housing, be capable of preparing plans and specifications, etc., and supervising construction.

Applications, endorsed "Second Assistant Architect," stating age, full details of qualifications and experience, and accompanied by copies of not more than three recent testimonials, must reach the undersigned not later than Monday, 19th September, 1949.

HERBERT HEX, Clerk of the Council.

Council Offices, Moor Street, Brierley Hill. 30th August, 1949. 2034

COUNTY OF LINCOLN-PARTS OF LINDSEY.

COUNTY ARCHITECT'S DEPARTMENT.

In view of the large building programme, the following Senior Architects are required:-

TWO SENIOR ARCHITECTS. Grade VII, £635-£710 per annum.

ONE SENIOR ARCHITECT. Grade V, £520-£570 per annum.

TWO SENIOR ARCHITECTS. Grade IV, £480-£525 per annum.

A subsistence allowance will be paid to married men finding it necessary to obtain lodgings in Lincoln whilst maintaining their homes outside Lincoln, of 25s. per week for six months, plus third-class railway fare to their home each two months.

Applicants need not have had previous Local Government experience, but preference will be given to Associates of the R.I.B.A.

Applications, stating age, experience, qualifications, and accompanied by two recent testimonials, should be sent to the undersigned not later than the 17th September, 1949.

A. RONALD CLARK, A.R.I.B.A., A.M.T.P.I., County Architect.

County Offices, Lincoln. 2056

COUNTY OF LINCOLN-PARTS OF LINDSEY.

COUNTY ARCHITECT'S DEPARTMENT.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the appointment of Clerk of Works on the Temporary Staff, to supervise the erection of new Schools at Scunthorpe.

The salary will be £9 9s. per week for a period of not less than 18 months. At the completion of the job the person appointed may be given the opportunity to transfer to further building schemes which may then be commencing, subject to satisfactory service and to the Council's approval.

The successful applicant would be required to take up his duties as soon as possible and to reside in or near Scunthorpe.

Applications, stating age and experience, together with copies of testimonials or names for reference, to be sent to the undersigned not later than the 17th September, 1949.

A. RONALD CLARK, A.R.I.B.A., A.M.T.P.I., County Architect.

County Offices, Lincoln. 2056

COUNTY BOROUGH OF BLACKBURN.

Applications are invited for the following ARCHITECTURAL ASSISTANTS on the permanent staff of the Borough Engineer:-

One, Grade VI (£595-£660) or VII (£635-£710), according to experience and qualifications.

One, Grade VI, £595-£660.

One, Grade VI, £530-£570.

One, Grade III, £450-£495.

One, Grade II, £420-£465.

Applicants for the Grade VI or VII posts must be Registered Architects, and have good experience in the design and construction of schools.

Preference will be given to Associates of the R.I.B.A.

Applicants for the Grade V post must be Registered Architects and have good general experience in the design and construction of Municipal buildings and housing.

Applicants for Grades II and III posts must have good experience in an Architectural office, and preference will be given to those who have passed the R.I.B.A. Intermediate Examination or its equivalent.

Applications, endorsed "Staff Appointments," stating age, qualifications, experience, present and past appointments, together with copies of recent testimonials, should be submitted to the Borough Engineer and Surveyor, Town Hall, Blackburn, not later than 15th September.

CHAS. S. ROBINSON, Town Clerk.

2044

Competitions

6 lines or under, 10s.; each additional line, 1s. 6d.

PUBLIC HALL AND RESTAURANT, WHITEHAVEN.

The Whitehaven Corporation invite Architects resident in this country to submit designs in competition for the Public Hall and Restaurant which they propose to erect in Whitehaven.

Assessor, Mr. Harold A. Dod, M.A., F.R.I.B.A. Premiums, £300, £250, and £175.

Last day for submitting designs, 15th March, 1950.

Conditions may be obtained on application to the Town Clerk, Town Hall, Whitehaven, Cumberland. Deposit £2.

Town Hall, Whitehaven. 20th August, 1949. 1990

UNIVERSITY OF NOTTINGHAM. ARCHITECTURAL COMPETITION FOR A HALL OF RESIDENCE.

The Council of the University of Nottingham invite Architects practising in the United Kingdom to submit designs in competition for a proposed Hall of Residence for 150 women students, to be situated on the Lenton Fields Estate, adjoining Beeston Lane, Nottingham, and for the layout of that Estate. On the nomination of the Royal Institute of British Architects, the Council of the University have appointed Sir Percy Thomas, P.P.R.I.B.A., of Cardiff, to act as Assessor. Premiums of £1,000, £750 and £500 will be paid to the authors of the designs placed 1st, 2nd and 3rd respectively.

A schedule of Conditions and particulars of the

site may be obtained on application to the Registrar, the University, Nottingham, on payment of a deposit of two guineas, which will be refunded on receipt of a *bona fide* design or upon return of the Competition documents.
The closing date for applications for Conditions will be Tuesday, 1st November, 1949.
The closing date for the Competition will be Saturday, 11th March, 1950. 2042

Architectural Appointments Vacant

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

ARCHITECTURAL ASSISTANTS required immediately for interesting and varied work on Schools, Hospitals, University Buildings, Housing, etc.; salary dependent on experience and qualifications. Apply personally by telephone or in writing. Pile Son & Fairweather, Chartered Architects, 6, Queen Anne's Gate, Westminster, S.W.1. Whitehall 8576. 1892

ARCHITECTS' ASSISTANTS required in the Architects' Dept., F. W. Woolworth & Co., Ltd., Head Office, 1-5, New Bond Street, London, W.1. Applicants should write in giving full details of training, qualifications, experience, and salary required, to H. Winbourne, F.R.I.B.A., Architect. 1879

TWO Qualified **ARCHITECTURAL ASSISTANTS** required with experience of design and working drawings, in private office, London West Central. Salary £500 and £700. Apply, giving particulars of experience, to Box 358.

ARCHITECTURAL ASSISTANT required for work in connection with Rural Housing, Ecclesiastical, Industrial and General Private practice. Applicants should write stating full experience, age and salary required, to D. C. Denton-Smith, L.R.I.B.A., 40, Regent Street, Cambridge. 1909

WEST RIDING Architects require **ASSISTANT** for busy general practice; industrial, hospital and housing work; excellent prospects for reliable man. Box 1947.

ARCHITECTS' ASSISTANT of Intermediate Standard or higher, required for Architect's Dept. of a Multiple Firm with offices in Birmingham. Applicants should have a sound knowledge of Construction and Surveying and should be able to produce Working Drawings under supervision. Salary in accordance with experience and qualifications, etc. Apply in first instance to Box 1943, enclosing copies of recent testimonials.

SENIOR ARCHITECTURAL ASSISTANT required for appointment to staff of Development and Research Department. Applicants must hold Associateship of R.I.B.A. and be interested and experienced in industrial construction. Applications in writing, stating age, experience and salary required, to Chief Staff Architect, Ilford Limited, Romford, Essex. 1980

REQUIRED in Croydon Architects' Office. Two **JUNIOR ASSISTANTS** of first and second year standard and Two **ASSISTANTS** of intermediate standard. Salary according to ability. Box 1964.

EXPERIENCED ARCHITECTURAL ASSISTANT (male or female) required by Canadian firm of Architects. Applicants should be 30-40 years of age, and should be capable of preparing rough sketches, details, and all necessary drawings and instructions to commence and complete a job. Commencing salary £300 (£76) per month. The post offers advancement to person of intelligence and accurate work. Help will be given in paying passage and expediting journey to Canada, and applicant should be prepared to commence by end of September. Applications should be addressed to Box 1985.

SENIOR and **JUNIOR ASSISTANTS** required for varied London practice. Kennington & Farms, F. A. & A.R.I.B.A. Welbeck 6543. 2002

REQUIRED in West End Architects' Office. Two **JUNIOR ASSISTANTS** of first and second year standard and Two **ASSISTANTS** of intermediate standard. Salary according to ability. Box 1983.

ARCHITECTURAL DRAUGHTSMAN for display and exhibition. Inter R.I.B.A. standard. Capable of producing accurate working details and coloured perspectives. Write, stating age, experience and salary required, to Charles Kenrick, Limited, 15, Berners Street, W.1. 1995

ARCHITECTURAL ASSISTANT required; good draughtsman; some office experience preferred. Apply, stating age, experience and salary required, to Farmer & Dark, Chartered Architects, Terminal House, Grosvenor Gardens, London, S.W.1. 2008

SENIOR ASSISTANT ARCHITECT, A.R.I.B.A. standard, required in busy London office; able to take complete charge of jobs from first stage; also Junior Assistant up to intermediate standard. Write, with particulars of experience, age, qualifications and salary required, to E. Bates and Wm. G. Stnning, 89, Chancery Lane, W.C.2. 2009

ARCHITECTS, SENIOR ASSISTANTS required. Should have good knowledge of commercial and industrial buildings and contemporary design. Apply in writing to S.C.W.S., Ltd., Architectural Department, 119, Paisley Road, Glasgow, C.5. Envelopes to be endorsed "Architect." 2026

QUANTITY SURVEYORS, SENIOR ASSISTANTS required. Preferably with pre-war experience in Scheduling; probable costing; measuring and agreeing Final Measurements. Apply in writing to S.C.W.S., Ltd., Architectural Department, 119, Paisley Road, Glasgow, C.5. Envelopes to be endorsed "Surveyor." 2026

ARCHITECTURAL ASSISTANT required; must have passed Intermediate examination; good draughtsman, ability to prepare detail and working drawings; good prospects. Reply, with full particulars and salary required, to G. H. Herring, 21, Milton Road, Harpenden, Herts. 2043

ARCHITECTURAL ASSISTANT required for writing drawings and job supervision. Apply in writing, giving particulars of training, experience, and salary required, to Drake and Lasdun, 29, Sackville Street, W.1. 2040

JUNIOR ASSISTANT required for general practice; working drawings, details, write reports and specifications, etc. Full particulars to F. E. Wilkins, L.R.I.B.A., "Prudhoe House," 808, High Road, Tottenham, N.17. 2030

WANTED, immediately, **SENIOR** and **JUNIOR ARCHITECTURAL ASSISTANTS**; salaries according to ability and experience. Write or phone Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill. Phone Brierley Hill 7545/6. 2027

QUANTITY SURVEYING ASSISTANT (Worker-up) required immediately for busy practice. Write or phone Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill. Phone Brierley Hill 7545/6. 2028

ARCHITECTURAL ASSISTANTS required at Hammersmith office; housing and general design work; salaries ranging from £400 to £500 per annum, according to experience and qualifications. Write, giving detailed particulars, to George Wimpey & Co., Ltd., Hammersmith Grove, London, W.6. 2039

SENIOR ARCHITECTURAL ASSISTANTS required. Apply in writing, stating age, experience and salary required, to Lucas, Roberts & Brown, Architects and Surveyors, Barnfield Hill, Exeter. 2047

the modern SCHOOL

by C. G. STILLMAN, F.R.I.B.A. and E. CASTLE OLEARY, A.R.I.B.A.

This book gives a comprehensive account of the architectural and building problems which face educationalists today. The Butler Education Act of 1944 has been revolutionary in its new approach to education and its scope and implications are not yet fully appreciated in many responsible quarters. *The Modern School* surveys the whole field beginning with the historical background and ending with a chapter on modern constructional design; it examines the contemporary architectural problem in relation to the Education Act and deals with each special aspect of school design in detail, so that questions of siting, classroom accommodation, specialist rooms (e.g. laboratories and music rooms), school kitchens, gymnasias and playing fields are each covered in turn. It is a book designed to be of value to all education officers and local education authorities as well as to practising architects.

The book contains 152 pages including about 120 photographs and plans. Its size is 9½ in. by 7½ in., and it is bound in cloth.

Twenty-one shillings, postage ninepence.

THE ARCHITECTURAL PRESS

9-13 Queen Anne's Gate, S.W.1.



Brolac Murac

DOUBLE PROTECTION PAINT

with the ENAMEL FINISH

Made from HANKOL, the special flexible, waterproof paint medium. Ensures long life and maximum protection, as well as the best decorative scheme. Gives outstanding resistance to Sea Air, City Dirt, and Indoor Condensation.

NEW TYPE MATT FINISH

for INTERIOR DECORATION

Economical and Hygienic—the Ideal Finish for Hotels, Schools, Hospitals etc. MURAC can be applied as easily and quickly as a Water Paint—with a 4-6" flat wall brush. Yet it dries with a lovely dull sheen as hard and durable as an oil paint. You can really WASH IT—RUB IT—SCUB IT.

JOHN HALL & SONS

(BRISTOL & LONDON) LTD • HENGROVE, BRISTOL 4

and ST. PANCRAS WAY, LONDON, NW1

Who also make 'BRISTOL' Gloss Enamel Paint 'BROLISTIC' Oil-Bound Water Paint

NEWCASTLE-UPON-TYNE. — ARCHITECTURAL ASSISTANTS required in office concerned with Architecture, Town Planning, and Landscape; 5-day week. Box 2044.

REASONABLE commencing salary and good prospects offered to competent ARCHITECTURAL DRAUGHTSMAN, capable of producing accurate working drawings; R.I.B.A. qualifications not necessary, but experience on working drawings essential. Write W. A. Bassett, L.R.I.B.A., 23, Quarry Hill Road, Tonbridge, Kent. 2048

ARCHITECTURAL ASSISTANT required immediately by Gollins, Melvin & Partners, A./R.I.B.A.; capable working drawings; salary £500-£550, according to experience. Telephone Museum 0883 for appointment. 2053

ARCHITECTURAL ASSISTANT required for Licensed New Building Work. Kindly write, stating age, experience, and salary required, A. Neville Holt, F.R.I.B.A., 20, Exchange Street East, Liverpool, 2. 2057

QUALIFIED ARCHITECT (25-35) required as Chief Technical and Design Assistant, to work with Max Lock, Architect and Town Planning Consultant, on new neighbourhood in Portsmouth district. Should have experience in costing and organizing the building of housing schemes. Sensitive ability in design and knowledge of civil engineering aspects essential. Town planning qualification and local authority experience desirable.

Should be well versed in use of contemporary building methods. Knowledge of foreign methods an advantage. Should be able to advise on interior decoration, equipment furnishing.

Will be required

- (a) to assist in direction of site office;
- (b) to collaborate with planner, economist, quantity surveyor, landscape architect and local government officials in preparing schemes of development;
- (c) to undertake technical research and apply results to urgent house building programme;
- (d) to prepare or assist in preparation of technical reports, specifications costing studies.

The job gives unusual opportunity for original work.

Commencing salary will be between £500 and £800 a year, or otherwise according to experience. Living accommodation can be made available.

Written application should be made by 3rd October to Max Lock, A.R.I.B.A., M.T.P.I., 13, Suffolk Street, London, S.W.1. 2052

Architectural Appointments Wanted

A.R.I.B.A., A.A. Honours Dip., 35, good general experience, seeks part-time work, preferably near London or in Home Counties. Box 358.

ASSOCIATE (age 28), Liverpool Dipl., desires post in Cornwall, Devon or Somerset, with progressive opportunities in general practice. Box 363.

ARCHITECTURAL DRAUGHTSWOMAN, of Intermediate R.I.B.A. standard, requires work in London office; starting immediately. Box 364.

JUNIOR DRAUGHTSWOMAN requires position in Architect's office; London area; qualifications: Ordinary National Certificate for Building and City and Guilds Intermediate for Quantities. Box 362.

A.R.I.B.A., A.A.Dipl., knowledge town planning, 15 years' experience public and industrial buildings and exhibitions, seeks responsible position in West Midlands, London, or Luton-St. Albans district. Box 365.

Other Appointments Vacant

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

EXPERIENCED MEASURING SURVEYOR required by Messrs. Holloway Brothers (London), Ltd., for a large Building and Civil Engineering Contract, in South of England; must be capable of measuring for interim payments, measuring and agreeing work on schedule rates, and preparing final account; opportunity for suitable applicant to join permanent staff. Apply in writing, giving full particulars of age, experience, and salary required, to the Secretary, 157, Millbank, S.W.1. 1411

ARCHITECTURAL Journal requires EDITORIAL ASSISTANT; knowledge of architecture essential; some journalistic experience and knowledge of magazine production useful. Box 345.

REINFORCED Concrete Engineer required for London Drawing Office. The work will consist chiefly of designing reinforced concrete floors and roofs. The position is a permanent one and there is a staff superannuation scheme. Write, stating age, experience, salary required, to Box A.J. 457, at 191, Graham House, E.C.2. 1996

RAPIDLY expanding Multiple Shoe Firm require on their staff a SURVEYOR ARCHITECT, of at least 10 years' experience; salary £500-£600 per annum, according to qualifications; age limits 30-40. Apply Peter Lord, Ltd., Mitre House, 177, Regent Street, W.1. 2037

HIGH-GRADE Technical Selling gives ample scope for self-expression and an income limited only by ability. A well-known company requires the services of Two Architecturally-trained Men with a bent in this direction, to put forward the technical possibilities of a product in every-day demand, to Architects and Local Authorities. One to be centred in London and one in the North Midlands. Their sphere of operations would be on a national scale, supported by National Advertising, postal publicity, and a strong field organization. Address reply in confidence to the Sales Manager, Box 2038.

SHORTHAND TYPIST required; 5-day week; previous knowledge of building terms an advantage; salary according to experience. Apply in writing to Graham Crump, F.R.I.B.A., 43, George Street, Croydon. 2026

Services Offered

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

DESIGNS, Plans, Perspectives, for all trades and professions. C. Leslie New, A.N.Inst.E. 182, Sladepond Farm Road, Birmingham, 14. Tel.: MID. 5421. 623

DRAUGHTSMANSHIP, Designing and Artistry for Architectural Metalwork, Shopfronts, Interiors, Neon Signs, Display, etc. "New" Services, 65, Heath Street, Birmingham, 15. Phone MID. 5421. 624

COMPETITION DESIGNS developed and rendered by Professional Draughtsman-Designer. O. Leslie New, A.N.Inst.E., 182, Sladepond Farm Road, Birmingham, 14. Tel.: MID. 5421. 1317

PART-TIME ASSISTANCE offered to Architects for building and land surveys, levelling, colouring, etc., for housing, school, factory, etc.; sites; own car and equipment. Box 1869.

SURVEYS, Designs, Working Drawings, Tracings and Specifications prepared. "Architectural Services," 14, Greenford Road, Greenford, Middlesex. Perivale 7040. 1840

FULLY equipped ARCHITECTURAL ASSISTANT requires Spare-time Work; sketch plans, surveys, tracings and colouring. Box 2029.

ARCHITECT, with wide experience, including licensed property work, offers Part-time Assistance in Liverpool area; preferably at own address. Box 2021.

ARCHITECTURAL Research or Development Work undertaken, of either contemporary or historical nature. Write Box 2032.

REINFORCED CONCRETE Design and Detailing, and Preparation of General Working Drawings. Box 2058.

For Sale

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

THOROUGHLY seasoned Home Grown Hardwood for Sale: 1 in., 1½ in. and 2 in. Oak, 3 in. and 1½ in. Elm; mixed Hardwood in sizes 4 ft. 3 in. by 2 in. by 1 in., 3 ft. 3 in. by 1½ in. by 1½ in., 3 ft. 11 in. by 1½ in. by 1 in. Timberica, Ltd., Oozells Street, Birmingham, 1. 705

RED Sable Water Colour Brushes, Nos. 0-4; sample set (7 brushes), 22s. 6d., post free; c.o.d. extra. Spar Artists Brush Co., 12, Duke Street, St. James's, London, S.W.1. Whitehall 6640/6988. 640

Miscellaneous

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

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of fencing, guard rail, factory partitions and gates. Harvest Works, 99-107, St. Pauls Road, N.1. Canonbury 2061.

SPECIALISTS in Gilding and Lettering in 23 carat English gold leaf. Messrs. F. C. Edwards, 13, Cunningham Place, N.W.3, undertake all types of signs and gilding work at competitive prices. Phone CUN. 3527. 1948

ONE or Two STUDENTS (25-35 years), working in private practice studying final December exam., invited to share superior flat and garden. Two guineas per week, or £1 15s. if two students. Write 3, Alton Road, Rochampton, S.W.15. 1999

ANTIQUE and MODERN IRONMONGERY for all classes of jobs. Specialists in Wire Gym Kit Lockers and Towel Cages for schools, swimming pools, etc. Write for list, AIC80, stating requirements, or ask for representative to call, Parker, Winder & Achurch, Ltd., 80, Broad Street, Birmingham, 1. (Midland 5001). 1943

£50 FOR ONE JOB. Architectural Modelling pays! We supply Plans, Instructions, and sell your work. Details free, BS, Biltex Models, London, W.4. 1946

FRAMING and MOUNTING of Drawings and Plans is a special service offered to Architects by The Rowley Gallery, Ltd., 87, Camden Street, Kenington Church Street, W.8. Park 4349. 136

FLOORS OF DISTINCTION Laid; in wood, rubber, composition, cork, mosaic; existing floors repaired, resurfaced and polished; also panelling restored. Davis Floorings, Grove Hall Court, Hall Road, N.W.8. CUN. 3205/6 and 5611. 60

ALL Kinds of Fencing supplied and erected; established over 100 years. Parker, Winder & Achurch, Ltd., 80, Broad Street, Birmingham, 1.

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, prepare candidates by correspondence tuition. 15, North Road, N.6. Tel.: MOUNTVIEW 8194.

LONDON COUNTY COUNCIL HAMMERSMITH SCHOOL OF BUILDING AND ARTS AND CRAFTS

Lime Grove, Shepherds Bush, W.12

Session 1949/50

Session commences 26th September, 1949

Enrolment week—19th September, 1949

Senior Building School, Head of School—F. G. GOODIN, A.R.I.B.A.

Evening and Part-time Day Courses for—

Architects, Builders, Structural Engineers, Builders & Quantity Surveyors, Auctioneers & Estate Agents, Re-inforced Concrete Engineers Foremen, Bricklayers, Masons, Carpenters & Joiners Plasterers, Plumbers, Woodcutting Machinists, Painters, Decorators and Sign Writers

Day Courses— Full-time Day National Diploma Courses are held for the training of Students for administrative positions in the Building Industry.

Also Courses in Architecture, Structural Engineering and Building and Quantity Surveying for students preparing for the examinations of these professional institutions. (499).



Continual research enables Rentokil to offer

RENTOKIL

Timber Fluid

as the most outstanding success against

WOODWORM

also

RENTOKIL

Dry Rot Fluid

as the most effective treatment for Rot & Fungus



RENTOKIL LTD.

School Lane, Fetcham, Leatherhead, Surrey
Tel: Leatherhead 4021/2

RIBA INTER, FINAL & SPECIAL FINAL.
 Postal Courses in all subjects of the examination syllabus (including Professional Practice) are conducted by
THE ELLIS SCHOOL OF ARCHITECTURE
 Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.
 182, OLD BROMPTON RD., LONDON, S.W.7
 Telephone: KENington 8641

DRAUGHTSMAN DESIGNER
 with first class experience of Architectural Metalwork required by the
MORRIS SINGER CO.
 Apply giving full particulars to:—
FERRY LANE WORKS, FOREST ROAD, WALTHAMSTOW, E.17

NORTHERN POLYTECHNIC
HOLLOWAY, LONDON, N.7.

Principal: T. J. DRAKELEY, D.Sc., Ph.D.(London), F.R.I.C., F.I.R.I.
 Head of Department of Architecture:
 T. E. SCOTT, F.R.I.B.A.

DAY SCHOOL OF ARCHITECTURE

The Five Years' Course qualifies for exemption from the Final Examination for Associateship of the R.I.B.A. and for registration under the Architects (Registration) Act, 1931-1938. Students who complete satisfactorily the first Three Years of the course are granted exemption from the Intermediate Examination of the R.I.B.A.

School year begins 26th September, 1949.
 Fees—£20 per annum, or £7 per term.
 Students under the age of 18 may be admitted free

EVENING SCHOOL OF ARCHITECTURE

(Five years' Course recognised by the R.I.B.A. for exemption from the Intermediate Examination.)
 New Session begins 26th September, 1949.

Fee from 10s. to 50s. per course according to age of student

Special Design classes, and lectures on the Theory of Structures, Hygiene, Materials, Specifications, and Professional Practice in preparation for the Final Examination of the R.I.B.A.

ENTRY TO THE SCHOOLS. Intending day students are interviewed by appointment. Intending evening students will be interviewed from 5.30—7.30 p.m. on 16th and 20th September, 1949, or on any subsequent evening by appointment.

Prospectus post free on application.
 Telephone: NORth 1690.

TILYARD TILES LIMITED
WALL & FLOOR TILING
TILED FIREPLACES
 APPROVED SPECIALISTS FOR
ARMSTRONG'S "ACCOTILE" FLOORING.
 182 EARL'S COURT ROAD, S.W.5
 Phone: Frobisher 3479—6762
SHOWROOMS: 1-5 CHILD'S PL. EARL'S COURT

PROFESSIONAL ADVANCEMENT

through **ICS** **STUDY COURSES**

I.C.S. Home Study Courses help the professional man to further his career. They include many courses for Membership Examinations of the various technical bodies. Brilliant successes have been recorded in the spheres of architecture, building, and surveying.

Here are some of the subjects in which we offer fully qualified instruction:—

Architecture
 Architectural Drawing and Designing
 Building Contracting
 Building Construction and Interior Work
 Building Construction and Quantities
 Building Specifications
 Quantity Surveying
 Civil Engineering

Surveying and Mapping
 Plan and Map
 Draughtsmanship
 Structural Engineering
 Concrete Engineering
 Structural Drawing
 Construction Draughtsmanship
 Sanitary Engineering
 Air Conditioning
 Heating and Ventilation

Special Courses for the examinations of the R.I.B.A., I.O.B., R.I.C.S., Inst.C.E., I.M.E. (Building Inspectors), Inst.Struct.E., A.E.A.I., Inst. Clerk of Works, etc.
 Examination students are coached till successful.

Write to-day for free booklet describing our Courses in any of the subjects mentioned above.

International CORRESPONDENCE SCHOOLS

Dept. A.J. International Buildings, Kingsway
 London, W.C.2.

FIBROUS PLASTERWORK OF EVERY DESCRIPTION

ALLIED GUILDS
 King Edward Square,
 SUTTON COLDFIELD. Tel.: Sut 3809

BOOKS

A list of books on architecture, planning and building practice will be sent on application to the Manager:—

THE ARCHITECTURAL PRESS
 9, Queen Anne's Gate, Westminster

ELLISON for

HIGH VOLTAGE SWITCHGEAR.
CIRCUIT BREAKERS of up to 4000 amps.
 and **STARTERS** for
 Electric Motors of up to 1000 H.P.

Made by GEORGE ELLISON LIMITED, Perry Barr, Birmingham, 22B

Books by post

MODERN HOUSING ESTATES
 by Stanley Gale 35s 9d

The first, concise outline of all matters affecting the planning and construction of housing estates, with chapters on the design of housing and layout of estates, road construction, finance and administration, legal regulations affecting development, and detailed examination and illustrations of all noteworthy completed schemes. 272 pages; 168 photographs.

THE MODERN SCHOOL
 by C. G. Stillman, F.R.I.B.A. and R. Castle Cleary, A.R.I.B.A. 21s 9d

The scope and implications of the Butler Act of 1944 have created many architectural problems, all of which the authors deal with comprehensively.

OLD CHURCHES AND MODERN CRAFTSMANSHIP
 by Alban D. R. Caroe 18s 9d

Mr. Caroe has had specialised experience in this branch of post-war reconstruction and renovation work and in detailing the many problems likely to confront the architect, he offers practical solutions.

HOMES:
Small, Medium and Large 30s 9d
 Two hundred contemporary American houses—of one, two and three bedrooms—are illustrated by over 400 photographs, plans and details.

Prices include postage from
STOBART & SON LTD.
 9 Victoria Street, London, S.W.1.

STEELWORK BY R.W. SHARMAN LTD.

Head Office: The Parade,
 Sunbury-On-Thames,
 Middlesex
 Phone:
 Sunbury 3210.

Works: Swan Works,
 Hanworth,
 Middlesex
 and at Hayes, Middlesex.

Telegrams: "Sharman, Sunbury" Feltham 3007.
 (All communications to be addressed to Head Office.)

INDUSTRIAL AND COMMERCIAL LIGHTING EQUIPMENT

Wardle

MAXHEAT TUBULAR HEATERS

SEND FOR CATALOGUE

The Wardle Eng'g. Co. Ltd. Old Trafford, Manchester 16 dmWA2B

WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
 BULWELL 75237-8

M. McCARTHY & SONS, LTD
 BULWELL NOTTINGHAM

FOR ELECTRICAL SCHEMES
 consult

MLITE INSTALLATIONS LIMITED
 182 Brompton Rd., South Kensington, S.W.7
 KENington 0259/2890

RECENT CONTRACTS:—

FLATS:—
 Clifden Court,
 Twickenham

HOUSES:—
 Roe Green Estate,
 Kingsbury, N.W.9

Factories, Offices Etc.:—

Westcott's Laundries,
 Chingford, Essex

Thames Valley Pattern Wks.,
 Teddington

Tote Investors Ltd.,
 1/3, Ridinghouse St., W.1

EXHIBITIONS:—

"Daily Mail" Ideal Home
 Exhibition 1947/8/9

British Industries Fair
 1947 & 1948

Annual Dairy Show
 1948

Alphabetical Index to Advertisers

Acrow (Engineers), Ltd.	PAGE lxiii	Gas Council, The	PAGE viii	Newman, Wm., & Sons, Ltd.	PAGE x
Adams, Robt. (Victor), Ltd.	lxviii	Gaskell & Chambers, Ltd.	xvii	Northern Polytechnic, The	lxviii
Adshedd, Ratcliffe & Co., Ltd.	lxvii	Gent & Co., Ltd.	lxvi	Ohmlite Installations, Ltd.	lxvii
Allied Guilds	lxvii	Glow Worm Boilers, Ltd.	xi	Orlit, Ltd.	vi
Anderson, D., & Son, Ltd.	xli	G.R.L. Plastics, Ltd.	liv	Park Foundry Co.	
Architects' Benevolent Society	lxix	Greenwoods & Airvac Ventilating Co., Ltd.	ii	Parkes, Josiah, & Sons, Ltd.	xlv
Architectural Press, Ltd.	lxix	Gyproe Products, Ltd.	lxiv	Paul, W. H., Ltd.	lxv
Armstrong Cork Co., Ltd.	xvi	Gypsum Mines, Ltd., The	lxix	Pesture, Ltd.	xxxvii
Associated Metal Works (Glasgow), Ltd.	lxv	Hall, John	lxix	Phoenix Timber Co., Ltd.	iii
Austin-Hall Group of Companies, The	xxv	Harvey, G. A. & Co. (London), Ltd.	iii	Pilkington Bros., Ltd.	xxxvii
Austin, James, & Sons (Dewsbury), Ltd.	xi	Head Wrightson Aldean Ltd.	lvi	Pollard, E., & Co., Ltd.	xxxv
Baldwin, Son & Co., Ltd.	xviii	Heat & Power Engineers, Ltd.	lxix	Prodorite, Ltd.	lxviii
Bath Cabinet Makers & Artcraft, Ltd.	lv	Helliwell & Co., Ltd.	lxix	Rackstraw, G. T., Ltd.	
Benham & Sons, Ltd.	xxii	Hickson's Timber Impregnation Co. (G.B.), Ltd.	xxxviii	Radiation, Ltd.	v
Blundell Spence & Co., Ltd.	xxxii	Hills, P., & Sons, Ltd.	lxvii	Redhill Tile Co., Ltd.	xlv
British Celanese, Ltd.	xxxii	Hills (West Bromwich), Ltd.	lxvii	Redpath Brown & Co., Ltd.	lxviii
British Door Association, Ltd., The	lxiii	Hobart Manufacturing Co., Ltd.	xxxv	Resolite, Ltd.	lxix
British Electricity Authority	lxiii	Hope, Henry, & Sons, Ltd.	ii	Resilient Tile & Flooring Co. (Ealing), Ltd.	lxviii
British Insulated Callenders Cables, Ltd.	lxiii	Horseley Bridge & Thomas Piggott, Ltd.	lxviii	Ruberoid Co., Ltd., The	xxxix
British National Electricies, Ltd.	lxix	Ibstock Brick & Tile Co., Ltd.	lxviii	Rubery Owen & Co., Ltd.	
Celoure, Ltd.	lxix	Imperial Chemical Industries, Ltd.	lxviii	Sadd, J. H., & Son, Ltd.	xxxix
Celoure & Chemical Co., Ltd.	lxix	International Correspondence Schools	lxviii	Sankey, J. H., & Son, Ltd.	
Cellon, Ltd.	lxix	Ioco, Ltd.	lxix	Scaffolding (Great Britain), Ltd.	ii
Cement Marketing Co., Ltd., The	xxxvii	Jenson & Nicholson, Ltd.	lxix	Sealcrete Products, Ltd.	lxviii
Central Office of Information	lxiii	Johnston Brothers (Contractors), Ltd.	lxix	Sharman, R. W., Ltd.	lxviii
Claygate Fireplaces, Ltd.	lxiii	Laing, John, & Son, Ltd.	lxv	Siegmart Floor Co., Ltd.	lxviii
Colt, W. H., Ltd.	lxiii	Lamont, James H., & Co., Ltd.	lxv	Smith & Rodger, Ltd.	lxviii
Constructors, Ltd.	lxiii	Lightfoot Refrigeration Co., Ltd., The	lxv	Smith, Samuel, & Sons, Ltd.	lxviii
Compression Joints, Ltd.	lxviii	Lindsay's Paddington Ironworks (1948), Ltd.	lxv	Smith's Fireproof Floors, Ltd.	lxviii
Critical Manufacturing Co., Ltd.	lxviii	Lond. Ld.	lxv	Southern Lime Assoc., The	lxv
Courtney, Pope, Ltd.	lxviii	London Brick Co., Ltd.	lxv	Stelcon (Industrial Floors), Ltd.	lxv
Costain, Richard, Ltd.	lxviii	London County Council	lxv	Stobart & Son, Ltd.	lxviii
Donnelly, Fredk., Ltd.	lxviii	Malnwarer (Coppersmiths), Ltd., Henry	lxv	Styles (Contractors), Ltd.	lxviii
Dow-Mac (Products), Ltd.	lxviii	Mallinson, Wm., & Sons, Ltd.	lxv	Sugg, Wm., & Co., Ltd.	lxviii
Dunbrik, Ltd.	lxviii	Marley Tile Co., Ltd., The	lxv	Sundalea Board Co., Ltd.	lxv
Ebor Concrete, Ltd.	lxviii	Mason, Joseph, & Co., Ltd.	lxv	Temple Varnish Co., Ltd., The	lxv
Ecto Insulations, Ltd.	lxviii	McCall & Co. (Sheffield), Ltd.	lxv	Thompson Beacon Windows, Ltd., John	lxv
Ellis School of Building	lxviii	McCarthy, M., & Sons, Ltd.	lxv	Thorn, J., & Sons, Ltd.	lxv
Ellison, George, Ltd.	lxviii	Merchant Adventurers, Ltd.	lxv	Tilyard Tiles, Ltd.	lxv
En-Tout-Cas Co., Ltd.	lxviii	Midland Brick Co.	lxv	Tungum Sales Co., Ltd.	lxv
Esavian, Ltd.	lxviii	Midland Woodworking Co., Ltd.	lxv	Troughton & Young (Lighting), Ltd.	lxv
Ezee Kitchens, Ltd.	lxviii	Midland Joinery Works, Ltd., The	lxv	United Paint Co., Ltd.	lxv
Farmiloe, T. & W., Ltd.	lxviii	Mills Scaffold Co., Ltd.	lxv	Versil, Ltd.	lxv
Fishburn, L.	lxviii	Morris Slinger Co.	lxv	Ward, Thos. W., Ltd.	lxv
Fleetwood Paints, Ltd.	lxviii	Musgrave & Co., Ltd.	lxv	Wardle Engineering Co., Ltd.	lxv
Freeman, Joseph, Sons & Co., Ltd.	lxviii			Westwood, J., & Co., Ltd.	lxv
French, Thomas, & Sons, Ltd.	lxviii			Wheeler, F. H., & Co., Ltd.	lxv

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property, Land and Sales, see lxx, lxxi, lxxii, lxxiii, lxxiv, lxxv, lxxvi.

Silver-Grey HAND-MADE Facings

To meet the demand for a light grey facing for formal elevations, for use in town, with or among stonework, etc., Ibstock Silver-Grey facings are now available. Very attractive texture and colour. May we show you a specimen panel?

IBSTOCK

Manufacturers of high-grade bricks
in many selected colours

IBSTOCK BRICK & TILE CO. LTD.
near LEICESTER. Phone: 98/9
London: L.M.S. Goods Depot, High St., Kensington, W.8
Phone: Western 1281/2



PAGE
x
xxvii
xxvii
vi
xlv
lxi
xxvii
iii
xxiv
xxx
lviii
v
xlii
xlviii
xxvi
xxix
xviii
xxxix

ii
xxvii
xxiv
xxix
lxxiii
lxxvi
lx
lxxiv
xxvii
lvi
xxvii
xx
lxxix
xv
xxviii
xxvii
lxx
xxiii
lxx
lxxvii
xxvii
lxx
lxxiv

**We offer our services as
SPECIALISED FLOORING CONTRACTORS
in the following products:**

GESCO CORK FLOOR TILES

Attractively Grained, Neutral in Colouring, Durable, Warm, Non-Slip, Ideal Wall Covering.

MARLEY FLOOR TILES

Colourful, Low in Cost, Hard Wearing, Easy to Clean, Ideal for Concrete Floors.

RUBBER FLOOR TILES

Full Range of Colours, Marbled or Plain, Quiet, Durable, Easily Washed.

BOURNE FLOOR SEAL

Reduces Maintenance Costs and Improves Appearance, Ideal for Schools, Hospitals, etc.

**REPAIRS, RENOVATION
AND MAINTENANCE**

Specialists in the Treatment of Old and New Floors.

Helpful advice and information are freely available and we are always interested in flooring "problems."

For full information and samples write or telephone—

**RESILIENT TILE & FLOORING
COMPANY (EALING) LTD.**

Phone: 247, Wimbledon Park Road,
Putney 2664 Southfields, S.W.18



By Appointment
to H.M.
King George VI,
Hard Lawn Tennis
Court Masters.

EN-TOUT-CAS

Makers of all



By Appointment
to H.M. the
King of Sweden,
Hard Lawn Tennis
Court Masters.

**HARD LAWN TENNIS COURTS
at THE ALL-ENGLAND CLUB, WIMBLEDON**

and

THE WEST HANTS CLUB, BOURNEMOUTH
used for the British Hard Court Championships for 20 years

also the RUNNING TRACKS used for
THE OLYMPIC GAMES (1948), WEMBLEY
(16 Records broken) and the

OXFORD v. CAMBRIDGE (1949), WHITE CITY
(3 Inter-Varsity Records broken)

LARGEST MAKERS IN GREAT BRITAIN
of all types of

SPORTS GROUNDS, BOWLING GREENS, etc.

Please send your enquiries for any type of Sports Ground and applications for the new EN-TOUT-CAS Booklet to:

**THE EN-TOUT-CAS CO. LTD.
SYSTON, Nr. LEICESTER**

Telephone:
Syston 86163-4-5-6

London Office: Harrods Ltd., Knightsbridge, S.W.1
(Sports Dept., 1st Floor) Telephone: Sloane 8117/8

A NEW first coat PLASTER



with greater covering capacity

The surest way to eliminate decoration failures is to use SIRAPITE BROWNING. This new plaster contains no injurious alkalis, and there is virtually no expansion and contraction once it has set.

SIRAPITE BROWNING SPEEDS UP WORK by enabling the setting coat to be applied earlier and promotes more rapid drying out because a high proportion of the gauging water combines chemically with the plaster.

Directions for use and Specification Clauses will be sent on request.

THE GYPSUM MINES LIMITED
MOUNTFIELD · ROBERTSBRIDGE · SUSSEX

**NOBODY
WANTS ME!**



Is your "White Elephant" an enormous piece of good solid mahogany furniture?

Why not make it into several small pieces—

and bleach it with VITABLEACH at the same time? Bleached mahogany is really beautiful—and fashionable too.

Remember:—

VITABLEACH

(Regd.)

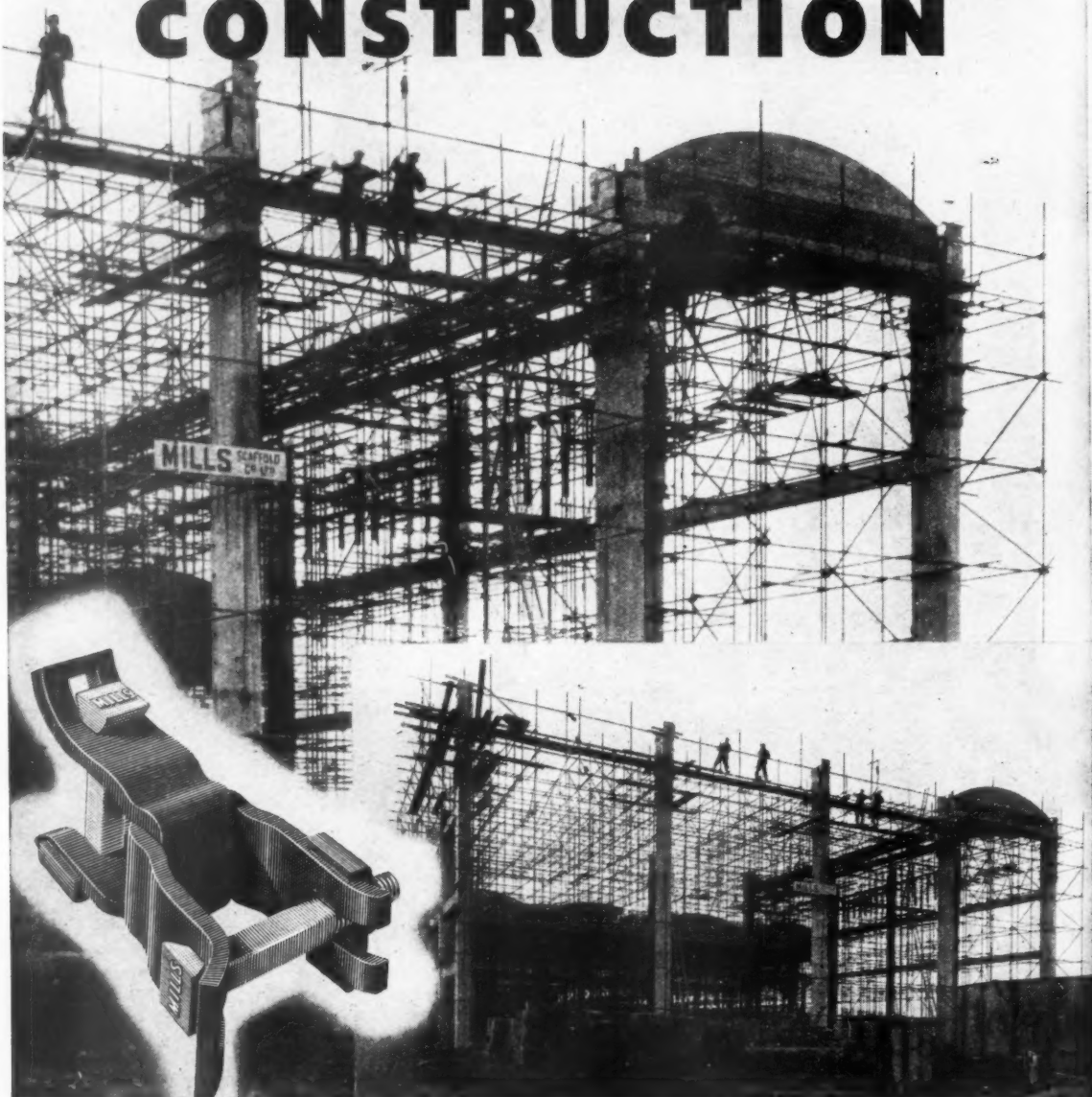
**BLEACHES
WOOD**

White

full details from

SMITH & RODGER LTD.
ELLIOT STREET · GLASGOW
Telephone: CITY 6341-2 Telegrams: "SMITROD" GLASGOW C.3

BARREL VAULT ROOF CONSTRUCTION



MILLS

KNOW HOW

TELEPHONE: RIVERSIDE 5026/9 OR YOUR NEAREST DEPOT

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

MILLS SCAFFOLD CO. LTD. Head Office: **TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6**

W
OT

W.6