

THE ARCHITECTS' JOURNAL



standard contents

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

DIARY

NEWS

from AN ARCHITECT'S
Commonplace Book

ASTRAGAL

LETTERS

PHYSICAL PLANNING

CURRENT BUILDINGS

INFORMATION

CENTRE

Physical Planning Lighting
Structure Heating & Ventilation
Materials Questions & Answers
Acoustics & Sound Insulation

INFORMATION SHEET

SOCIETIES & INSTITUTIONS

PRICES

Architectural Appointments
Wanted and Vacant

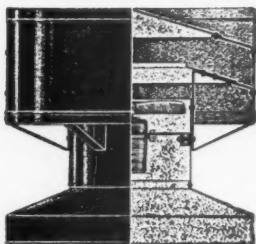
No. 2549] [Vol. 98
THE ARCHITECTURAL PRESS,
War Address: Forty-five The Avenue,
Cheam, Surrey. Phone: Vigilant 0087-9

Price 9d.

Registered as a Newspaper

★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone number of the organizations concerned. In all cases where the town is not mentioned the word LONDON is implicit in the address.

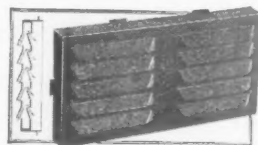
AA	Architectural Association. 34/6, Bedford Square, W.C.1.	Museum 0974.
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8.
APRR	Association for Planning and Regional Reconstruction. 32, Gordon Square, W.C.1.	Euston 2158-9.
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738.
ASB	Architectural Science Board of the Royal Institute of British Architects, 66, Portland Place, W.1.	Welbeck 6927.
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128.
BDA	British Door Association, Shobnall Road, Burton-on-Trent.	Burton-on-Trent 3350.
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385.
BINC	Building Industries National Council. 110, Bickenhall Mansions, W.1.	Welbeck 3335.
BOE	Board of Education. Belgrave Square, S.W.1.	Sloane 4522.
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140.
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246.
BSA	British Steelwork Association. 11, Tothill Street, S.W.1.	Whitehall 5073.
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333.
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255.
CEMA	Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W. 1.	Sloane 0421.
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280.
CSI	Chartered Surveyors' Institution. 12, Great George Street, S.W.1.	Whitehall 5322.
DIA	Design and Industries Association. Central Institute of Art and Design, National Gallery, W.C.2.	Whitehall 7618.
DOT	Department of Overseas Trade. Dolphin Square, S.W.1.	Victoria 4477.
EJMA	English Joinery Manufacturers Association (Incorporated), Sackville House, 40, Piccadilly, W.1.	Regent 4448.
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041.
GG	Georgian Group. 55, Great Ormond Street, W.C.1.	Holborn 2664.
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881.
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158.
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577.
IEE	Institution of Electrical Engineers, Savoy Place, W.C.2.	Temple Bar 7676.
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197.
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172.
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29.
ISPH	Committee for the Industrial and Scientific Provision of Housing. 1, Old Burlington Street, W.1.	
LIDC	Lead Industries Development Council. Rex House, King William Street, E.C.4.	Mansion House 2855.
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767.
MARS	Modern Architectural Research. 8, Clarges Street, W.1.	Grosvenor 2652.
MOA	Ministry of Agriculture and Fisheries, 55, Whitehall, S.W.1.	Whitehall 3400.
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300.
MOI	Ministry of Information. Malet Street, W.C.1.	Euston 4321.
MOLNS	Ministry of Labour and National Service. St. James' Square, S.W.1.	Whitehall 6200.
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933.	
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711.
MOTCP	Ministry of Town and Country Planning. 32-33, St. James' Square, S.W.1.	Whitehall 8411.
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611.
NBR	National Buildings Record. 66, Portland Place, W.1.	Welbeck 1881.
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041.
NFBTO	National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1.	Holborn 2770.
NT	National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham Palace Gardens, S.W.1.	Sloane 5808.
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245.
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House S.E.1.	Reliance 7611.
RC	Reconstruction Committee RIBA. 66, Portland Place, W.1.	Welbeck 6927.
RCA	Reinforced Concrete Association. 91, Petty France, S.W.1.	Whitehall 9936.
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721.
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335.
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274.
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646.
TCPA	Town and Country Planning Association. 13, Suffolk Street, S.W.1.	Whitehall 2881.
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147.
TPI	Town Planning Institute. 11, Arundel Street, Strand, W.C.2.	Temple Bar 4985.



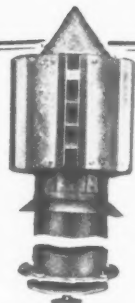
"MECHAVENT" STATIC OR MECHANICAL ROOF EXTRACTOR



"NOGAS" PATENT WALL VENTILATOR TYPE WGO



"NOLITE" PATENT DUPLEX LOUVRE VENTILATOR



"VACAIRE" EXTRACTOR WITH "NOGAS" VALVE

GREENWOOD-AIRVAC GASPROOF AND BLACK-OUT VENTILATORS

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD.

TELEPHONE: CHANCERY 8135/6

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

TELEGRAMS: "RHODESPACA" LONDON

REBUILD

with

ACCRINGTON 'NORI' BRICKS

• FACINGS • ENGINEERING • ACID-RESISTING

ACCRINGTON BRICK & TILE COMPANY

ACCRINGTON Telephone: ACCRINGTON 2684

Steam Laundries

If you have a scheme on hand for any type of Laundry either Commercial, Public Institution, or Private House — Ask our help.

For 30 years we have specialised in this work and can offer Plans and Specifications to architects free of charge.

New Catalogue now Ready

D. & J. TULLIS LTD.

Steam Laundry Engineers
Clydebank

AN ENDOWMENT POLICY

is more than ever necessary in War-time.

- (1) It includes WAR RISKS for Civilians living within the land area of the United Kingdom.
- (2) It forms a sound foundation for family prosperity in the changing world of to-day.
- (3) AN ENDOWMENT POLICY TAKEN OUT NOW WILL HELP TO PURCHASE A HOUSE WHEN THE WAR IS OVER.
(See A.B.S. House Purchase Scheme).

Particulars from:—

The Secretary,
A.B.S. INSURANCE DEPARTMENT
66 Portland Place, London, W.1.
Tel. Welbeck 5721.

THE SHAPE OF THINGS TO COME

AND THE SPIRIT AND TRADITION OF THE PAST.~



AN ENTRANCE GATEWAY, IN WROUGHT IRON

REPRODUCTIONS AND ORIGINALS, IN BRONZE, LEAD, WROUGHT AND CAST IRON, - OF ALL TYPES OF WORK, - SUCH AS GATES, RAILINGS, GRILLES, RAINWATER HEADS ETC., - FAITHFULLY CARRIED OUT BY ROSS CRAFTSMEN SKILLED & TRAINED TO APPRECIATE THE VALUE OF TRADITION AS APPLICABLE TO MODERN DESIGN. ~

ARCHITECTS' DESIGNS, FROM THE SIMPLEST AND PLAINEST WORK UP TO THE MOST RICHLY ORNAMENTED PIECES, RECEIVE THE MOST CAREFUL ATTENTION IN WORKING AND EXECUTION.

**S. GRAHAME
ROSS Ltd.**

ARCHITECTURAL CRAFTSMEN & ENGINEERS

BATH ROAD, SLOUGH

TELEPHONE: BURNHAM. 686.

LONDON OFFICE: 47, DORSET ST, W.1.

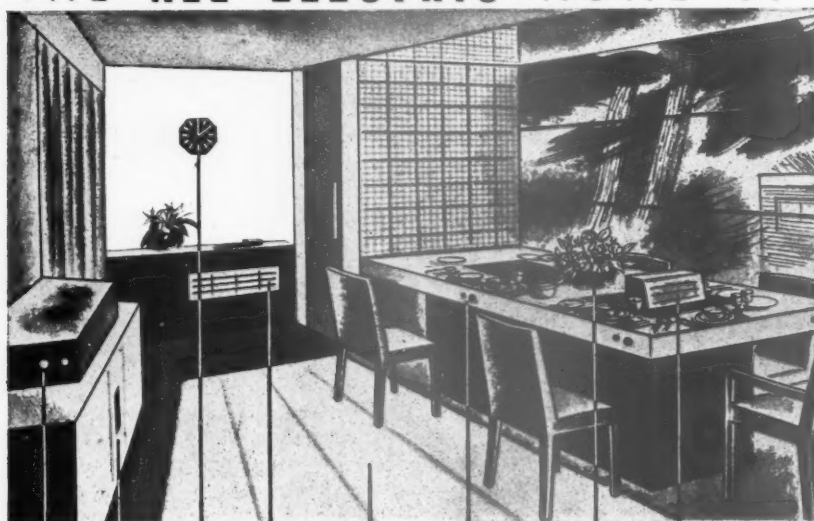
TELEPHONE: WELBECK. 8464.

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accrington Brick & Tile Co., Ltd.	ii	Foyles	xliv	Newsum, H., Sons & Co., Ltd.	v
Allied Paints & Chemicals, Ltd.	xliii	Franki Compressed Pile Co., Ltd.	xii	Nobles & Hoare, Ltd.	xliv
Anderson, C. F., & Son, Ltd.	—	General Cable Manufacturing Co., Ltd.	—	North Wales Slate Quarries Assoc.	xxiii
Anderson, D., & Son, Ltd.	—	Good Housekeeping Institute	—	Parsons, C. H., Ltd.	xxii
Architects' Benevolent Society	ii	Gray, J. W., & Son, Ltd.	—	Penfold Fencing Ltd.	xxxv
Architectural Press Ltd.	xliv	Greenwood's & Airvac Ventilating Co., Ltd.	ii	Pickerings Ltd.	xv
Ardor Insulation Co., Ltd.	xl	Haden, G. N. & Sons, Ltd.	vii	Poles Ltd.	xl
Arens Controls, Ltd.	xliv	Henleys Telegraph Works Co., Ltd.	xxx	Positive Flow Ventilators Ltd.	xxxviii
Ashley Accessories	—	Hills, F. & Sons, Ltd.	—	Prodorite Ltd.	xxxv
Bakelite Ltd.	—	Holden & Brooke, Ltd.	xliv	Pyrene Co., Ltd., The	ix
Bell, A., & Co., Ltd.	—	Hopton-Wood Stone Firms, Ltd., The	viii	Reynolds Tube Co. Ltd. & Reynolds Rolling Mills Ltd.	xvi
Benham & Sons, Ltd.	xxi	I.C.I. (Metals), Ltd.	—	Ross, S. Grahame Ltd.	iii
Birmetals Ltd.	xx	Ilford Ltd.	xxxix	Rownsdon, Drew & Clydesdale Ltd.	—
Boulton & Paul, Ltd.	xxx	Industrial Engineering Ltd.	—	Ruberoide Co., Ltd.	—
Braithwaite & Co., Engineers, Ltd.	—	International Correspondence Schools Ltd.	xliv	Rubery Owen & Co., Ltd.	xxxii
Bratt Colbran, Ltd.	xxv	Invisible Panel Warming Association	xiii	Rustproof Metal Window Co., Ltd.	x
Briggs, Wm. & Sons, Ltd.	—	Jenkins, Robert, & Co., Ltd.	xl	Sankey, J. H., & Son, Ltd.	—
British Trane Co., Ltd.	—	Kerner-Greenwood & Co., Ltd.	—	Sankey-Sheldon	xiv
Broadcast Relay Service, Ltd.	xxxiii	Kerr, John, & Co. (M/r.) Ltd.	—	Scaffolding (Great Britain), Ltd.	—
Brown, Donald (Brownall), Ltd.	xlii	Laing, John, & Son, Ltd.	xlvi	Sharman, R. W.	xlii
Burn Bros. (London) Ltd.	xxxvii	Lancashire Dynamo & Crypto Ltd.	—	Sharp Bros. & Knight Ltd.	xl
Cable Makers' Association	—	Leaderflush Ltd.	xxxix	Smith's English Clocks, Ltd.	iv
Caston & Co., Ltd.	xxiv	Limmer & Trinidad Lake Asphalt Co., Ltd.	xli	Smith's Fireproof Floors, Ltd.	xxxvii
Celotex Ltd.	—	Lloyd Boards, Ltd.	xliv	Standard Range & Foundry Co., Ltd.	xviii
Cheetham, H. & Co., Ltd.	xli	London Brick Company, Ltd.	—	Stephens, Henry C. Ltd.	xlii
Clarke & Vigilant Sprinklers, Ltd.	xlii	McCall & Co. (Sheffield), Ltd.	—	Taylor, Woodrow Construction, Ltd.	xliii
Copper Development Association	—	McCarthy, M. & Sons, Ltd.	xlii	Tentest Fibre Board Co., Ltd.	—
Crabtree, J. A., & Co., Ltd.	xi	Magnet Joinery	—	Thompson Beacon Windows, Ltd., John	xix
Crittall Manufacturing Co., Ltd.	—	Mathews & Yates Ltd.	—	Tretol Ltd.	xliii
Drynamels, Ltd.	—	Mellowes & Co., Ltd.	viii	Trussed Concrete Steel Co., Ltd.	vi, xxxv
Durasteel Roofs Ltd.	—	Metropolitan Plywood Co.	—	Tudor Accumulator Co., Ltd.	—
Eagle Range & Grate Co., Ltd.	xxxv	Metropolitan-Vickers Electrical Co., Ltd.	xlii	Tullis, D. & J., Ltd.	ii
Electrolux Ltd.	—	Mills Scaffold Co., Ltd.	xlv	Turners Asbestos Cement Co., Ltd.	xxxvii
Ellison, George, Ltd.	xlii	Milners Safe Co., Ltd.	—	Twistell Reinforcement Ltd.	—
Esavian Ltd.	xvii	M.K. Electric Ltd.	xxxvi	Walker, Croweller & Co., Ltd.	—
Etchells, Congdon & Muir, Ltd.	—	Morris, Herbert Ltd.	xxxvi	Wardle Engineering Co., Ltd.	xxxviii
Ewart & Son, Ltd.	—			Wood Wool Building Slab Manufacturers' Association	x
Expanded Metal Co., Ltd.	xxxviii				
Expandite Products Ltd.	—				
Flexo Plywood Industries, Ltd.	xxviii				

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

THE ALL ELECTRIC HOME OF THE FUTURE



No. 2

THE DINING ROOM

This suggestion is respectfully submitted to our professional friends with the thought that they will find interest and usefulness in a constructive layman's vision of what should be provided in the post war era.



1 Electric Cocktail Mixer

2 Electrically Cooled Cocktail Cabinet

3 SMITH SECTRIC CLOCK

4 Air Conditioning Radiant

5 Electric Panel Heated Carpet

6 Bell Push and Plug for Phone

7 Illuminated Flower Decoration and Table Lighting

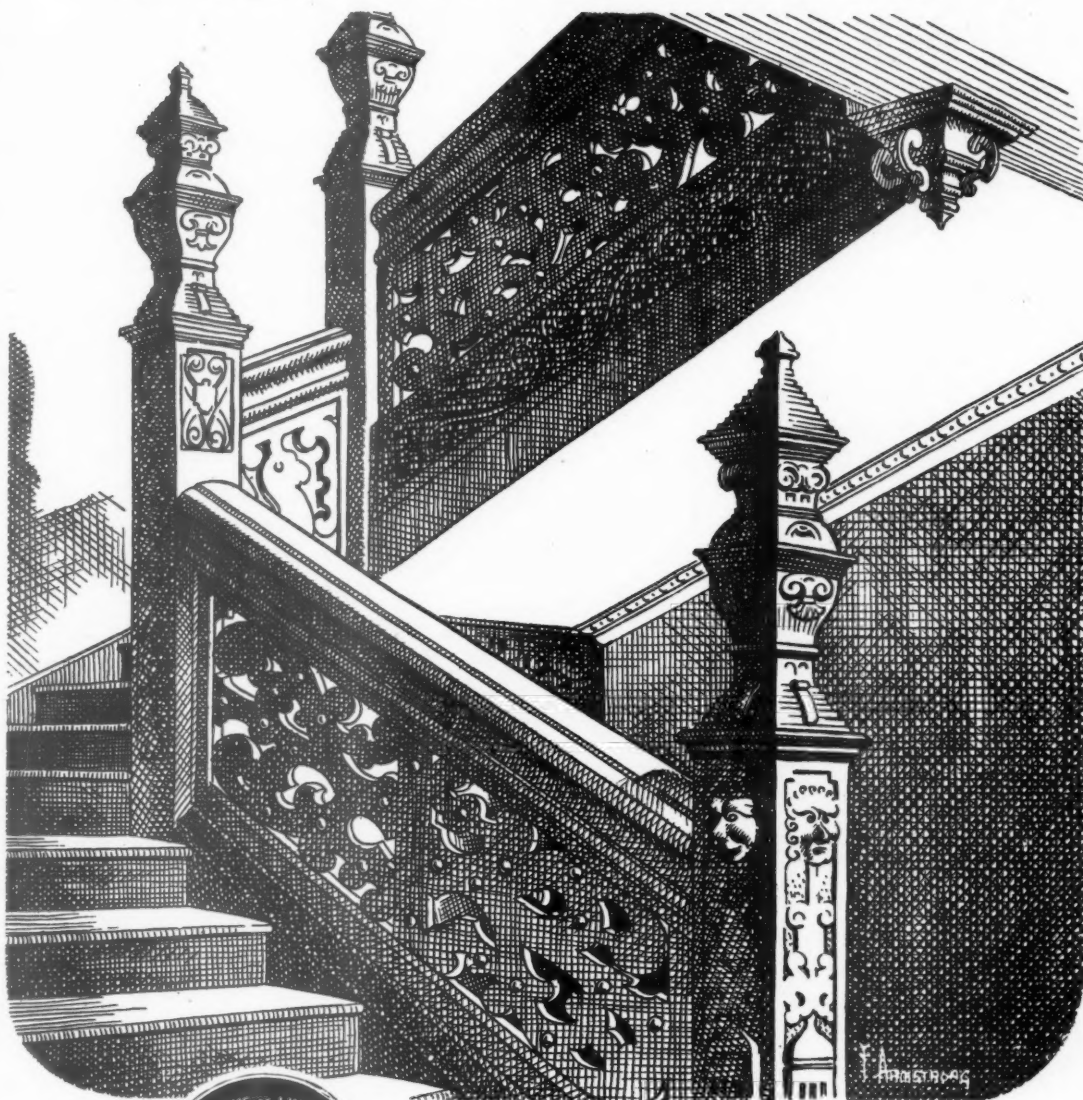
8 Electric Hot Plate and Toaster Rising from Table



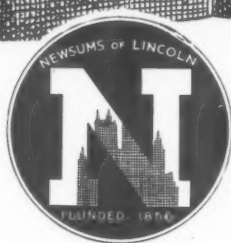
SMITH SECTRIC
CLOCKS

SMITH'S ENGLISH CLOCKS LTD., CRICKLEWOOD WORKS, LONDON, N.W.2

FAMOUS STAIRS OF OLD ENGLAND No. 4.



Benthall Hall, Shropshire (1583).



*For all that is best in
Modern Design and Craftsmanship—*

H. NEWSUM SONS & CO. LTD.

(Telegrams NEWSUMS) **LINCOLN** (Telephone Nos. 812—4 lines)

Mills also at GAINSBOROUGH and SHEFFIELD

DOORS • WINDOWS • STAIRS

AND ALL TYPES OF MANUFACTURED WOODWORK

★ Art-paper reproductions of each illustration of this series will be gladly sent to Architects and Building Contractors on request.

ROOFS of UNIT GARAGES

HY-RIB

The Combined Centering
and Reinforcement

NO TIMBER SHUTTERING
CONCRETE SLABS CAST IN SITU
SPEEDY CONSTRUCTION
EASY TO ERECT

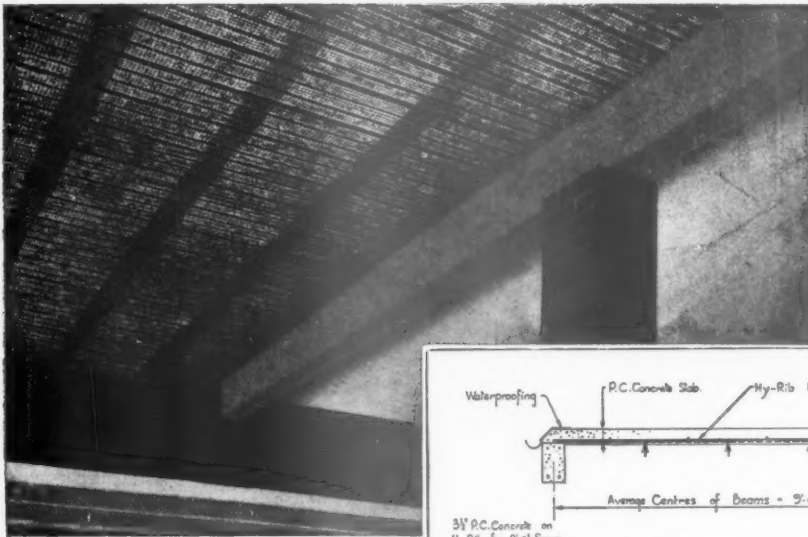


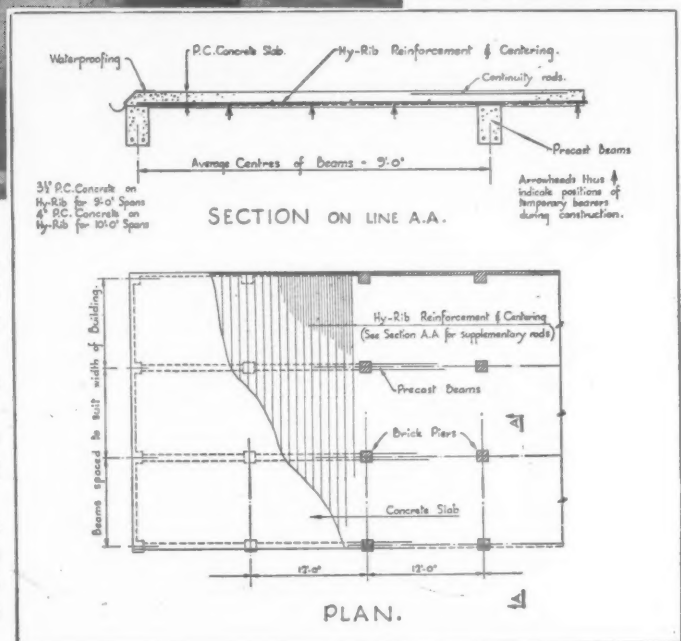
Illustration shows Hy-Rib centering and reinforcement after concrete of roof slab has set and temporary propping removed.

Typical details of unit garage showing construction of roof.

The use of Hy-Rib combined centering and reinforcement effects a double economy as timber shuttering is eliminated and the reinforcing steel is utilised in the constructional stages.

The use of Hy-Rib is a guarantee that the maximum strength is developed in the reinforcing steel. The sheets of Hy-Rib cannot "ride up" into the concrete during construction and become ineffective.

The Hy-Rib system of construction can be carried out by unskilled labour under the control of a competent foreman. Detailed working drawings are supplied for the guidance of the building staff.



HY-RIB SALES • 6 COLLINGHAM GARDENS

EARLS COURT • S.W.5 • PHONE FROBISHER 8141

HY-RIB
COMBINED CENTERING
AND REINFORCEMENT

[illegible]

'Phone: TERminus 2877 (10 lines)
Wires: Warmth, Westcent, London



DERBYSHIRE RAM *Sculptured in Hopton-Wood Stone by H. WILSON PARKER*

Many architects and sculptors choose Hopton-Wood as a fitting medium for their works, delighting in its flawlessness, its working qualities and in its pleasing finish.

'HOPTON-WOOD' STONE

THE HOPTON-WOOD STONE FIRMS LTD., WIRKSWORTH, DERBYSHIRE
and Victoria House, Bloomsbury Square, London W.C.1. 'Phone: Holborn 0895

Members of British Stone Federation



Mellowes
"ECLIPSE" PATENT GLAZING



MELLOWES & CO. LTD. SHEFFIELD
incorporating
FIELDING & SON (WERNETH) LTD. OLDHAM & LONDON

Looking ahead and maybe not so far!

When Architects again commence to specify for building purposes, it is probable that non-ferrous metals will still be in restricted supply, which seems that steel may have to be considered to a much greater extent than in pre-war days.

It is therefore well to remember what the "PARKERIZING" and "BONDERIZING" Processes have done for the Motor, Cycle and Refrigerator Industries during the past twenty years, providing a rust-proof base for the various types of paint finishes used in these Trades.

If steel articles are "PARKERIZED" or "BONDERIZED" before painting, the danger of paint flaking or rust creepage will be eliminated and the paint life increased many times.



METAL FINISHING
PROCESSES

PARKERIZED

Regd. Trade Mark

BONDERIZED

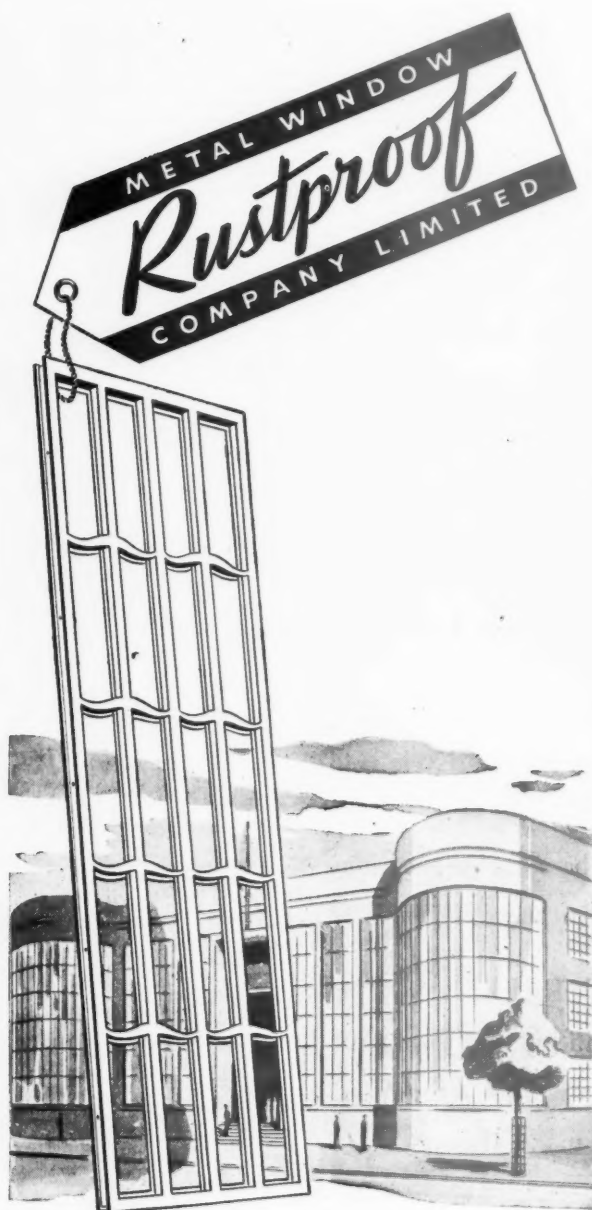
Regd. Trade Mark

SPRA-BONDERIZED

Regd. Trade Mark

Three words meaning rust-proofed with PYRENE Chemicals

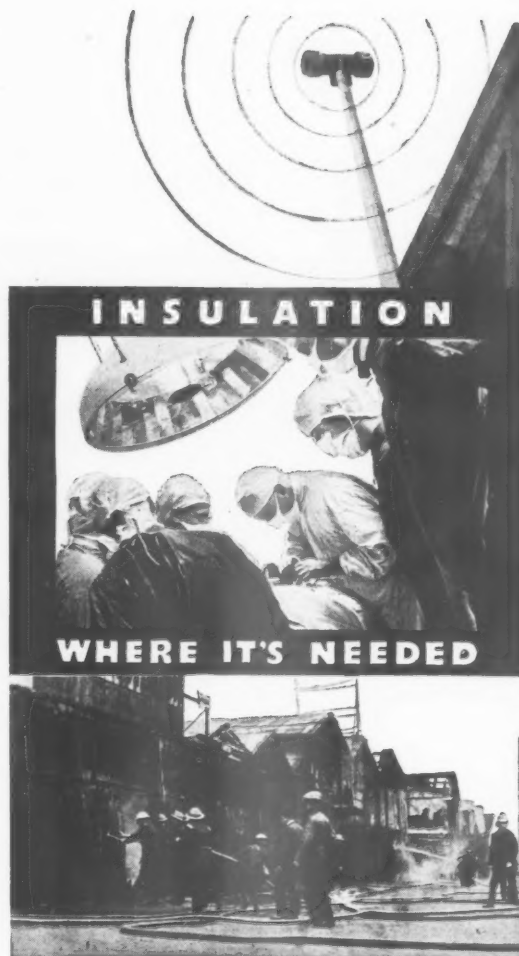
**THE PYRENE COMPANY, LIMITED (Metal Finishing Departments),
Great West Road, Brentford, Middlesex**



Windows for Public Buildings

The new and finer buildings of the post-war period—
not only public buildings, but also private
houses, factories, hotels, etc.—will call for windows
combining appearance with *durability and minimum*
cost of upkeep. Rustproof Metal Windows—purpose-
made or standard—will meet these requirements.

RUSTPROOF METAL WINDOW COMPANY LIMITED
DEVA WORKS, SALTNEY, CHESTER. LONDON OFFICE:
9, HANOVER STREET, LONDON, W.1. TEL.: MAYFAIR 2764



When we are able to look back upon current building progress, it will be recognised that the science of insulation was one of the great and permanent contributions of this generation. The development of the technique of insulation and the perfecting of the Wood Wool Building Slab are closely connected. These slabs have a large wartime use for roof decking and the cladding of buildings for war services and industries. But their value in insulating against noise, heat and cold and the condensation of moisture is rapidly bringing Wood Wool Slabs into standard use in many types of building construction.

The Wood Wool Building Slab Manufacturers Association is in being to extend the knowledge of the qualities and uses of Wood Wool Slabs. We will gladly send you the latest information about them in exchange for a penny stamp.

WOOD WOOL BUILDING SLABS

Wood Wool Building Slab Manufacturers Association
21 St. James's Square, S.W.1.



Acton Burnell Castle, Shropshire

Photo: Crabtree Studio

IT is well that we should occasionally glance back through the mists of time lest our hearts and minds, filled with the promise of the future, should forget from whence came our rich heritage of freedom, justice and courage, so aptly symbolised by the establishment of the first English Parliament at Acton Burnell nearly seven hundred years ago.

Progress, it must be remembered, is not a wonder-child of today: it is essentially of yesterday, born of the blood and toil and suffering of the pioneers of bygone centuries. Let us then pause for a moment in our labours and give thanks for this golden birthright which has enabled the British nation to endure the dark and troubled hours. Let us also acknowledge the priceless gift of true craftsmanship which has forged the weapons which will destroy our enemies—that same quality of hand and eye which will turn with equal facility to forging the tools of peace.

CRABTREE

A • NAME • SYNONYMOUS • WITH • PROGRESS • IN • ACCESSORIES • AND • SWITCHGEAR

"Crabtree" (Registered)

C.571/205. Advt. of J. A. Crabtree & Co. Ltd., Walsall, England



WAR AND PEACE

In the days of peace it was the practice of the Franki management to produce chapter, verse and photographs of important work recently carried out, thereby providing convincing evidence of the superiority of the Franki system of cast-in-situ piling.

Nowadays such a practice cannot be continued as all our work is in connection with the National effort. However, up-to-the-minute evidence, even more convincing, is available and will be produced as soon as circumstances allow.

In the meantime we shall be pleased to send you, post free on receipt of one penny, a copy of the Franki Brochure, which contains full details of a range of jobs carried out before the present war.

THE FRANKI COMPRESSED PILE CO., LTD.

39, VICTORIA STREET, LONDON, S.W.1.

'Phone : ABBey 6006-9.

'Grams : "Frankipile, Sowest, London."



Invisible Panel Warming Association

In the many new buildings which will be required in this country and on the continent after the war, Invisible Panel Warming will inevitably play an important role. The inherent success of this all British invention is the result of the low temperature employed in establishing the final comfort conditions. It affords many advantages and these may be broadly classified as follows:—

1. It is healthy. 2. It is economic. 3. It is invisible.

These advantages have been proved in over one thousand important buildings throughout the country.

For technical and further particulars apply to any of the following:—

ASHWELL & NESBIT, LTD., Barkby Road, Leicester.	HADEN, G. N. & SONS, LTD., 19/29, Woburn Place, London, W.C.1.	ROSSER & RUSSELL LTD., 30 Conduit Street, London, W.1.
BENHAM & SONS, LTD., 66, Wigmore Street, London, W.1.	HOPE'S HEATING & LIGHTING, LTD., Smethwick, Birmingham.	STEEL & CO. LIMITED, Crown Works, Sunderland.
BRIGHTSIDE FOUNDRY & ENGINEERING CO. LTD., G.P.O. Box No. 118, Sheffield, 1.	JEFFREYS, J. & CO. LTD., St. George's House, 195/203, Waterloo Road, London, S.E.1.	SULZER BROS. (LONDON) LTD. 31, Bedford Square, London, W.C.1.
CRITTALL, RICHARD & COMPANY, LTD., Aldwych House, London, W.C.2.	NORRIS WARMING CO. LIMITED, Burley House, Theobalds Road, London, W.C.1.	YOUNG, AUSTEN & YOUNG, LTD., 35, Uphill Road, Mill Hill, London, N.W.7.

or to the Secretaries, Invisible Panel Warming Association, Pinners Hall,
Austin Friars, London, E.C.2. Phone: London Wall 4286

Issued by the
INVISIBLE PANEL WARMING ASSOCIATION
formed to promote and to exchange and codify technical information

PLAN TO SAVE SPACE

AND REDUCE FIRE RISKS



WITH STEEL

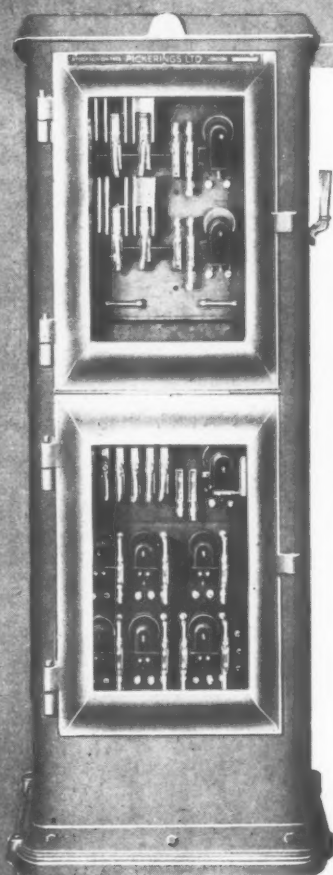
You can plan your storage equipment to meet any needs that may come. Sankey-Sheldon have perfected a system of adjustable steel shelving and bins that can be expanded or altered at will. ● Standardised parts are kept ready in stock which can be assembled in any desired layout. The parts are entirely of steel and so are space-saving, fire-resisting, vermin-proof, easily cleaned and immensely strong. Sankey-Sheldon are experts in storage and you would do well to consult them on your storage plans.

SANKEY-SHELDON
STEEL FURNITURE & EQUIPMENT
Chief Office . 46 Cannon Street, London, EC4

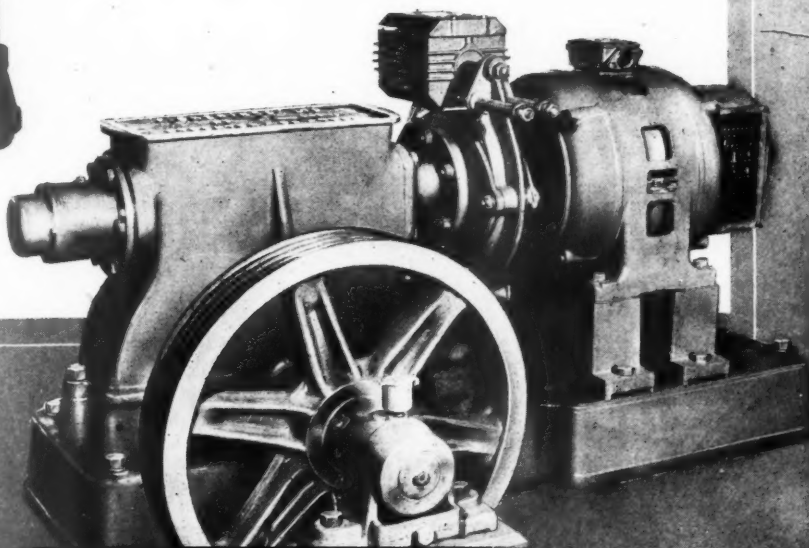
LIFTS *by* PICKERINGS

The quality of a lift does not lie in those parts which the public sees. The control gear, worm drive and all the equipment hidden from public view determine the reliability, freedom from maintenance and long life. In Lifts by Pickerings these parts are made throughout in our own works, not just assembled from bought-out components. We thus establish a primary control over materials, workmanship and design which is the basis of Pickering Reputation.

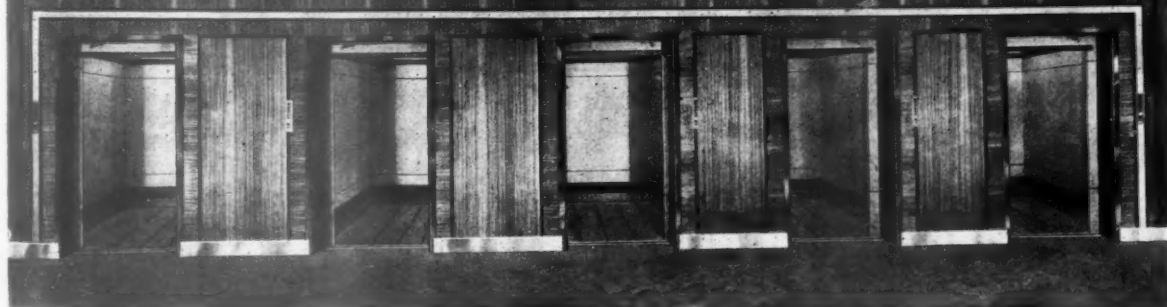
STOCKTON-ON-TEES AND LONDON

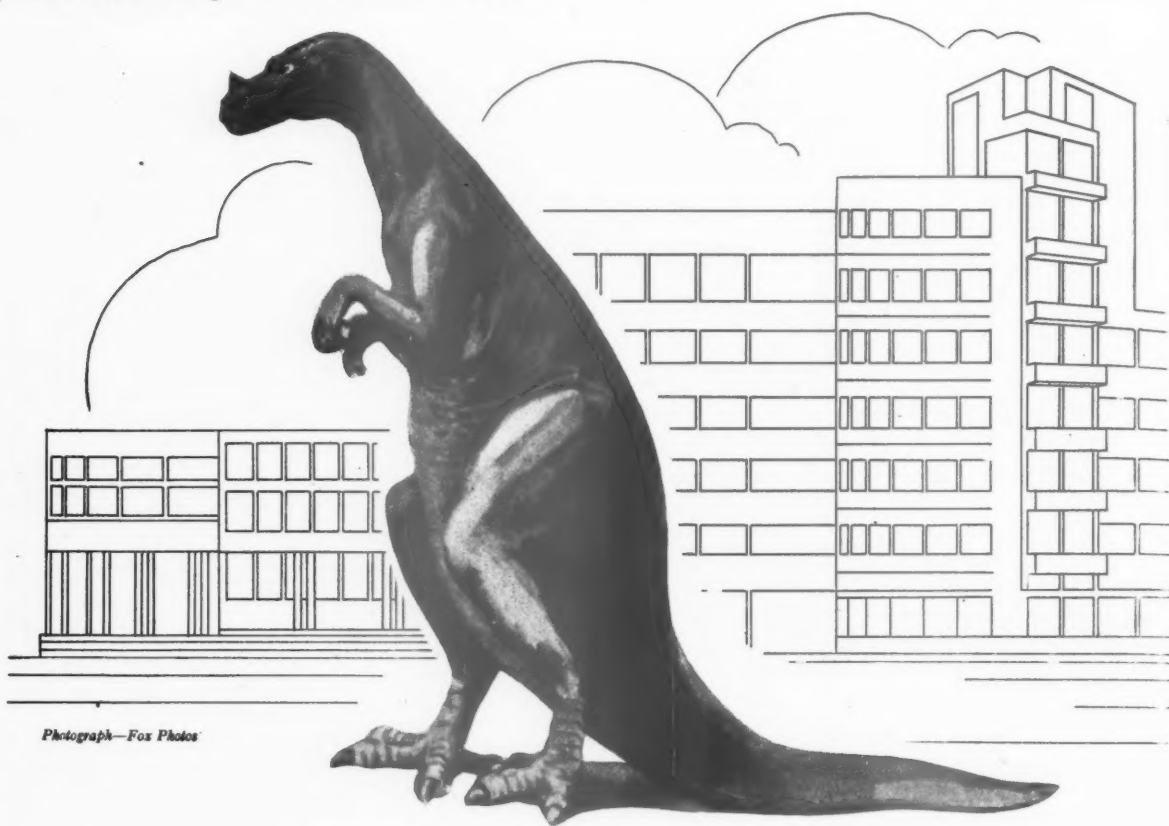


ESTABLISHED 1854



LIFT TO ALL FLOORS






Photograph—Fox Photos

"OBVIOUSLY PREHISTORIC"

will be the verdict in the Post-War Era of many disadvantageous materials used to-day—heavy and easily corrodible metals we "put up with," because nothing better was available until Yes, UNTIL, Reynolds can release to normal Industrial development, the highly

specialised Hiduminium Light Alloy Products, designed to supplant, for very obvious reasons, materials that at least have only established one claim—

that of being slightly prehistoric . . . in an enlightened age.



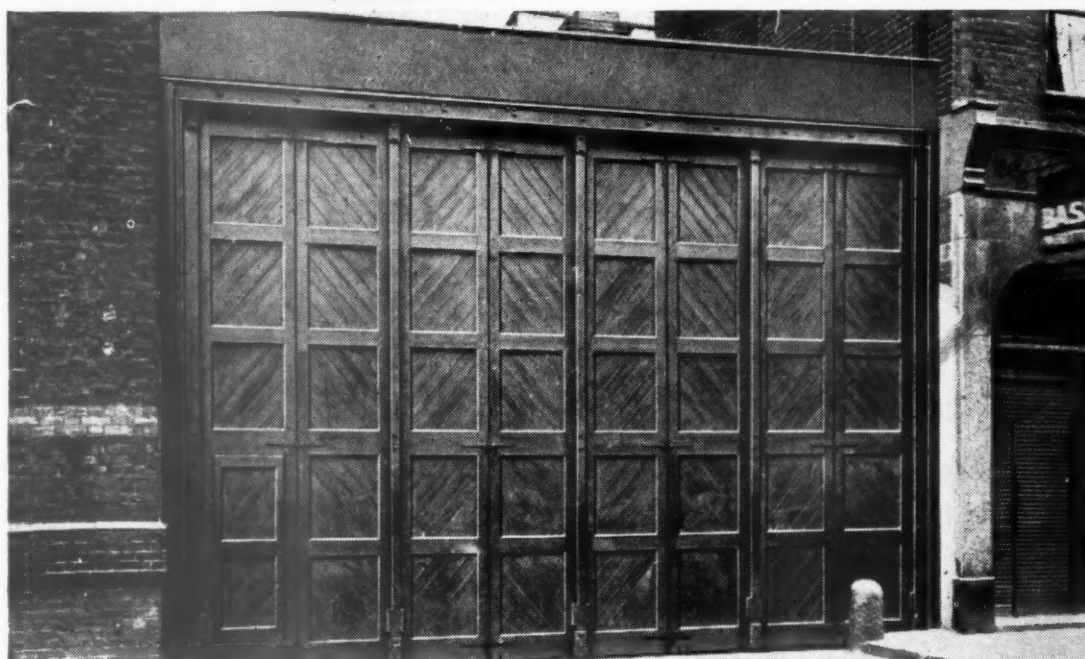
REYNOLDS

TUBES-RODS-STRIP-SECTIONS-SHEET IN "HIDUMINIUM" ALUMINIUM ALLOYS

REYNOLDS TUBE CO. LTD. & REYNOLDS ROLLING MILLS LTD., BIRMINGHAM, II.

ESAVIAN

FOLDING DOORS



Two further examples of how perfectly ESAVIAN Doors combine in their use the qualities of complete protection with complete accessibility. But it must also be recalled that ESAVIAN Doors require the minimum of labour in their operation and the minimum of maintenance during their long life. They may still be specified in conjunction with work of National importance.

ESAVIAN
DOORS & PARTITIONS

ESAVIAN LTD. HEAD OFFICE: ESAVIAN HOUSE, HIGH HOLBORN, LONDON



BEAVERS
build themselves
log huts containing
a spacious internal
chamber, apart from
their well-known
dam building
activities.

Stockholders and Distributors of

**SANITARYWARE
BATHROOM REQUISITES**

**FIREPLACES STOVES
BOILERS**

**ARCHITECTURAL &
BUILDERS' IRONMONGERY**



CALENDARS 1944. In compliance with Paper Control Regulations, we are obliged to make a nominal charge of 1d. per copy. Will customers kindly send us a stamp or stamps with their written request for our 1944 Calendars, which will be forwarded in due course.

STANDARD RANGE & FOUNDRY CO. LTD.

TELEPHONE 2261 WATFORD (6 lines)

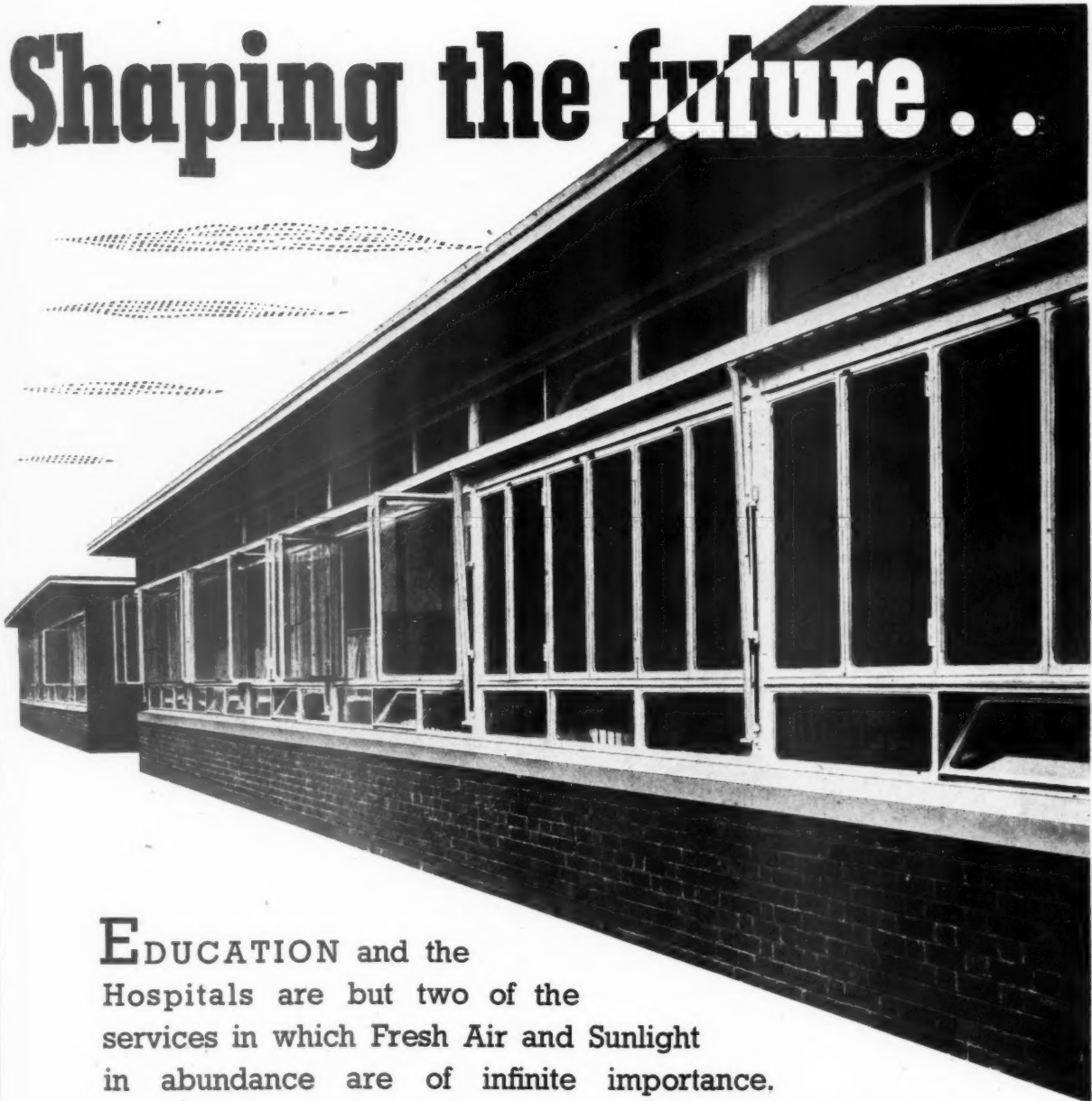
ESTD 1870

Watford

TELEGRAMS 'STANDARD, WATFORD'

JOHN
BE
Telephone:
London

Shaping the future...



E DUCATION and the Hospitals are but two of the services in which Fresh Air and Sunlight in abundance are of infinite importance. Beacon Metal Windows do much to shape the future in these and other spheres by their adaptability to changing requirements and rigid adherence to standards of reliability and endurance under all climatic conditions. The illustration shows a typical hospital installation.



JOHN THOMPSON BEACON WINDOWS LTD.
BEACON WORKS, WOLVERHAMPTON
Telephone: Bilston 41944-5 Telegrams: Windows, Wolverhampton
London Office: IMPERIAL HOUSE, Kingsway, W.C.2
Telephone: Temple Bar 3216 (3 lines)

JOHN THOMPSON

BEACON
METAL WINDOWS

*"Oh! Pardon me for this intrusion;
But ...
Have you seen this fine extrusion?"*



FOR WROUGHT LIGHT ALLOY EXTRUSIONS SHEET AND STRIP

BIRMETALS LIMITED · BIRMINGHAM · 32

BENHAM KITCHEN INSTALLATIONS



MEANWOOD PARK COLONY, LEEDS—The main kitchen

Architects : Messrs. J. M. Sheppard and Partners, FF.R.I.B.A.

Consulting Engineer : H. A. Sandford, Esq.

This Company has had long experience in planning and equipping kitchens of all types, and is glad to advise architects on schemes to be carried out after the war.

BENHAM & SONS LTD.

COOKING, HEATING & VENTILATING ENGINEERS

66 WIGMORE STREET, LONDON, W.1

FROM TOP FLOOR TO BASEMENT



Electrical Accessories

P O I N T S O F P E R F E C T I O N

C • H • P A R S O N S • L T D

Telephone:
ACOCKS GREEN
1642 5 LINES

Britannia Works
Wharfdale Rd. Tyseley
BIRMINGHAM 11

Telegrams:
"HECTOMAR"
BIRMINGHAM

The one roofing that will satisfy the far-seeing house purchaser

IN A NEW AGE OF SOLIDITY, SIMPLE BEAUTY AND PERMANENCE IN BUILDING

The post-war house purchaser will know about roofing before you tell him. He will be that type of man. In line with an age when the ordinary man and woman will investigate, analyse and find out for themselves, the house purchaser will know the merits of slates for roofing, their amazing durability, their unique weather-resisting properties and the scope they afford for attractive modern roofing effects, offer him an investment that no other roofing material can approach.

The house purchaser of the new building age will judge the work and materials of a builder or architect not only on first appearances but on solid future service. That is why you should put slates for roofing in the forefront of your building programme.



A THOUSAND MILLION YEARS IN NATURE'S MIGHTY WORKSHOPS
Pressure of uncountable tons per inch—millions of centuries of preparation in Nature's mighty workshops—produced SLATE, the natural roofing that defies the elements and challenges time itself.

"WE SHALL BE JUDGED BY FUTURE GENERATIONS"

Lady Sinclair, Wife of Air Minister

Lady Sinclair, opening a competition organised by the Incorporated Association of Architects and Surveyors for a design for a post-war housing estate said "I cannot believe that it is any more expensive to have a well-designed than a badly-designed house. . . . It is up to the common or garden public to see that we get what we want. If we want it badly enough we shall get it, and if we don't want what is good, that will be our own fault, and we shall be judged accordingly by future generations."

SLATES

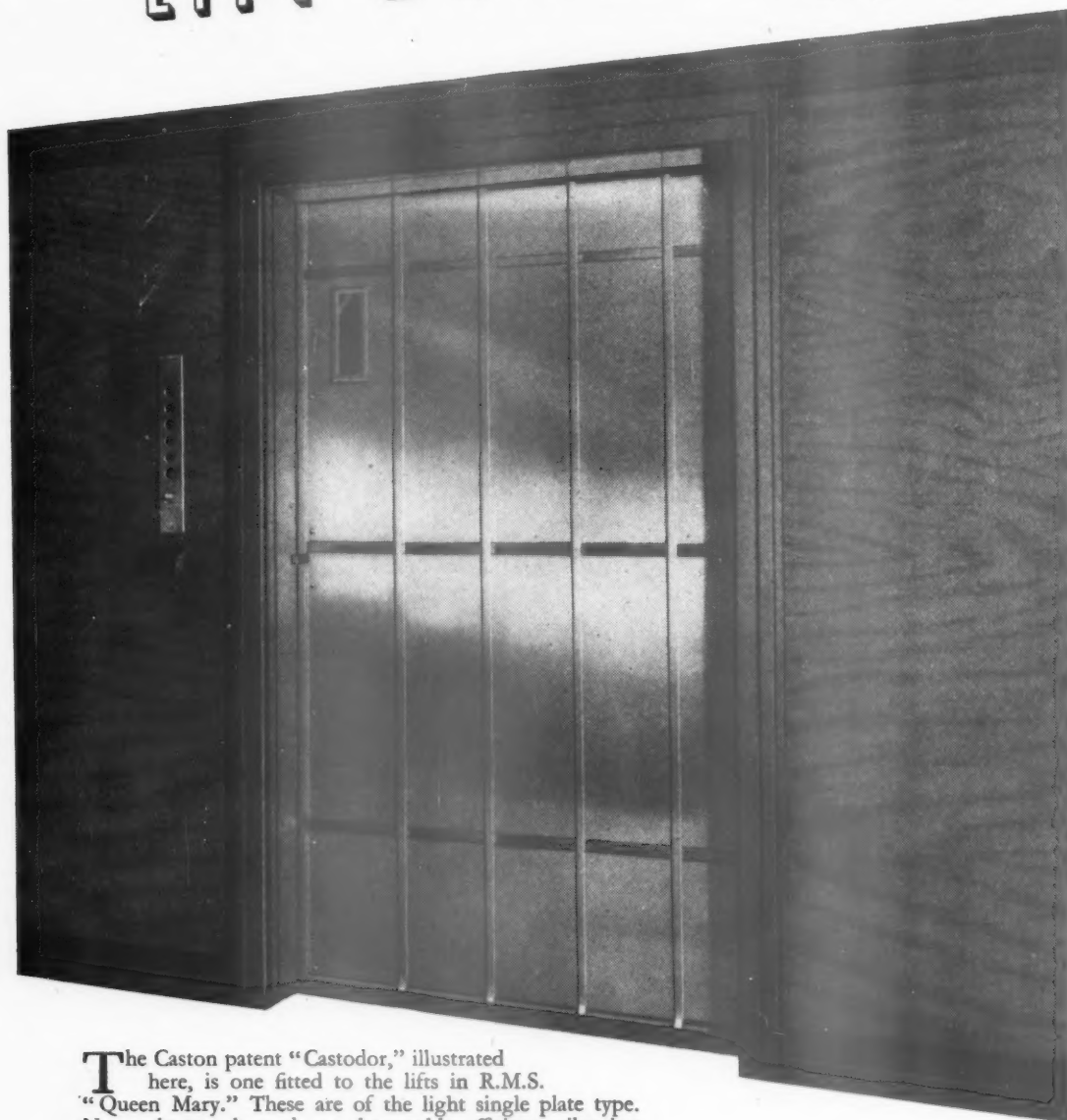
THE ROOFING OF FORESIGHT



Every slate you lay is building for today, insuring for tomorrow



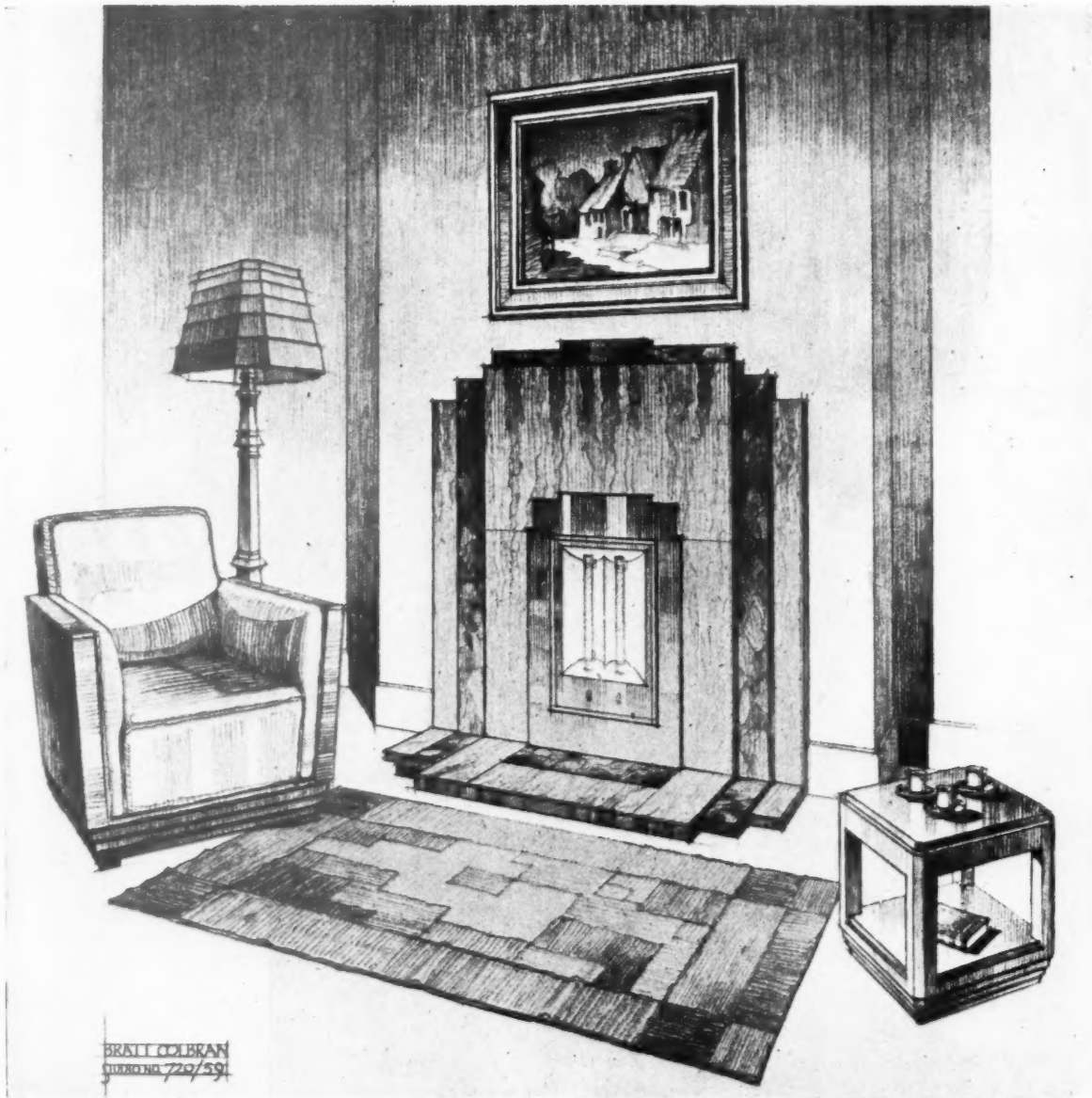
CASTON 'CASTODOR' LIFT DOORS



The Caston patent "Castodor," illustrated here, is one fitted to the lifts in R.M.S. "Queen Mary." These are of the light single plate type. Not only are these doors thoroughly efficient, vibration proof, and fire-resisting, but they offer infinite decorative possibilities. These doors are approved by the Board of Trade and insurance authorities.

Telephone: HOP 0613 (2 lines)

CASTON & CO. LTD., 1 TABARD ST., LONDON S.E.1



A PRE-WAR EXAMPLE OF FIREPLACE CRAFTSMANSHIP

When the time comes to turn again to the tasks of peace, we look forward to making renewed progress in a tradition of craftsmanship we have made essentially our own.

BRATT COLBRAN LIMITED
10, MORTIMER STREET, LONDON, W.1.

SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING

LIFTS



Passenger
and industrial
lifts

Service,
cellar and
special lifts

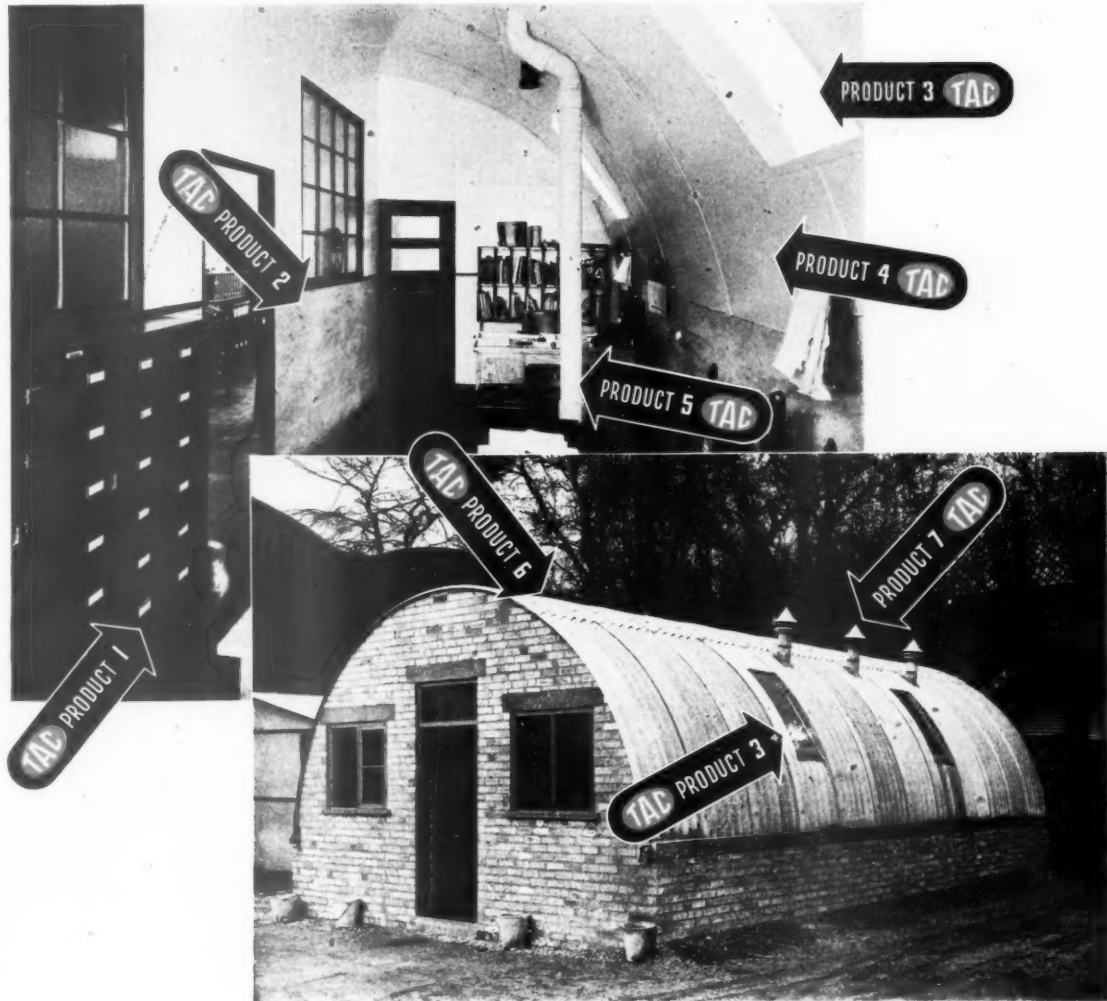
by

MORRIS

Herbert Morris Limited Loughborough England

Asbestos-cement

SOLVES THIS PROBLEM



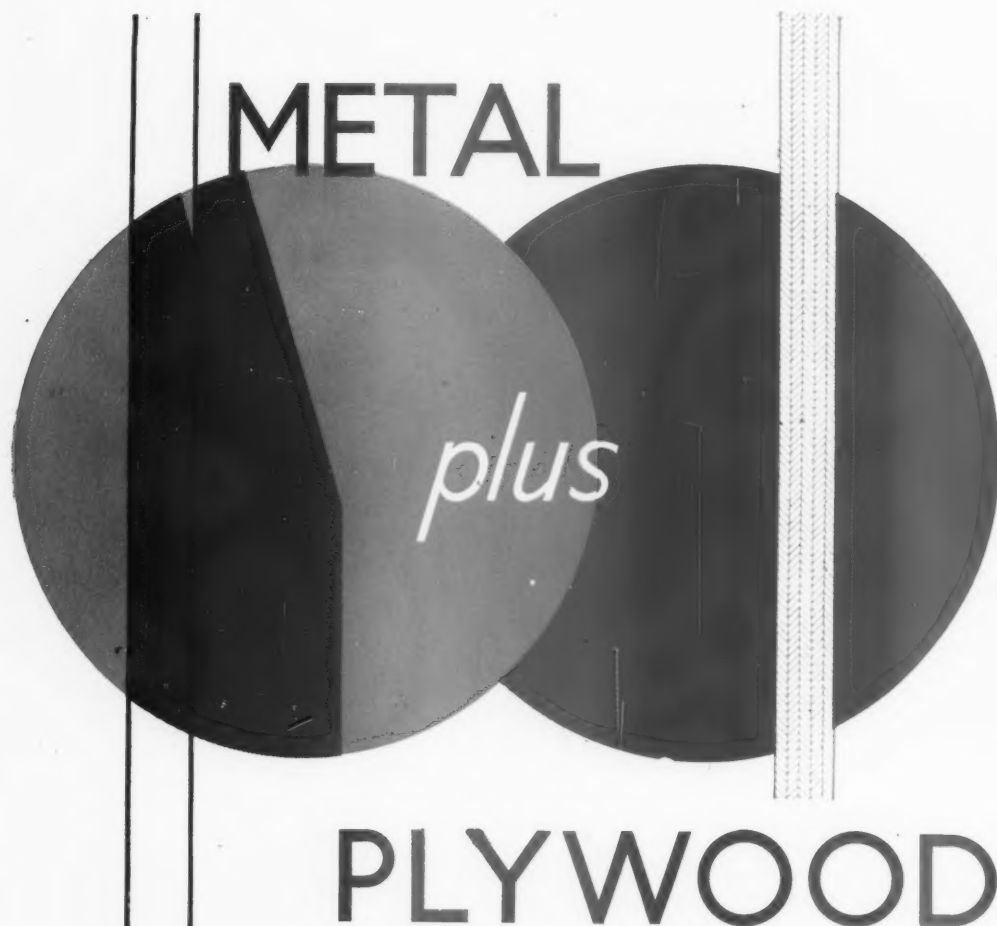
Wartime Construction in Asbestos-cement
 Write for special catalogue - "Building with Asbestos-cement"

This is one of a series of advertisements designed to show how Asbestos-cement can help to solve an almost infinitely varied range of problems. At present, war-time needs have a monopoly of its service, but when peace comes the manufacturers look forward to extending further its usefulness.

**TURNERS
 ASBESTOS
 CEMENT
 CO. LTD.**

TRAFFORD PARK
 MANCHESTER.17

1. "TURNALL" ASBESTOS WOOD
2. "TURNALL" MARBLED-GLAZE SHEETS
3. "EVERITE" ROOFLIGHTS
4. "POLITE" FLEXIBLE COMPRESSED SHEETS
5. "EVERITE" FLUE PIPES
6. "EVERITE" "BIGSIX" CURVED CORRUGATED SHEETS
7. "EVERITE" SOAKER FLANGES and TWO-LOUVRE VENTILATORS



METAL

plus

PLYWOOD

As thin as these printed lines, the metal sheets are light, yet they have all the qualities of metal: hardness, fire-resistance, imperviousness to moisture, and ductility, enabling them to be flanged over and soldered to form a sealed enclosure.

The plywood, in turn, provides strength and rigidity with lightness, it can be cut to any desired profile and made in any thickness: it has good heat-insulating properties, and it enjoys the perfect protection of the sealed metal facing.

These component elements are combined to provide, in Flexo-metal panels, a constructional material of the greatest value for partitions, cubicles and so forth, where the smooth cleanliness and other attendant qualities are combined with important savings in space—for framing or battens are seldom required.

FLEXO PLYWOOD INDUSTRIES LTD., SOUTH CHINGFORD, LONDON, E.4
Telephone: Silverthorn 2633 (7 lines). Associated with Cork Manufacturing Company Ltd.

FLEXOMETAL

In com
time n
pages.
a copy



D I

Titles
paper
by th

CAR
(Spe

L ON

Med
opport
practic
gramm
by ge
will b
Techni
don.

Street,
be adr

Non-m
Ticket

2, Buc
phone

Exhibi

At All

exhibi

houses

of Ph

Econo

design

prima

restric

monet

He wi

labour

house

be gi

Econo

Admis

When

Son,

(Spon

Bros.)

When

Buildi

son) T

Annu

Buildi

Club,

welco

W.

Produ

Adam

A. E

Potter

House

Hoop

1.30 p

2.30 p

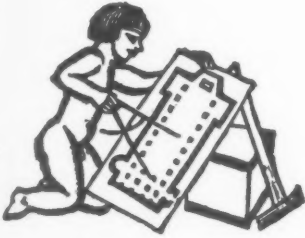
A. C

of C

Royal

Adelp

In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. Od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL, and made of raw materials now in short supply, are not necessarily available for export.



DIARY FOR DECEMBER AND JANUARY

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 their initials as given in the glossary of abbreviations on the front cover.

CARDIFF. *Rebuilding Britain Exhibition.* (Sponsor, RIBA.) DEC. 20-JAN. 17

LONDON. *Institute of Welding Discussion Meetings.* Meetings designed to give opportunities for the informal exchange of practical information on welding. The programme will consist of a short film followed by general discussion, in which questions will be invited. 6 p.m. Dec. 9, Wimbledon Technical College, Gladstone Road, Wimbledon. Dec. 15, Acton Technical College, High Street, Acton. Members of the Institute will be admitted on production of Sessional Card. Non-members are invited to apply for Guest Tickets to the Secretary, Institute of Welding, 2, Buckingham Palace Gardens, S.W.1. (Telephone: Sloane 9851/2). DEC. 9 and 15

Exhibition of Designs and Models of Houses. At Alliance Hall, Palmer Street, S.W.1. The exhibition will be of designs and models of the houses that can be provided under the Science of Physical Economy in the Charter of Economic Equity. The houses and the flats are designed by Charles E. Elcock, architect, primarily to meet human needs, and are not restricted to the limitations imposed by the monetary and economic system as constituted. He will also show his prefabricated house with labour-saving kitchen unit. A model of the house will be exhibited. Short addresses will be given at 3.30 p.m. daily. (Sponsor, Economic Equity.) 11 a.m. to 5 p.m. Admission one shilling. DEC. 2-3

When We Build Again Exhibition. At Heal & Son, 196, Tottenham Court Road, W.1. (Sponsor, TCPA, in conjunction with Cadbury Bros.) DEC. 2-18

When We Build Again Exhibition. At the Building Centre, Maddox Street, W.1. (Sponsor) TCPA. DEC. 2-21

Annual General Meeting. Association of Building Technicians. At University of London Club, 21, Gower Street, W.C.1. Friends welcome. 2.15 p.m. DEC. 4

W. A. Robertson. Timber, the Minor Products. At Royal Society of Arts, John Adam Street, W.C.2. 1.45 p.m. DEC. 6

A. E. Hewitt. What Design has meant to the Pottery Trade. At Royal Society, Burlington House, Piccadilly, W. In the chair, F. C. Hooper. Buffet lunch 2/6, from 12.45 to 1.30 p.m. Talk and discussion, 1.30 p.m. to 2.30 p.m. (Sponsor, DIA.) DEC. 7

A. C. Bossom, M.P. Some Modern Methods of Construction practised in America. At Royal Society of Arts, John Adam Street, Adelphi, W.C.2. 1.45 p.m. DEC. 8

A. C. Bossom, M.P. Modern Building Methods. At 1, Grosvenor Place, S.W.1. (Sponsor, TCPA.) 12.45 p.m. DEC. 9

Motorways for Britain Exhibition. At 22, Lower Regent Street, W.1. (Sponsor, British Road Federation.) Sir William Rootes, K.B.E., will open the exhibition. It has been designed by G. A. Jellicoe, President of the Institute of Landscape Architects. DEC. 9-24

Film Evening. Films selected by Paul Rotha, who will give an informal talk. At 34-36, Bedford Square, W.C.1. 6 p.m. (Sponsor AA.) Formerly on Dec. 14; postponed until March 14.

Sir Eric Macfadyen. A Business Man Looks at Planning. At Abercorn Rooms, Great Eastern Hotel, Chairman, Sir Montague Barlow. 12.30 p.m. DEC. 15

Motorways for Britain Exhibition. 22, Lower Regent Street, London, S.W.1, designed by G. A. Jellicoe, President of the Institute of Landscape Architects. (Sponsor, British Road Federation.) DEC. 9-24

Henry Berry, chairman, Metropolitan Water Board. London's Water Supply. At Royal Society of Arts, John Adam Street, Adelphi, W.C.2. Chairman, Viscount Falmouth. President, Conjoint Conference of Public Utilities. 1.45 p.m. JAN. 19

Alastair Morton, on Good Design in the Textile Trade. At Royal Society, Burlington House, Piccadilly, W. Buffet lunch 2/6 from 12.45 to 1.30 p.m. Talk and discussion 1.30 to 2.30 p.m. (Sponsor DIA) JANUARY 4

John Gloag, The Selling Power of Good Industrial Design. At Royal Society, Burlington House, Piccadilly, W. Buffet lunch 2/6 from 12.45 to 1.30 p.m. Talk and discussion, 1.30 to 2.30 p.m. (Sponsor DIA) FEB. 2

LYNESS, ORKNEY. *Twenty Women at Home Exhibition.* (Sponsor, HC.) DEC. 2-12

RUGBY. *Homes to Live In Exhibition.* At the School of Art. (Sponsor, HC.) DEC. 2-4

SWANSEA. *Rebuilding Britain Exhibition.* (Sponsor, RIBA.) DEC. 2-11

WEST HAM. *When We Build Again Exhibition.* (Sponsor, TCPA.) JAN. 8
TCPA Conference. JAN. 15

YEALMPTON, DEVON. *Living in the Country Exhibition.* (Sponsor, HC.) DEC. 2

NEWS

THURSDAY, DECEMBER 2, 1943
No. 2549. Vol. 98

News	401
City Architect of Southampton ..	402
This Week's Leading Article ..	403
Astragal's Notes and Topics ..	404
Letters from Readers	405
Stage for ENSA Concerts	406
Information Sheet	408
<i>Domestic Water Heating 11 (918)</i>	
Physical Planning: 17	409
House at Austin, Texas. Designed by Chester Nagel	413
Information Centre	415
Societies and Institutions	416

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

★ 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.

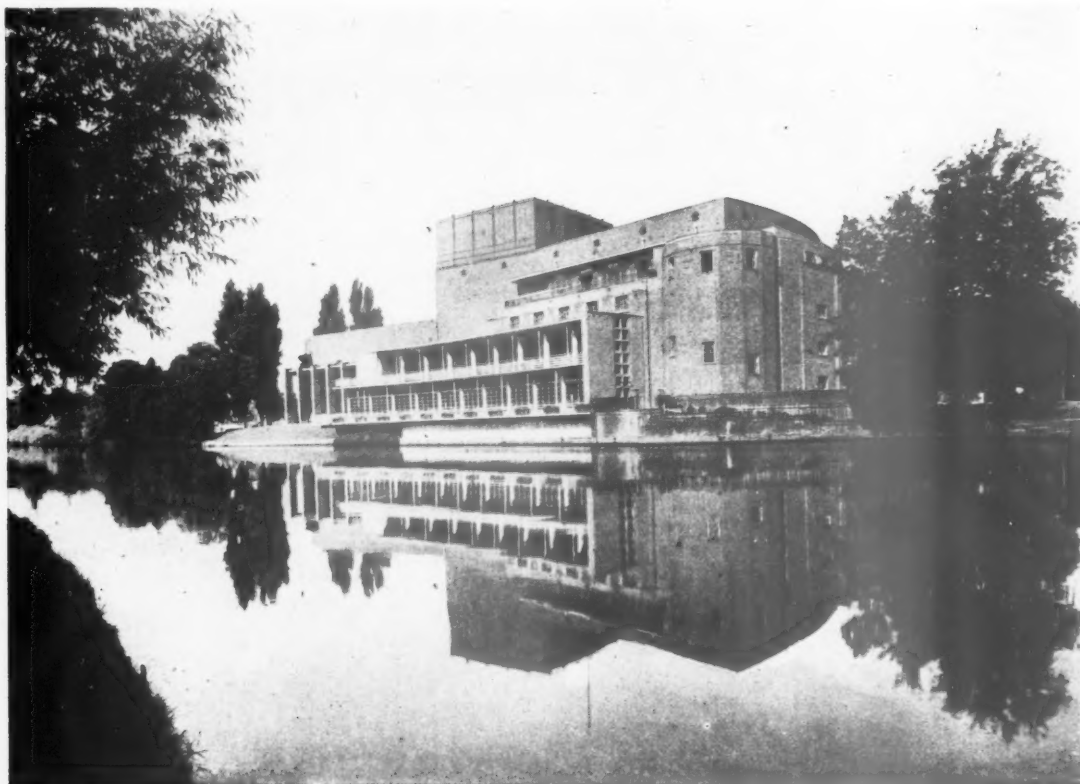
Mr. R. Bruce Wycherley has been elected CHAIRMAN OF THE BUILDING SOCIETIES ASSOCIATION in succession to Mr. William McKinnell, who has retired on account of ill-health.

Mr. Bruce Wycherley is managing director of the National Building Society. He is succeeded as Deputy Chairman of the Council by Mr. Andrew Stewart, General Manager and a director of Huddersfield Building Society.

Mr. W. R. Davidge is TO AID CROYDON RECONSTRUCTION COMMITTEE.

At the Ministry of Food a committee is continually devising NEW METHODS TO SAVE PAPER CONSUMPTION.

As a result of the committee's work many economies have been achieved. Duplicate invoice books, for instance, have been made so that fast sheets can be used on both sides. Thus only 50 sheets are required for the copies of every 100 invoices. Reduction of the space between the lines of invoices and the use of omnibus envelopes for branch correspondence are among other economy methods which have been adopted. In the latter case, 19 canvas folders do the work previously done by 836 paper envelopes. Realizing the vital demand for salvage, paper is regularly combed out of old files.



SHAKESPEARE MEMORIAL THEATRE

STRATFORD-ON-AVON

"We have been given a theatre which is an honest contribution from our own age, and all the special advantages which the 20th Century offers in the way of technical aids have been incorporated to make as fine and as enduring a playhouse as has ever been seen in Great Britain." This quotation from an article by Mr. G. K. Chesterton in the Souvenir of the opening of the Theatre in April, 1932, neatly sums up the character of the building. The Theatre accommodates about 1,000 people, all of whom have an uninterrupted view of the stage and a completely comfortable angle of vision. Rolling stages — a

new feature in England — were introduced, so that it is possible to set three complete scenes any of which can be moved rapidly and noiselessly into position in front of the proscenium opening.

The original Memorial Theatre, conceived by Mr. Charles Flower in the middle of last century, was destroyed by fire in 1926. The Board of Governors, of which Sir Archibald D. Flower is Chairman, organised a competition under the auspices of the R.I.B.A., for a new theatre. The competition was open to British, Canadian and American Architects, and was won by Miss Elisabeth Scott, A.R.I.B.A.

for Steelwork in theatres of the future

Boulton & Paul Limited

STRUCTURAL ENGINEERS

NORWICH • BIRMINGHAM • LONDON

¶ This advertisement is one of a series which briefly traces, from earliest times, the structural development of the theatre and places of entertainment, according to the "fashion" and requirements of the entertainment demanded.

fr
PRE.
descri
1820
broug
comp
wher
prop
A ca
finds
the q
week
to M
★★
In h
Parli
SPO
TION
PLA
in
The K
legisla
re-deve
of ene
need to
ment
examin
made
power
land c
"To
that
move
NO
BU
of L
capit
Lord
of Civ
letter
Plan.
honor
Plann
he is
of wh
unfort
Count
house
Englis
in the
desire
practi
wheth
those
inhab
that
the co
propo
that
the co
fatal
tradit
of Ci
large
mode
applic
avoid
Leeds
has c
Quar
water
laund
word
other

from AN ARCHITECT'S Commonplace Book

PREFABRICATION A CENTURY AGO. [From *The Young Northern Traveller*, by Mrs. Hofland, describing a journey taken by a young man in the company of his uncle through Northern Europe to Moscow between 1820 and 1830. (A. K. Newman & Co., published circa 1837)]. Many of the houses here are of wood, brought from their immense Northern forests; and so expert are they become in forming the component parts of a house, that one may be purchased here and conveyed to any part of the city where a site is procured, and completely set up and inhabited in a day or two. Each piece being properly numbered, can be quickly put together, and by the same rule taken down and removed. A carpenter of tolerable property has usually some respectable houses on hand; and if the purchaser finds the number and size of the rooms suitable to his wants, he has nothing to do beyond examining the quality of the wood, and he may be forthwith put in possession of a home to his wishes. In three weeks' time a palace was actually constructed for the great Catherine on one of her recent visits to Moscow.

★★

In his speech at the opening of Parliament last week THE KING SPOKE OF THE LEGISLATION FOR PHYSICAL PLANNING to be debated in the House of Commons.

The King said: You will be invited to pass legislation conferring special powers for the re-development of areas which, by reason of enemy action, over-crowding or otherwise, need to be replanned as a whole. My Government will lay before you the results of their examination of the Reports which have been made recommending the assumption of further powers to control and direct the use of the land of Great Britain.

"To suggest, as Mr. Osborn does, that 1,500,000 people should be moved out of the county area is NOT ONLY UNPRACTICAL BUT FATAL to the character of London and its tradition as a capital city," says Lord Esher.

Lord Esher, chairman of the Central Council of Civic Societies, makes this statement in a letter to *The Times* on the County of London Plan. The letter reads as follows: The honorary secretary of the Town and Country Planning Association is a very able man, but he is doing no service to that town planning of which he is so ardent an advocate by his unfortunate controversy with the London County Council on the relative merits of houses and flats. Let it be granted that English people prefer houses to flats, and that in theory it is possible to give them what they desire. But the English people are also practical, and they know that in practice, whether they like it or not, the majority of those who live in the centre of large cities must inhabit flats. To suggest, as the LCC does, that 500,000 people should be moved out of the county area is an ambitious but practical proposal. To suggest, as Mr. Osborn does, that 1,500,000 people should be moved out of the county area, is not only impractical but fatal to the character of London and its tradition as a capital city. The Central Council of Civic Societies, representing most of the large cities in the kingdom, would plead for moderation, and that the uncompromising application of theoretical ideas should be avoided by planners in general. The City of Leeds, a very intelligently governed community, has constructed in its congested centre the Quarry Hill estate, which, with its lifts, its water supply, its rubbish disposal, its central laundry, and many other gadgets, is the last word in making flats comfortable. On the other hand, on the outskirts of the city they

have developed, at Brianside, a housing estate with all the modern ideas of layout and traffic disposal. Here we find planning that has passed through the stage of theory and has reached the more profitable one of creation. My council is anxious lest the brickbats thrown by the schoolmen should have a harmful effect upon the bold and magnificent scheme presented to the public by the skilful and experienced architects of the London County Council. The Philistines rejoice when there is lack of unity among the chosen people, and the result may well be the loss of this great opportunity for the reconstruction of London.

Professor C. H. Reilly has RE-SIGNED FROM TCPA IN PROTEST against the Association's criticisms of the LCC plan for London.

The Association's main complaint against the LCC plan has been against what they feel to be an excessive use of flats. They wish to reduce the population of inner London more than the plan proposes. (See Astragal, p. 404.)

"I strongly suspect that the real grounds of objection are not that the land is to be built upon, but that houses for the working classes are to be erected. THERE'S

THE RUB," said Lord Latham, Leader of the LCC.

Lord Latham was replying to protests against the council's proposal to build a cottage estate at Oxhey, near Watford, and said that the LCC would not be deflected from its duty. Speaking at a meeting of the Forest Hill and Sydenham Rotary Club, he said: The need for new housing accommodation in London is immense, and some of it must take the form of cottage estates outside the county area. In preparation for getting on with the job as soon as building can be commenced, the LCC must acquire land, and one of the sites selected, after careful consideration, is at Oxhey, near Watford, where it will erect cottages with gardens, well and spaciouly sited, with tidy streets and roads with grass verges and green spaces, in such a way as to preserve and fit into the amenity and beauty of the surrounding district. At once opposition arises from a section of people who are themselves fortunate enough to be living in good houses in or near beautiful surroundings, and would deny to others what they themselves enjoy. Better houses for the people, yes, every time; but not in my district, nor near where I live. The LCC encountered it with almost every cottage estate it built before the war.

But surely we were entitled to expect that, out of the sacrifices of the present conflict, a wider sense of personal obligation towards others would be manifest in these days. It is strange that these protests are usually reserved for public housing authorities; they were not very audible against the hideous ribbon development and other spoliations of the countryside by speculative builders between the two wars. It is also worth noting that this very land at Oxhey has for some time been zoned by the planning authorities for residential development without there having been any discoverable protest about destroying beauty spots. The LCC is not out to spoil beauty spots—as the Green Belt project is witness—but to make them available for those who hitherto have passed their lives in the desolation of unrelieved ugliness. I strongly suspect that the real grounds of objection are not that the land is to be built upon, but that houses for working people are to be erected. There's the rub. Good citizens will ask what right have those more happily placed objectors to regard the people from the overcrowded parts of London as "untouchables," and who gave them the title to the exclusive enjoyment of sun, air, and nature's beauty? I appeal to them to display more of the virtues of Christian charity and less personal selfishness. Finally, let me say that the LCC will not be deflected from its duty as a housing authority by anti-social influences of the kind now vocal about the Oxhey site, and I warn these objectors that the men and women returning from the forces will take a very poor view of any action that obstructs the building of the houses so urgently needed.

The effect of the County of London Plan on LONDON'S FUTURE WATER SUPPLY is dealt with in a report of a Metropolitan Water Board Committee.

The report of the general purposes committee points out that while the scheme deals only with the area controlled by the LCC—116 square miles—the Board will also be affected by the proposals to be put forward for the City of London and for the area of 459 square miles outside the county boundary which is supplied by the Board. Dealing with the LCC's plan, the report states that as the chief object is to provide better housing conditions in place of property which, in many instances, contains neither bathroom nor a hot-water system, this will cause increased consumption of water *per capita*. To meet this the Board will have to augment existing sources of supply and perhaps, eventually, seek new sources. At the same time, the distribution system will require alteration. Noting that the intention is to move about 500,000 persons out of the most congested parts of the county, the committee states: But we gather that it is contemplated that most of these would still



City Architect of Southampton

Captain Hubert Bennett, F.R.I.B.A., has been appointed Chief Architect to the Southampton Corporation. The department is a new one. There were seventy-four applicants for the post. Last year he won the competition for the layout and replanning of the Castle Hill site and surroundings at Ilkley.* A student of Professor R. A. Cordingley and Dr. J. L. Martin at the Manchester School of Architecture, he has won most of the RIBA prizes: The Arthur Cates Prize, 1933; Sir John Soane Medal, 1934; Neale Bursary, 1936; First Hon. Mention, Measured Drawings, 1932; and, two years running, the Certificate of Hon.

Mention (and £100), 1936, and a Commended, 1937, Rome Scholarship in Architecture. Earlier, in 1932 he won the Royal Society of Arts Medal. In the following year he joined the staff of the Leeds School of Architecture, and in 1935 that of the Regent Street Polytechnic School of Architecture, where in 1937 he was appointed superintendent of the course. He is a member of the RIBA Junior Members Committee, Salaried Members Committee, Prizes and Scholarships Committee, hon. secretary of the Social Committee and Examiner in Design, Intermediate Examination. Since 1941 he has been supervising architect, Lands, for a War Office Command, with rank of captain.

* See A.J., Dec. 24, 1942.

remain
report
consum
London

Refer
at a
Inspe
in L
Mini
WE
TH
situa
It will
words
of the
The w
after t
effectiv

The
Henr
MR.
his
L.
his

Coll
DIN
who
Infor
During
the cro
MOI
beginn
the "
Christ
and I
Dutto
develo
in line
ganda
of MO
Sets o
the 60
in Ox
has ha
archit
Section
Design
more.
Contr
Bloxb
farewe
by hi
Persia
with
MILNI
TO WE

Mis
the
Ser
Am
done
OF
Resea
into e
The
this
and
be gi

remain in the Board's area. Further, the report states, there is every indication that the consumption of water in the East End of London will increase.

Referring to post-war rehousing at a meeting of the Sanitary Inspectors' Association Conference in London, Mr. H. U. Willink, Minister of Health, said this time
WE MUST BE QUICK OFF THE MARK *for the situation is extremely serious.*

It will be my constant purpose to work, in the words of Disraeli, "for the improvement of the conditions of the people." He added: The work of my Ministry in preparing for after the war will be energetic and, I hope, effective.

The Minister of Health, Mr. Henry Willink, has appointed
MR. MICHAEL REED *to be his Private Secretary, and Miss L. R. Prescott to be his Assistant Private Secretary.*

Colleagues have given a farewell
DINNER TO MILNER GRAY, *who is leaving the Ministry of Information after three years' work.*

During this time he has built up and directed the creative unit responsible for the design of MOI exhibitions and displays. From small beginnings in 1940, when Gray was known as the "one man Division"; from the first Christmas blitz-time show, *London Pride*, Gray and his lieutenants Misha Black, Norbert Dutton, Peter Ray, Ronald Dickens, have developed a technique which has put exhibitions in line with films and broadcasts as a propaganda medium. The scope, volume and size of MOI shows have varied from small Picture Sets on the little kiosk at Waterloo Station to the 60,000 square feet of the Army Exhibition in Oxford Street. To handle this work Gray has had a busy team of writers, designers and architects. Though head of the Creative Section, Milner Gray had been a part-time Design Adviser to MOI over the past year or more. The Exhibitions Division is under the Controldership of G. S. Roys; and Clifford Bloxham remains Director. During the farewell dinner, Milner Gray was presented by his colleagues with a fifteenth century Persian enamelled and gilt bowl, inscribed with the words: FROM DE2, M.O.I. TO MILNER GRAY WHO CREATED A DESIGN TEAM TO WHICH IT HAS BEEN A PRIVILEGE TO BELONG.

Miss Jane Drew, consultant to the Gas Industry's Domestic Heat Services Committee, is going to America to study what has been done there in the
ABOLITION OF DRUDGERY *in the home.*

Researches are to be made by the committee into every aspect of kitchen and home planning. The researches are to be made not only in this country but in America, Russia, Sweden and other countries. Particular attention will be given to homes for lower income groups.

BUREAUCRATS OR PLANNERS?

IT is told that Mallarmé's English was so bad he was in the enviable position of believing that a pigeonhole meant a dovecote. Such misunderstanding may soon appear

reversed in England where the serious shortage of pigeonholes is likely to make necessary the requisitioning of dovecotes.

A recent broadsheet issued by PEP, called *A Civil General Staff** makes some very interesting proposals which, if put into effect, would go far towards solving this problem. The proposals are based upon the main assumption of an active democracy in which ideas for progress are thrown up, generally through democratic discussion, in all sorts of groups and at all sorts of levels. An inert democracy which merely supports, or rejects, government policies in whose formation it has taken no part, is not in the picture.

The proposal for a Civil General Staff is inspired by the need for a policy-planning organization. It is suggested that there should be a standing policy-planning committee of the principal administrative officials in each government department, in close touch with the Minister. Ministerial decisions on policy-planning should be given after consideration by this committee. Where problems cut across departmental boundaries (these, as the report points out, may be relatively few in number but will be of the highest importance), an *ad-hoc* policy-planning group might be created, including specialists of the appropriate departmental planning groups, and co-opted specialists from outside, both using the resources of such unofficial agencies as research institutes and universities. It is intended that this should imply the working out of alternative policies for given situations. In addition to these committees, the need is emphasized, and it is a need which up to now has, if at all, been only very vaguely realized, for a Civil General Staff serving the Government as a whole.

As the report points out, the present tendency to meet every demand for action on a new and major issue by the creation of a new department, merely produces a Minister competing among his colleagues for such attention as a Cabinet fully absorbed in the administrative problems and political conflicts of the moment can give him, and having no value, except as a façade. The idea of a super-minister might conceivably meet the need for executive co-ordination but it would do nothing to secure the other objective of more specialized attention being given to general questions not within the normal function of departments.

The type of organization which would, in fact, fulfil the requirements of national policy-planning PEP believes to be that of a group of persons constituting an enlarged Cabinet Office. Operationally the personnel would fall into two categories: (i) Those attached for the time being to particular Ministerial groups, and exercising policy-forming functions,

*Planning No. 214. *A Civil General Staff*. Published by PEP.

who would be under the control of the chairman or other Minister responsible for the policy-planning in hand; and (ii) those not so attached, who would remain in the Cabinet Office, under the direction of its head, and whose work would naturally consist rather of fact-finding research and appreciation than of the direct working out of policies.

What the broadsheet most strongly emphasizes, and what must be most carefully considered when the powers and position of the new Ministry of Reconstruction become apparent, is that the present need is for a specialization of *different* responsibilities, not further concentration of *general* responsibility. The creation of a new ministry secures specialized attention but complicates co-ordination: it directs effort and attention to a particular series of issues, but in doing so merely imposes another pattern of organization on top of the already complex kaleidoscope of our administrative machinery. The only measure which secures simplification works vertically, not laterally; it is the addition of a new level of responsibility which combines subjects previously under separate control and thus reduces the number of units to be co-ordinated at the top level.



The Architects' Journal

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

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

THE KING'S SPEECH

The King said little about physical reconstruction in his speech at the opening of Parliament last week, but what he said was significant. First, we are to know the Government's views on the "Reports which have been made recommending the assumption of further powers to control and direct the use of the land of Great Britain"—presumably the Barlow(?), Scott and Uthwatt trinity. Secondly, legislation will soon be passed to confer "special powers for the re-development of

areas which, by reason of enemy action, over-crowding or otherwise, need to be replanned as a whole." That means presumably that there is to be planning not on a national scale but piecemeal planning limited only to certain areas.

PROFESSOR REILLY RESIGNS

After being a member for only a few weeks, Professor C. H. Reilly has resigned in disgust from the Town and Country Planning Association. He states his reasons fearlessly and bluntly. They are: (1) that the TCPA is sabotaging the County of London Plan at a time when, if it is to go through, it needs all the support it can get; (2) that the TCPA is confusing the issue and juggling irresponsibly with figures; (3) that it is using its new high-sounding title as camouflage for an organization whose sole aim is to propagate the Garden City idea—an idea which has had its uses in the past but which is fatuously inadequate to cope with the new problems of city planning. There is more to planning, the Professor believes, than providing a wilderness of petit-bourgeois stud farms, and growing roses round the cottage door to make me love my mother more.

Why then did the Professor join the TCPA in the first place?

(a) Because he did not realize how biased and limited was its outlook; and (b) because he was charmed into joining.

TRAINING FOR TECHNOLOGY

Whether the architect is to disappear or rehabilitate himself in the future depends on whether architectural education is to be reformed on the right lines. This point was made during the discussion on the training of the architect held at the AA*, by a French architect in revolt against schools like that of the Beaux Arts where he had been trained.

During the first part of the AA discussion, members of the staff explained how the AA school worked. From their remarks it was clear that the school curriculum is well-balanced, stimulating to the student and far from rigid in its outlook. Probably the AA provides as good an architectural training as can be obtained anywhere in the world.

The question still arises whether we have learned enough from the revolutionary principles of the Bauhaus. Being experimental, it contained certain ideas which have proved to be unsound, but its main principles I do not believe can be disputed—the principles of co-ordinating "all creative effort to achieve in a new architecture the unification of all training in art and design," of "evolving goods specifically designed for mass-production," "to create type-forms that would meet all technical, æsthetic and commercial demands" to inaugurate "a modern architectonic art all-embracing in its scope . . . in which the old dividing line between monumental and decorative elements would have disappeared for ever."

These principles have been included in *A Plan for a School of Technological Design*†, a recent publication which has received far less notice than it

* See page 416 for a report of the discussion.

† *A Plan for a School of Technological Design*, by Norbert Dutton. (Published for the author. Limited number available from Norbert Dutton, Staple House, Chancery Lane, W.C.2, 1s. 6d. post free).

deserves. The school would provide a basic course of about three years to develop in the student a mentality capable of solving problems of design in general, who would learn draughtsmanship, perception, planning and technical understanding. At the end of the basic course students would be equipped to enter industry as draughtsmen or junior designers, though the main intention of the basic course is to prepare students to enter one of three advanced courses of a further two or three years, viz.: (1) the Architectural Course, including the wider issue of regional planning and the narrower one of design of equipment. (2) The Industrial Design Course, comprising the study of engineering design for mass-production, the study of contemporary materials and processes, works progress, costing, marketing, consumer research, etc. (3) The Course in Graphic Design, comprising all aspects of two-dimensional design, e.g. of typography, textiles, charts, graphs, maps, etc. Certain subjects would, of course, be common to more than one course.

To the question, *should all industrial designers be architects?* the author replies that architecture and design for machine production, however closely related, are not synonymous, and he believes that the proposal to

recruit industrial designers through the architectural profession is open to two major objections: (a) that the architectural profession with its increasing responsibilities could ill afford such depletion of its personnel; and (b) that students not intending to practice ultimately as architects would find a large part of their training of little subsequent value.

Here are some aphorisms from the booklet:

"Since planning is the basis of design, it follows that the contemporary designer is not restricted to the production of certain articles, or to any specific industry or group of industries, but that his scope is determined only by the limits of his technical knowledge."

"The practice of design in watertight compartments is to be condemned on both logical and practical grounds. . . . Where precisely is the division between furniture and fittings, or between fittings and utensils or between utensils made in one material, such as glass, and in an alternative material, such as aluminium? Where precisely is the division between the planning of houses and the planning of streets, or between streets and towns, or between towns and communications."

"The principles of design, the adaptation of form to function, economy of means and material, are fundamental, and whatever degree of specialization may be adopted later, they can and should form a common basis for all courses of design training."

One wonders if structural engineering should not be included among the advanced courses, for at present the structural engineer receives practically no basic training in design as such. Perhaps, too, physical planning should now be treated as a separate advanced course. Moreover, should not a large part of the basic course be included as part of general school education from an early age? Whether or not there are faults of detail in Mr. Dutton's proposals, his main principles, I believe, are sound and his booklet provides a meal rich in vitamins for the minds of all associated with technical and architectural education.

QUAINT NEW WORLD

"BICESTER'S NEW ALL-BRICK CENTRE.—The first hollow brick and cement YMCA centre is to be opened in Bicester shortly. The building will cost approximately £5,000, and this amount has already been subscribed. A distinctive feature of the new centre will be two cotswold bridges leading to the entrance—giving a quaint old-world air to the ultra-modern red brick building." (*Bicester Advertiser*)

ASTRAGAL



LETTERS

N. C. Stoneham

Peter Bernes, A.R.I.B.A.

J. D. Tetlow, B.Arch.,
A.R.I.B.A., Dip.T.P.

G. B. J. Athoe

Borrower

Robert R. Meadows, A.R.I.B.A.

A. Calveley Cotton

R. Perry

H. J. Reifenberg

The RIBA and Prefabrication

SIR,—In view of the fears expressed regarding prefabrication in the memorandum submitted by the RIBA to the Central Housing Advisory Committee; and in view of the fact that this august body appears to think that prefabrication is something new, and therefore dangerous, the following extract from Bradford's *History of Plimoth Plantation, 1606-1646* (reprinted from the original MS in New York in 1908 on page 301) is of interest:—

"They having made a small frame of the house ready, and having a great new-barke, they stowed their frame in her hold, and bords to cover and finishe it, having nayles and all other provisions fitting for their use. . . . Coming to their place, they clapt up their house quickly, and landed their provisions and left the company appointed, and sent the barke home, and afterwards palisadoed their house aboute, and fortified themselves better."

Regarding de-mountable houses, the following extract is from Professor Fiske Kimball, *American Domestic Architecture*, New York, 1922: "Governor Winthrop ordered his house to be cut and framed in Charleston, and shortly afterwards he moved to Boston 'whither also the frame of the Governor's house was carried.' This was in 1630. Two years later he built another timber house at Cambridge. . . . the governor had removed the frame of his house, which he had set up at Newtown (i.e. Cambridge)."

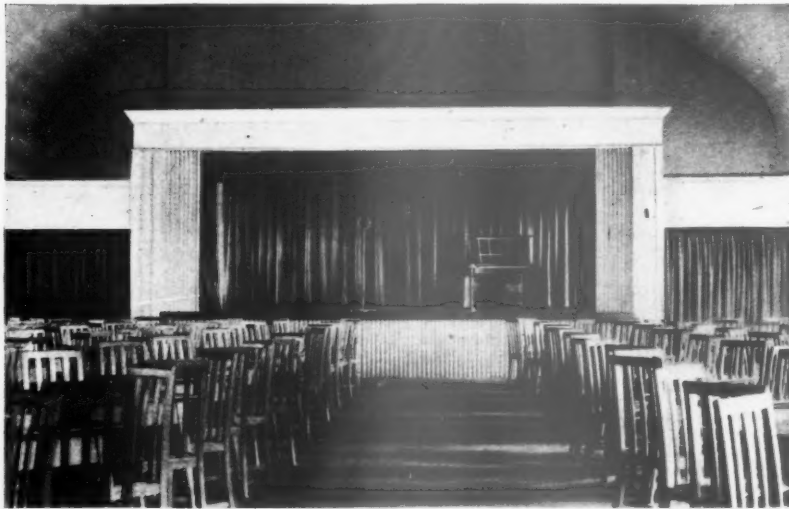
N. C. STONEHAM

London



First-year students of the A.A. School of Architecture sketching a chimney to study the effects of climatic and other conditions on the brickwork. See Astragal's note on Training for Technology, and page 416.

STAGE FOR ENSA CONCERTS



Temporary stage in the mess room of Herbert Terry and Sons' Works at Redditch, designed by Francis W. B. Yorke. The side panels of the proscenium and the dado at the front of the stage are of standard corrugated asbestos sheets, the curtains are hung on theatre curtain track, and the friezes to the cornice and to both dressing-room wings are of hardwood. The wings also are of hardwood, pivoted for adjustment to required angles and fitted with bolts. The stage floor, constructed with a slope towards the auditorium, is of jurgun. With the exception of the asbestos panels and dado the whole of the stage front is painted cream. Top, the temporary stage designed by Mr. Yorke; centre, the end of the mess room before the stage was erected, and below, two views of the exterior of the mess room.

SIR,—The RIBA mixes sadly the issues of short-lived houses and prefabrication—i.e., factory fabrication—in its recent *Memorandum on House Construction of a Definite Limited Life*. Therefore I shall do the same.

Prefabrication is new, prefabrication is dangerous, prefabrication is not traditional and therefore is bad. I give below two quotations, the first from I. Kings, 6, 7, referring to the building by Solomon of the Temple, the second from a MS of 1606-1646, entitled *History of Plymouth Plantation*, referring to the settlements of the Pilgrim Fathers.

1. "And the house, when it was in building, was built of stone made ready before it was brought thither; so that there was neither hammer nor axe nor any tool of iron heard in the house while it was in building."

2. "They having made a small frame of a house ready, and having a great new-barke, they stowed their frame in her hold, and bords to cover and firshe it, haveing nayles of all other provisions fitting for their use . . . coming to their place, they clapt up their house quickly, and landed their provisions, and left the companie appoynted and sent the barke home."

Is anything further needed to give the lie to the traditional, therefore the only, method bias of this singularly regrettable memorandum?

PETER BERNES

Maidstone

SIR,—May I add my support to the criticism of the RIBA *Memorandum on House Construction of a Definite Limited Life*.

Even the list of reasons (a) to (e) given for considering such a policy overlook the most obvious and important argument. The idea of erecting houses of a definite limited life is no new one; post-war shortages need not be stressed as a main basis. The point is simply that houses built by traditional methods outlast their usefulness. Hundreds of thousands of houses in this country are structurally sound but hopelessly inconvenient and responsible for much ill-health, discomfort and unnecessary work. It is impossible to adapt them satisfactorily to modern needs (as anyone knows who has tried to convert old houses to meet the present housing shortage) and as long as we rely on traditional methods of construction it will be uneconomic to replace them as they become unsuitable. Yet the authors of the *Memorandum* apparently regard this as such an ideal situation that it must at all costs be perpetuated.

The Board of Education for years advocated that school buildings should be of a less permanent character to allow for changing needs, and Mr. C. G. Stillman has shown us that there is at least one way of doing this without resorting to jerry building or short-lived materials. Surely then the house problem can also be solved without adopting low standards or losing amenity.

The danger pointed out by the *Memorandum* that "permits have a habit of being extended" is a real one, but it should be possible to ensure it only arising in emergencies. Even so, to have a recognized limit of life would be an improvement on the present position of allowing the occupation of a house, however unsuitable, for as long as the admittedly low standards of housing legislation are not infringed.

Astragal and Petrus have already pursued the devious track of the *Memorandum's* argument through the bush undergrowth of adventurers, motor cars, freedom of choice and hire-purchase, so I add only two points.

1. On prefabrication the authors stand firm on the William Morris line. Hand crafts are the ideal, machine technique only to be tolerated for fittings. Most of us would be sorry to see the passing of the bricklayer and the joiner, I agree, and the exchange of their skills for machine shop skills. But the problem is how to give the public good houses and, in the near future, to give them quickly. We don't know much about prefabricated houses yet but until their possibilities have

been examined in a rational way, we cannot so airily dismiss them.

2. Paragraph (c) 1) visualizes five or six years as being necessary to eliminate the skilled labour shortage. In a recent *Evening Standard*,* Col. Walter Elliot, M.P. says "Tell a young couple that they will have a house this year. Or even next year. You will raise their hopes. If you deliver the goods you will earn their gratitude. . . . Tell them—a house in four years. You will be lucky if you escape with your life." That is a realistic view of the position. It contains a warning for the authors of the Memorandum. If this attitude persists the profession will be lucky if it escapes with its life. It is more likely that the Memorandum will take its place among Famous Last Words. West Wickham J. D. TETLOW

New Houses, New Methods

SIR,—Most practical men in the building industry will wholeheartedly support the view, expressed by Viscount Bledisloe and others, that the only way to meet the vast and ever growing demand for houses within a reasonable time is the application on a large scale of the newer methods.

They are not so new as to be thoughtlessly deprecated as untried novelties. These methods have been tested and there is abundant evidence on record to prove their case; and no doubt more will be forthcoming when the mission lately sent to the USA returns to this country and reports on housing methods and progress in America.

The time has come to test them in this country on a considerable scale. Possibly the public is getting a little tired of exhibitions and plans, and wants to see the real thing. By this time the Ministries of Works and Health must have accumulated a vast array of evidence on which to base a judgment. It would be a good thing if they received instructions from the Government to get a move on and, in collaboration with the appropriate local authorities, commence at once on one or more large-scale housing schemes in accordance with the agreed plans of those authorities, and apply the new methods.

Then the country might once again have solid ground for hope that the Government really means business in this most urgent and greatest of all social needs—housing.

G. B. J. ATHOE,
Secretary, IAAS

Building Societies

SIR,—In your article on Building Societies on September 30, you state:—

"The most recent criticism against building societies—and perhaps a valid one—is that they are now being compelled in their own interests to oppose with all their power any plans for the national control of land use, which is so essential if we are to re-create our environment in a more practical and beautiful way."

Since you appear to uphold this criticism, I should like you to quote a single instance of a responsible representative of a building society advocating unqualified opposition to any plans for the national control of land.

Nobody reading the full report (see *Building Societies Gazette*, October) of the speech of Mr. David W. Smith (to which you specifically refer) could construe it as implying more than opposition to the theory that the obliteration of freehold ownership of homes is essential to successful planning and control, and an affirmation that the adoption of this principle would retard the healthy movement towards home ownership. My own impression is that building society leaders have consistently advocated reasonable control in planning, design and materials.

Architects must be given credit for knowing better than other people where their own

interests lie, but it is difficult for the layman to understand what advantages nationalization of development rights can bring to a great liberal profession whose mainspring must be individualism in creative art.

Heaven forbid that architects should become State or local government servants tied to the chariot wheels of bureaucracy.

Maldon

BORROWER

Our leader writer writes:

We refer Borrower to Mr. Smith's statement, quoted in our leading article of September 30. There is surely nothing equivocal about this statement. We are not aware that building society leaders have consistently advocated reasonable control in planning, design and materials, or, if they have, the work those leaders are responsible for, does not show it. Good planning is a sine qua non of good architecture, and good planning is impossible without some degree of governmental control. Architects could work as freely and creatively for the State or for local governments as for private groups or individuals. There is bureaucracy and bureaucracy. A country gets the bureaucracy it deserves.

TCPA versus LCC

SIR,—The public display of dissension in the town-planning world is most objectionable at a time when so much depends on the presentation of a strong and united front to the layman. But this wider issue involved in the action of the TCPA in circulating its memorandum, with the names of so many respected planners appended, seems to have been obscured both in the national and professional press by the narrower and threadbare controversy on houses versus flats.

The TCPA uses the findings of various questionnaires on the subject as the basis for its case for the house with a garden. But the nature and right use of such questionnaires seems to be given insufficient consideration. In their book *Methods of Social Study*, Sidney and Beatrice Webb indicate the dangers peculiar to this form of investigation. Questions which ask for a statement of opinion rather than of fact produce results which may be quite unsatisfactory, for opinion is conditioned largely by experience which may be very limited. So that, for example, a person who has had no experience of good flats—and that is the condition of the majority of people—if asked to choose between a house or a flat, will invariably tend to choose the former.

In its leaflet *Houses or Flats* the TCPA gives the results of various housing questionnaires. It is interesting to see that the highest percentage preference for flats comes from those already living in flats, and the second highest preference for flats from those who live near to flats. This seems to demonstrate the conditioning of opinion by experience. It is unlikely that the flats in question are much above the average English standard, which is generally admitted as not very high, both in the actual buildings and especially in their siting and environment. It is therefore probable that given the opportunity to see and live in flats of a much higher standard, many more people would express a preference for them. Of course, this does not conclusively prove the case for flats without further consideration of all the implications.

It is not within the architect's or planner's function to dogmatize on such issues, supporting his case by unscientific methods, but rather to explore in a dispassionate manner all the technical possibilities and introduce them to the public in terms of basic human needs.

Moreover, the planner should, to a large extent, be a leader rather than a follower of public opinion in such matters—and this does not necessarily imply a planning dictatorship, which would be the last thing desirable.

ROBERT R. MEADOWS.

Hull

Unity in the Profession

SIR,—I am always interested in Astragal's remarks, for, to me, he typifies the average architect. He has all the bad qualities, the pompous sense of humour, the eagerness to poke his nose into everyone's business but his own, and above all criticizes everything, with fifth year seriousness and intellect. In this latter mood he rivals Beachcomber, and once made a remark: "It is difficult to see the advantage of unity in the profession, the RIBA and the Mars group . . ."

But at the same time Astragal has his good points. He is loyal to his profession, and he wants us to put things right. He thinks and acts as most of us do, and now he is beginning to wonder, in company with 95 per cent. of the profession, what is to become of us. This is just about two years late, but perhaps not too late, if we can recognize what we want and show enough courage and self-sacrifice to get it.

I suggest we start with two simple aims excluding all side issues, however attractive. The first aim is to unite all registered architects under one control, so that the profession may obtain the necessary political bargaining power. As soon as this is done, establish a code of profession practice with a really strict discipline behind it.

When we have a unified profession we can find out how we want to carry out the architectural programme, and, having set up the necessary machinery, do it.

Such an idea is not impossible: the profession is simply crying out for sensible leadership. The present trend of events is leading one way only and there is no future for the men at present in the Forces.

A. CALVELEY COTTON

Bath

Make the Dream House Come True

SIR,—Reverting to Mr. Erdi's letter in your issue for November 4, it is, I think, permissible now to state that we are taking active steps to implement the findings of our First Report which you so thoroughly dealt with in your issue of June 17.

The body described therein, which appears to coincide so closely with Mr. Erdi's requirements, will shortly be set up. We should, however, like to make it clear that we do not consider the time has come, nor that knowledge of the situation is sufficiently far advanced for the delineation or establishment of any organization actually to engage or direct production as Mr. Erdi's letter appears to suggest. We do, however, plead that this aspect of the problem should be investigated and we hope very shortly to be in a position to do so.

R. PERRY,
Executive Officer, Committee for the Industrial and Scientific Provision of Housing

London

Daylight Factors

SIR,—Mr. Waldram's letter in your issue for September 23 convinces me that I should give more details about the method of predetermining daylight factors which I suggested in your issue for September 9.

The obstruction diagram (described in the sixth paragraph of my previous letter) is a simple polar projection of obstructions on to a horizontal plane through the point of reference (Fig. 2). I have chosen that projection because I wanted an operation that has to be repeated again and again to be as simple as possible. I have, consequently, adapted the hemisphere diagram, which is always the same (Fig. 3), to the obstruction diagram and not the other way round. It is obvious that on an obstruction thus obtained

* See A.J., Nov. 25, page 399, for reprint of Colonel Elliot's article.

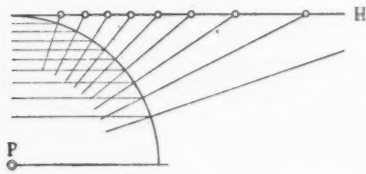


FIG. 1. PRINCIPLE OF HEMISPHERE DIAGRAM. The hemisphere is divided into horizontal zones of equal daylight factor. The parallels enclosing the zones are projected upwards onto the horizontal projection plane H through the centre P (Polar projection). Note unequal spacing of parallels. Equally spaced meridians are projected in the same way.

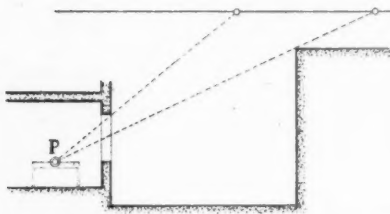


FIG. 2. PRINCIPLE OF OBSTRUCTION DIAGRAM. Obstructions, e.g., buildings or window heads are projected in the same way as the hemispheres through the point of reference P.

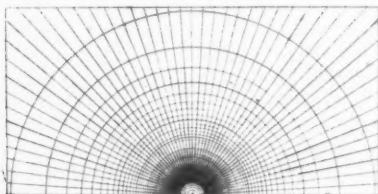


FIG. 3. HEMISPHERE DIAGRAM. Each unit represents the same daylight factor.

straight lines plot to straight lines and any horizontal figures to their true form as on plan but to a different scale "according to their height above point of reference." This projection is directly used as obstruction diagram. In this way I avoid the labour involved in measuring a great number of angles and plotting angular co-ordinates on a diagram.

On the obstruction diagram obtained the size of the area enclosed between obstructing outlines does not directly represent the daylight factor. This is the reason why I have to use a superimposed special grid to account for the distortion and why I have to measure daylight factors by counting the units of a grid, which, although of different size, represent the same amount of daylight factor.

The grid drawn on the hemisphere and consisting of meridians and parallels is projected on to the same horizontal plane and in the same manner as the obstructions. But as the parallels enclose "zones of equal daylight factors" (or "sky factors") they are not equally spaced on the circumference of the circle as can be seen on Fig. 1 where the hemisphere has been divided into 10 zones of equal daylight factors. There are, of course, more subdivisions on the final diagram (Fig. 3). The circular zones are further subdivided into small areas of equal daylight factor by radials spaced at equal angular intervals.

A simple example may serve to show the practical application.

Fig. 5 shows a cross-shaped building to be erected in place of a bombed one (Fig. 4) which had been arranged around an inner courtyard. To have the same area of floor space for the new building, part of it (shown darker on plan) is planned to have 12 storeys corresponding to a height of 120 ft. above point of reference, while the remainder has the same height as the previous one and the surrounding buildings (60 ft. above point of reference).

To find the daylight factor on a point P on the working plane 6 ft. behind the exterior wall surface, proceed as follows:—

Draw plans of the horizontal obstructing outlines to the appropriate scale for each level. Assuming that the distance of the projection plane from P = 2 in., e.g. at a level 60 ft. above P, the scale is 60 ft. = 2 in., at a level 120 ft. above P the scale is 120 ft. = 2 in.

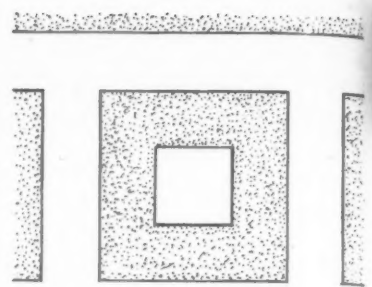


FIG. 4. OLD BUILDING ON BOMBED SITE. Site 200 ft. by 200 ft. surrounded by streets 60 ft. wide. Height of all buildings 6 storeys = 60 ft. above point of reference.

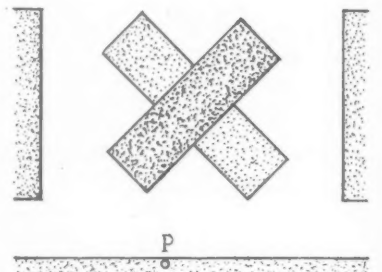


FIG. 5. NEW BUILDING IN PLACE OF (4). The darker part is double height above P than Fig. 4. Same aggregate floor space.

Correspondingly the window head being 5 ft. above the working plane, has to be drawn to a scale of 5 ft. = 2 in. Care must be taken to apply the appropriate scale as well when fixing the position of the portion of the building in question in relation to point P.

Then draw radials from P through salient points of the plans representing vertical obstructing outlines. The areas of visible sky enclosed between obstructing outlines on the diagram obtained are measured by superimposing it on the hemisphere diagram and counting the units they cover. In Fig. 6 the hemisphere diagram is omitted where it is outside the visible sky. We count 40 units = 0.8 per cent. daylight factor. The same point had no daylight at all under the previous conditions as shown in Fig. 4.

It is obvious that the daylight factor for any other point can be determined by shifting the plans for the different levels into the correct position as against the new point. The daylight factors for a number of points can thus be ascertained with a minimum of labour. This, as I pointed out, is of great advantage where contours of equal daylight factors are to be drawn by means of a grille. By such contours the daylight illumination of a whole building may be represented on plan.

I do not want to go into further details, as I merely wanted to demonstrate the principle of a method which I have found to be simple and convenient and which so far does not appear to have been used anywhere.

London

H. J. REIFENBERG

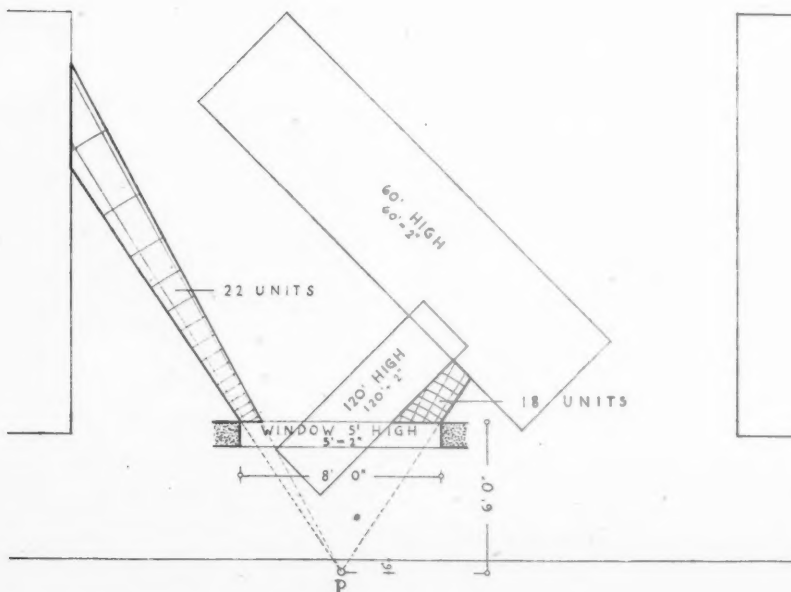


FIG. 6. OBSTRUCTION DIAGRAM. The higher portion of the building is drawn to half the scale of the remainder and consequently shifts towards P. The units of the hemisphere diagram are shown where they appear between the obstructing outlines. The heights given refer to a level above P.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

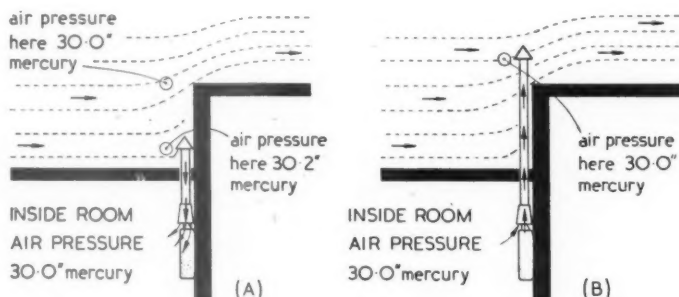
• DOMESTIC WATER HEATING II: FLUES FOR INSTANTANEOUS GAS WATER HEATERS (B)

FLUE TERMINALS.

The primary functions of a terminal are :¹

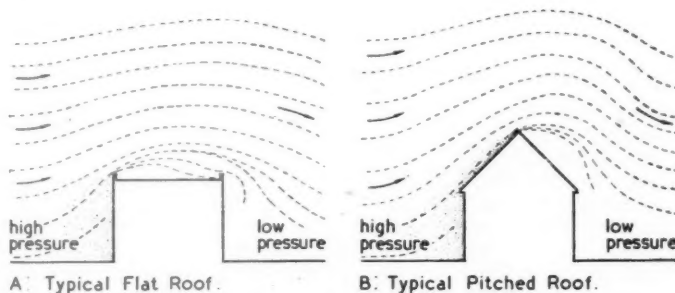
- (a) To prevent, as far as possible, currents of air impinging on the end of the flue² and causing down-draught.
- (b) To prevent the entry of birds into the flue, where they might build nests.

The flue terminal, if unsatisfactorily designed or incorrectly positioned, may prevent an otherwise satisfactory flue from working, but a good terminal cannot correct a bad flue.



1: Diagram illustrating A: the impossibility of a flue terminal overcoming the defects of an inherently poor flue installation, and B: the effect of correctly situating the flue outlet.

To be successful a flue should terminate clear of the roofs,³ adjacent overhanging trees, high buildings or chimney stacks.² The use of wall terminals is undesirable. They should not be used other than under the most exceptional circumstances where no alternative can be adopted.⁴



2: Diagram indicating the areas of high pressure built up by wind blowing against a structure.

The diagram above illustrates the way in which wind builds up an area of high pressure on the face of a building. It will be quite apparent that no form of wall terminal can operate successfully if the wind is blowing against the wall on which it is placed. Even if the wind does not strike the terminal directly, there will be a deep layer of air above atmospheric pressure over the face of the wall. For this reason, the operation of wall terminals tends to be unsatisfactory.

1. For satisfactory operation, a terminal should embody the following characteristics :—

- (a) It should offer the minimum resistance to outward flow consistent with (b), (c) and (d). The cross sectional area of the outlet from the terminal should be not less than that of the flue pipe.
- (b) It should not interfere with the air flow and tend to set up back draught.
- (c) Birds should not be able to nest in it.
- (d) It should be strong and made of incorrodible material.

Under special circumstances, the manufacturers of the water heater should always be approached for advice on the selection of a suitable terminal.

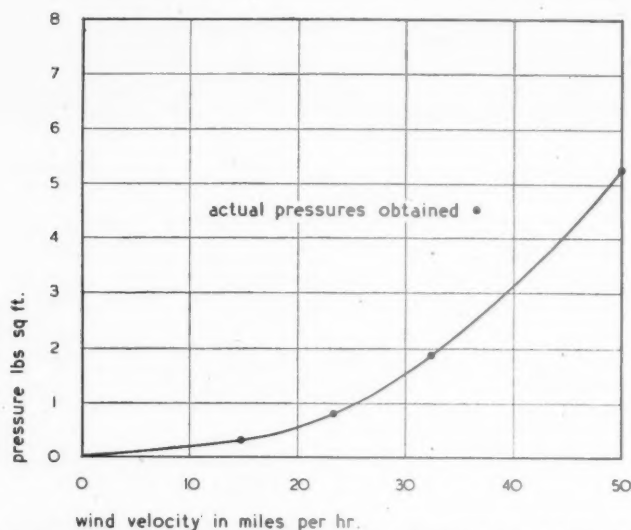
2. Where a flue finishes below the level of neighbouring high buildings or similar obstructions, there is a possibility that the wind will be deflected suddenly upwards by these obstructions and follow a sharp downward course afterwards. If the flue were open ended, and in the path of such an air current, the wind would blow directly down the flue. The terminal is designed to prevent such a possibility, but at the same time to offer no restriction to the flow of the flue gases.

3. If, as in example (A) diagram (1), the flue terminates in a pocket formed by the roof and an adjacent wall, pressure may easily be considerably in excess of the pressure inside the building. Under these conditions, and no matter what type of terminal is used, the flue will be subject to down-draught.

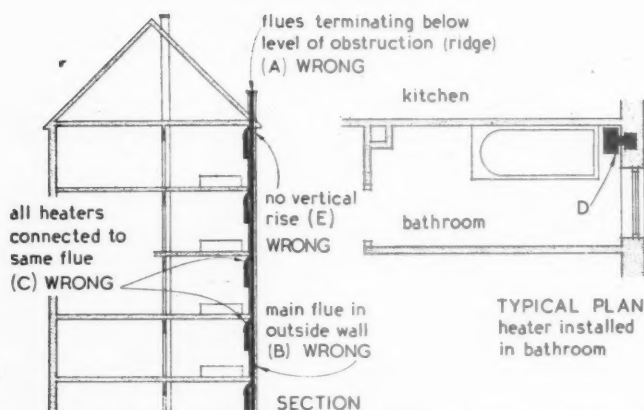
4. Wall terminals suffer from the inherent disadvantage that, if wind blows on to the wall to which they are fixed, a positive pressure is built up over the surface of the wall. Depending on the strength of the wind and the angle at which it strikes the wall, either static conditions or back draught in the flue will occur.

Where the use of a wall terminal cannot be avoided special care must be given to the ventilation. Permanent ventilation must be provided through the wall carrying the terminal to equalise under all conditions the pressure inside and outside the room.

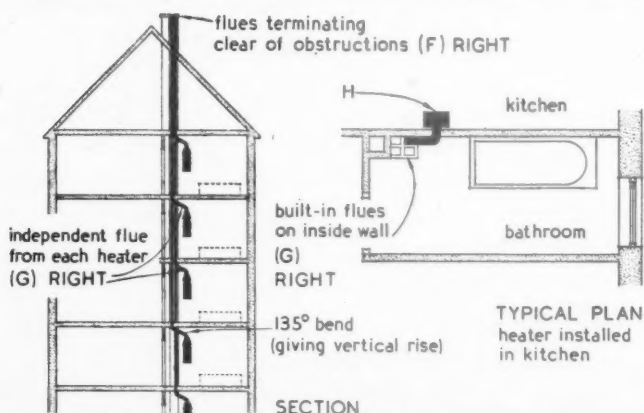
[TURN OVER



3: ACTUAL WIND PRESSURES ON WALL FACE OF A STRUCTURE.⁵



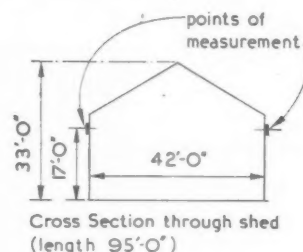
4: INCORRECT FLUE PLANNING INSTALLATION.⁶
Diagram illustrating a typical unsatisfactory flue installation



5: CORRECT FLUE PLANNING INSTALLATION.⁷
Diagram illustrating correct planning of the unsatisfactory installation shown above.

5. Some experiments (Mr. A. Bailey, M.S.C.E., As.Mem.S.C.E., Wind Pressures on Buildings. Inst. of Civil Engs.) which were made on a large shed (see Diagram 3), showed that the static pressure at a distance of 1-2 ft. away from the wall was the same as that on the wall face and that, in fact, any obstruction placed in an air stream influenced the pressure for a distance of seven times its own height. Even wall terminals designed to incorporate a venturi throat can only be effective when air movement is parallel to the wall face. Wall terminals tend to bring about static conditions which are even more unfavourable than back draught, as the air vitiation in the room where the appliance is installed is more rapid than under strong back-draught conditions, where a certain dilution of the products takes place.

The conditions under which the pressures were recorded, are indicated in the cross-section below.



6. A. The outlet has not been carried above the roof ridge.

B. The main flue is built into an outside wall.

C. A combined flue has been used for all appliances.

D. The water heater need not be installed in the bathroom. There should be a more frequent demand for hot water at the kitchen sink.

E. No vertical rise from the heater (connection being by means of right angle bend into flue).

7. F. Flues have been carried up above the roof ridge.

G. Internal wall carries the flues—each heater has an independent flue next to the chimney from central heating boiler.

H. Water heater in the kitchen is nearer to the kitchen sink, where hot water is most frequently needed.

Issued by Ascot Gas Water Heaters Ltd., North Circular Road, Neasden, N.W.10.
Telephone: - - Willesden 5121 (14 lines).

Information from Research & Development Department, Ascot Gas Water Heaters Ltd.

PHYSICAL PLANNING

PROBLEM NUMBER FOUR

17

index

10. Summary
11. Town & Country Planning Act, 1943
J. B. Wikeley

- Problems
12. Administration
Part I. Dr. W. A. Robson

13. Administration
Part II. Dr. W. A. Robson

14. Training for Planning
Part I. Dr. E. A. Gutkind

15. Training for Planning
Part II. Max Lock

16. Organization of the Building Industry
D. Percival

17. Public Relations
Misha Black

18. Summary of the Problems

Misha Black, author of this week's article on Public Relations, specializes in exhibition design. He was responsible for co-ordinating the MARS exhibition and has designed exhibitions on housing, nutrition, smoke abatement, etc. He has worked at national and international exhibitions in London, Seville, Paris, Glasgow, Stockholm, Liege and New York and is now chief exhibition architect to MOI.

It is in the field of public relations that physical planning comes face to face with its destiny. However thorough the fact-finding, detailed the analysis, perceptive the diagnosis and imaginative and practical the plans, physical planning will either succeed or fail through its publicity.

We are still far from that age of reason when we can be sure that plans will be understood and judged on their merits. The process of putting planning across, of presenting proposals and arousing enthusiasm for them, must therefore account for prejudice in addition to ignorance. The weapons against these two obstacles are propaganda and instructional publicity respectively. In confusion between these two weapons and particularly in the justifiably vile reputation which propaganda has acquired for itself, lie many pitfalls for the planning publicist. Misha Black anticipates these in the following article and makes a practical suggestion for the establishment of an Office of Reconstruction Information with the main purpose of arousing an enthusiastic national planning movement.

HOW SHALL WE PUT PLANNING ACROSS?

by Misha Black

new approach to planning publicity needed

Propaganda for town planning and good building over the past few decades has been propaganda for ideas with little hope of their realization on any appreciable scale. To have said one was in favour of intelligent planning was tantamount to saying one believed in improved sanitation in West African villages—it gave the protagonist a sense of righteousness with little danger of personal inconvenience.

This long-range propaganda for good planning and building over the past 50 years has been by no means ineffectual, but a very different publicity technique will be needed if any really large scale re-planning operations are projected for the immediate post-war period. It will be necessary to obtain public agreement and enthusiasm for plans which may immediately affect the living conditions of hundreds of thousands of people. Even a scheme as reasonable and relatively conservative as the County of London plan, for example, postulates the en-

forced movement of half a million people from the overcrowded central London areas.

In addition to the educative propaganda addressed to those who fundamentally approve of re-planning, it will also be necessary to combat opposition from those basically opposed to any large-scale amendment to pre-war conditions. Organized opposition will probably develop and sooner or later we shall be faced with the threadbare arguments that "the people won't move—they prefer things as they are—consider how unhappy the evacuated Stepney mothers were."

The large-scale amendments to normal living conditions during the war have proved, however, that a static public opinion even about those matters which affect people's lives most intimately is an illusion. Given a real desire to effect a change in the living conditions of great numbers of people, habit, immediate convenience, inertia and laziness can be overcome.

The voluntary recruitment of women into industry, the waiting lists for submarine crews and other particularly

dangerous war-time jobs, the millions of packets of carefully sorted salvage, and the recruitment to the Services, W.V.S. and Civil Defence, demonstrate that large masses of the population will voluntarily change their routine existence and venture into other unexplored ruts if they can be made to feel that they are morally justified in doing so, and worthy of general approbation. But while some thousands of people may voluntarily follow their leaders, whether it be in a wooden boat to an unexplored America or in a 'bus to a war factory, the most sustained educative propaganda and conditioning is necessary if a national conscience is to become so widespread on any issue as to cause no serious opposition when compulsion is introduced as a method of ensuring fair distribution of hardship. In spite of the 'great number of voluntary recruits to the armed services, war work and other war-time activities, all the forces of press, radio, cinema and other propaganda media had to be brought into operation to ensure anything approaching a national unity behind the obviously necessary war-time restrictions on the freedom of the individual.

propaganda potential

The effectiveness of efficiently directed propaganda cannot be disputed. The ease with which the Nazis whipped up incipient anti-semitism to a form of national hysteria is sufficient proof of the potentialities of propaganda for evil.

The establishing of criteria for the moral and social life of the community and the engendering of a feeling of moral self-justification is the basic activity of the propagandist whether his job is to make people feel justified in persecuting the Jews, ashamed if they are not doing a war job, or frightened that their breath may smell. Propaganda can be as much an instrument of progress as of reaction, given real democratic control of the propaganda organization. In a matter of a few months or years propaganda can effect changes in the national conscience which might otherwise take decades to achieve. But if speed is requisite finance must be made available commensurate to the problem.

propaganda finance

In one year (July, 1942, to July, 1943) Government expenditure on press advertising alone totalled £2,154,677, and this medium is by no means the only or the most important method of persuasion employed. Commercial firms are still more ready to recognize the power of publicity. To encourage the purchase of beer, mustard, tooth-paste, fountain pens and other essentials of a civilized community, commercial advertisers in a typical year (1938) spent the sum of £28,500,000 on press advertising in addition to expenditure on other media.

It is against expenditure of this calibre that the £4,000 (which is reputed was spent on the RIBA re-planning exhibition), must be measured, if the task of propaganda for national planning and reconstruction is to be seen in a true perspective.

The work of the social reformers of the past decades has gradually permeated to the great mass of the population and the lessons of 1918 have not yet been forgotten; a general public desire for reasonable national planning and living conditions exists, but nevertheless sustained propaganda on a large scale will be necessary to persuade people to accept, more or less willingly, changes in their personal lives. The country as a whole will be "behind reconstruction" as it is "behind the war," but carefully organized propaganda will be as necessary during the reconstruction era as it has proved to be during the war period.

war v. peace propaganda

The organization concerned with reconstruction propaganda may need to be of a different character due to the difficulty of retaining a national unanimity of purpose and a willingness to accept personal inconvenience for a programme lacking the romanticism attached to high explosives and mechanised killing machinery. The men responsible for reconstruction propaganda will need to consider the effect of their work in 10, 20 and 50 years' time. They will have to undertake long-term programmes while dealing with more immediate problems: their task will not be limited by the duration of a 4, 5 or 6 year war. A greater

stress will have to be placed therefore on publicity and the necessity of achieving sustained long-range results will probably require the development of a technique in which the methods of the teacher and missionary are grafted to contemporary publicity technique. Long-term post-war propaganda must, if its effect is to be sustained, operate on what Julian Huxley has called "the democratic principle of persuasion, consent and participation." The need for propaganda overseas will also not decrease: as the USSR proved during the first 20 years of its existence, an antagonistic and unco-operative outside world can prolong and intensify the difficulties of any attempt at national planning.

education v. the bogies

In a national economic, social and physical reconstruction programme, propaganda for physical planning and reconstruction will be only part of the monumental task of education and re-education which will have to be undertaken, but it may be anticipated that the intrinsic importance of physical reconstruction, and even more important from a propaganda point of view, the symbolic importance of physical planning and building, will be realized and the publicists concerned with this problem be allocated newspaper space, radio time, ministerial speeches and other media commensurate to the importance of the problem.

The resistance and bogies which will have to be overcome have already been considered in previous articles in this series, but the most important of these can briefly be restated as follows:

- (1) The fear that organized reconstruction will entail some degree of Fascist or Communist regimentation.
- (2) The fear that many people, if not all, will be forced to leave their present homes and move into sterile unpleasant "Council" houses.
- (3) The fear that the country cannot afford large-scale reconstruction and that any improvement in housing conditions can only be achieved at the expense of an impoverished nation.

To counter these formidable myths and to deal with other more specific problems, it will probably prove essential to establish an information and educative agency which, for the purpose of this article, I shall call the Office of Reconstruction Information (ORI).

the office of reconstruction information

The work of the Office of Reconstruction Information would include the maintaining of contact with the national press, the organization of national press advertising campaigns; the production and distribution of films; the compiling of panels of lecturers; the publishing and distribution of leaflets, periodicals and books; the assembly of statistical data on public reaction to planning proposals; the organization of exhibitions; and all the rest of the now familiar public relations machinery.

ORI would work in collaboration with the Board of Education on the formulation of school curricula both for children and adults; it would work with religious bodies, with the WEA, with Rotary Clubs, Trade Unions, Boy Scouts, Freemasons, the voluntary societies, the Institute of Adult Education and all other associations able to influence large numbers of people.

national campaigns

The Great National Reconstruction Exhibition* would be organized under the aegis of the ORI, which would also be responsible for public relations activity in connection with the national and international competitions organized by the RIBA and the Ministry of Town and Country Planning. The Information Office would attempt to control and co-ordinate competitions, exhibitions and other means employed by trade federations and private firms to impress the public with the peculiar advantages and attributes of their own particular products.

The London headquarters of the Information Office would include a library, lecture hall, film theatre and exhibition gallery; it would be ready

*See Physical Planning 3 and 4. A.J. 12 and 26: 8: 43.

and able to answer enquiries from the general public; it would ask for and receive general and detailed proposals, ideas and inventions. It would organize exhibitions of the work being done in other countries. Organized visits would be arranged to districts where reconstruction projects were approaching completion or already completed.

During the many years of the reconstruction programme, the Information Office would work to sustain enthusiasm, to explain the reasons for delays, and to focus public attention on those local plans which are likely to be of national interest and accepted as symbols of progress achieved. It would assist in the formation of local study groups; it would undertake in factories and workshops the kind of educational activity which ABCA is now promoting so successfully in the Army. It would publish pictorial statistics showing the progress of building operations throughout the country; it would compare progress in one district with that in another. If the ORI is staffed and financed to undertake its task efficiently it could make the people of one district as fervently partisan for their own local scheme and as much personally identified with it as they are with their local football team.

ORI would be equally concerned with the morale of the skilled and unskilled labour employed on the reconstruction projects and would aim to engender in every bricklayer, carpenter or labourer the righteous feeling of being one of the shock troops of the reconstruction army. The Information Office would be responsible for the publishing of particular feats of operative skill and the awarding of bonuses and medals for acts of labour above that called for in the normal line of duty. It would grant awards and distinctions to the architects, engineers and other technicians whose skill and ingenuity enabled the speed and efficiency of the programme to be increased.

local campaigns

Impressive though the work of the National Information Office may be, its work will be abortive unless the most careful plans are made for the concentration of its campaigns

to meet the special and very different requirements of every region where planning is contemplated.

In many advertising campaigns undertaken by commercial firms and in many of the Government's war-time campaigns the technique of supplementing national appeals by local campaigns specifically addressed to the people of a country, district or town has been employed with considerable success. In propaganda for physical planning, the technique of regional or local campaigns will, I believe, have to be exploited to a greater degree and with more thoroughness than has so far been attempted. The work of the Office of Reconstruction Information will be, to a great extent, that of stimulating and guiding these local campaigns while undertaking sufficient propaganda on a national scale to make every local campaign appear as part of a great national programme, in which the smallest village development scheme is seen by the inhabitants of that locality as one step towards the realization of the greatest programme of social improvement that history has known.

In every town or district scheduled for building operations a branch of the ORI would need to be established, staffed by skilled publicists working in the closest co-operation with the planning architects, engineers, sociologists and other technicians, with the Borough Council, the local educational bodies, trade unions, district organizations and generally on a smaller scale repeat within a county, town or district the pattern of the national organization. Each local information office will have to become completely identified with the area it serves and able to undertake activities of greater importance and wider sociological potentialities than have ever before been undertaken by public relations officers or propagandists in this country.

The primary task of the local information office will be to engender a real and enduring local patriotism. In some areas this already exists to some considerable extent, but in others only the most inspired work will be able to achieve some degree of local unanimity of action.

local patriotism

The LCC plan, for example, has stressed the importance of the some 100 district groupings in London, but these local groupings are not so clear-cut as the carefully defined patterns on the plan may lead one to suppose. Local patriotism is more firmly established in some of the smaller provincial towns, but in these, as in London, the first task of the Information Office will be to build this incipient local patriotism into a fervent enthusiasm, firstly for one's town and, secondly, for the portion of the town in which one happens to live.

The drift of population to the larger towns, the steady movement to more "respectable" neighbourhoods, and the class distinction attached to different districts will need to be overcome if people are to be content and proud to live, for example, in Stepney without a nagging desire to move to Hackney or Golders Green or some other district where greater social distinction is at present attached to the address. If balanced communities are to be achieved without resort to compulsion, this snobbery-directed vagrancy must be counteracted so that the carefully organized district groupings will not degenerate into favoured areas and despised concentrations temporarily harbouring only those who are unable to find or afford accommodation in the more esteemed areas.

a democratic ORI

The problem will be different in every district. In some it will be necessary to persuade large numbers of people to move from homes which their families have occupied, perhaps for some generations, in others factories may be re-zoned with some seeming inconvenience to the workers; in other districts new industries may be established or a complete area scheduled for demolition, for reasons of no direct interest to the people previously living in the scheduled area.

The work of the Regional ORI will not end with the completion of the major building operations. The enthusiasm engendered during the actual reconstruction period will need to be synthesized into an enduring community spirit. From its inception ORI will need to guard against the

danger of assuming an autocratic position and imposing its policy on an apathetic public willing to allow the Government to carry forward its plans but taking no real interest in them. If a real community spirit is to be developed in the post-war period the general public must be made to feel that it is its own plans which are being put into operation, that it has the power to influence them and to assist in their materialization. If ORI undertakes this task its work will have to continue as long as this country remains a progressive power. The form of ORI will gradually change, its short-term publicity campaigns will lapse and in time it may become integrated with educational authorities concerned as much with the education of people during their adult lives as during their childhood and youth.

During the many years of major reconstruction programmes the most acute stresses and strains will doubtlessly occur. If education and propaganda is not undertaken on a scale comparable to that of the re-planning projects themselves, the temporary difficulties and hardships may be artificially magnified until they may well imperil the success of the whole plan. The work of the National and Regional Information Offices must be undertaken with a technical skill and understanding no less efficient than that which we shall expect from the planning engineers and architects.

three requirements

In propaganda for planning and reconstruction the publicist will have the advantage of a positive constructive activity as their merchandise, and given sufficiently careful research into the history, public opinion and secret reservation of the population of the planning areas, it should not prove impossible to engender and sustain that knowledgeable and enthusiastic co-operation which is an essential of democratic planning. Only three things are still required—the reconstruction schemes themselves, the establishment of ORI and the allocation of funds to start immediately on the education of some 46,000,000 people to a clear understanding of the potentialities of their country.

PLANNING REVIEW

MOR

A leading article in *The Times* on November 24 concludes: Every issue of reconstruction will, indeed, receive a new impetus from Mr. Churchill's emphatic declaration (FOOD, WORK, HOMES) and from Lord Woolton's fresh and stimulating supervision. The new session of Parliament may be expected to devote a considerable part of its time to the discussion of these issues and—it may be hoped—to legislation on some of them.

The New Statesman and Nation suggests that Lord Woolton's job may be to get together a compromise reconstruction programme that will appease the Left without too far upsetting the Right. It assumes that the new Ministry of Reconstruction will be a co-ordinating Ministry, and not a department in the ordinary sense—Sir William Jowitt's Reconstruction Secretariat writ larger, and with greater powers, and not a new agency to which the main executive tasks will be transferred. It agrees that this is unavoidable but believes that the great question is whether the ban on controversial legislation is to remain unaltered, or to be modified in practice, even if some profession of retaining it is maintained. *Food, Work and Homes* are by their nature controversial, they involve property.

The Political Correspondent of *The Observer* states that Lord Woolton's job in the War Cabinet will be to fit the findings of the Government Departments on post-war policy into a programme of action for the approval of his Cabinet colleagues. He will tell the Departments what matters the Cabinet wants decided, and he will tell the Cabinet what decisions the Departments have made. He points out that this is a new job. Lord Woolton is not going to take over the existing duties of any of the Departments; the Ministers will remain responsible to Parliament for what they do or do not do.

OXHEY ESTATE

The LCC's proposal to develop 910 acres of Oxhey, near Watford, as a cottage estate for London workers, is opposed by residents in that area who are sending a petition to Air Commodore W. Helmore, M.P. for the division, requesting that the matter be raised in the House of Commons. The proposed town is to have a population of 15,000. The petition is being taken from door to door. Councillor E. J. Baxter, representing the Oxhey ward on the Herts County Council, described the LCC plan as a good one; he believes it is better than any speculative builder could envisage.

The Times further reports a vigorous reply to these protests by Lord Latham, leader of the LCC, at a meeting of the Forest Hill and

Sydenham Rotary Club. His main points were: (1) The need for new housing accommodation is so immense that one of the methods to relieve it must take the form of cottage estates outside the county area. (2) Opposition to the LCC proposal has at once arisen from a section of the people who are themselves fortunate enough to be living in good houses in or near beautiful surroundings, and would deny to others what they themselves enjoy. (3) These protests are usually reserved for public housing authorities; they were not very audible against the hideous ribbon development and other spoliations of the countryside by speculative builders between the two wars. (4) The land at Oxhey has for some time been zoned by the planning authorities for residential development without there being protest. (5) The LCC is not out to spoil beauty spots but to make them available for those who have hitherto passed their lives in the desolation of unrelieved ugliness. (6) He suspects that the real grounds of the objection are not that the land is to be built upon, but that houses for working people are to be erected. (7) The LCC will not be deflected from its duty as a housing authority by anti-social influences of the kind now vocal about the Oxhey site.

In a letter to *The Times*, Mr. J. V. Langmead Casserley, Vicar of Oxhey, points to three serious defects which were characteristic of housing schemes sponsored by housing authorities after the last war. They were: (1) Indifference to the waste of time and energy caused by making people live at a long distance from their work. (2) Insufficient concern for the value of good agricultural land. (3) Preference for utilitarian rather than æsthetic values (beauty spots). Oxhey is a test case, for all these factors bear directly upon it and all three defects are evident in the LCC scheme.

REGIONALISM

A meeting of 300 delegates from rural and parish councils in Kent has decided to resist any attempt in post-war reconstruction to usurp the powers and functions of small country authorities. This decision is part of a national anti-regionalization campaign.

TCPA VERSUS LCC

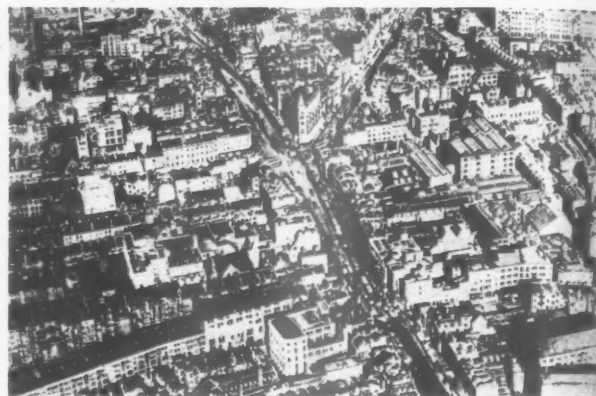
Mr. F. J. Osborn answering Lord Esher's letter to *The Times* (Planning Review 25:11:43), restates his case for the decentralization of 1,500,000 people from inner London in order to allow a predominance of family houses with small gardens. He concludes the letter with the hope that the matter can be discussed as the momentous social issue it is, and that accusations of brickbat slinging can be discontinued.

NEW LITERATURE

The City: Its Growth, Its Decay, Its Future: Eliel Saarinen. Reinholt Publishing Corporation, New York. \$3.50 (England 21s.).

Town and Country Planning: Autumn, 1943. The Town and Country Planning Association. 2s. 6d.

Regional Planning of Natural Resources: T. A. Lang. State Rivers and Water Supply Commission, Melbourne, Australia. Reprinted from the Australian Municipal Journal, 20:11:42.

LOCAL PARTICIPATION IN PLANNING
2. STEPNEY RECONSTRUCTION GROUP

CROWDING, CONGESTION, CHAOS. STEPNEY TO-DAY. This is the title of the first picture, above, in the exhibition of the Stepney Reconstruction Group, STEPNEY TO-DAY AND TO-MORROW. It is to such communities as this that we look for the flesh and blood which will make the new Ministry of Reconstruction a living force.

The Stepney Reconstruction Group began after the blitz when it became clear to many that a fresh start could be made with the seemingly impossible problems of providing decent living conditions in the East End. It was decided to form a group of people, representing the various aspects of the borough's life, to study the problems, explain to planners the needs of ordinary people and to interest the public in what planning means. This group sent evidence to the Dudley Committee, distributed a questionnaire throughout Stepney, and finally decided to hold an exhibition which was opened in the Whitechapel Art Gallery on October 13, and is now on tour in Stepney. The exhibition is the work of amateurs who felt that something should be done, even if it did not come up to the professional standards. Such an exhibition as this goes a long way towards closing the gap between the expert's plan and the men and women for whom it is produced. It has an advantage over the slick, standardized MOI exhibition, in that, although the latter serves certain purposes excellently and at the same time provides guidance to amateur exhibition designers, the amateur's efforts are often felt by the people to be closer to themselves. This factor is especially important in reconstruction issues where

the results will be more lasting than in those arising from the solution of short-term war-time problems.

G. M. Kallman, in his article on *The Wartime Exhibition*, suggests that "a solution to the difficulty of registering with an unknown mass audience, which is experienced by producers like MOI, ABCA and CEMA, may lie in the production of many small exhibitions explaining the same subject, on various planes, and addressing itself to various audiences, making use of the specific lines of thought prevalent amongst them." Such a solution will only succeed fully where there exists willingness to participate in the production of exhibitions on the part of local amateurs. For in addition to the closer contact of local enthusiasts with specific lines of thought prevalent in their community, the medium of the exhibition can draw upon the skill not only of members of local art schools, but also of photographic societies, literary societies and the higher classes in local schools (see Blackpool Grammar School, Planning Review, November 25, 1943), thereby encouraging all sections of a community to take part in the solution of their local problems.

*The Architectural Review, October, 1943.

This painting, done by Miss B. Hamilton, for the Stepney exhibition, shows well the particular qualities of this technique for driving home special points in an exhibition theme, providing relief from photographs and mass-produced posters, however good, and offering an opportunity for employing talent from local art schools. Such collaboration will produce real People's Exhibitions.

A FACTORY AT YOUR FRONT DOOR



IT MIGHT HAPPEN TO YOU

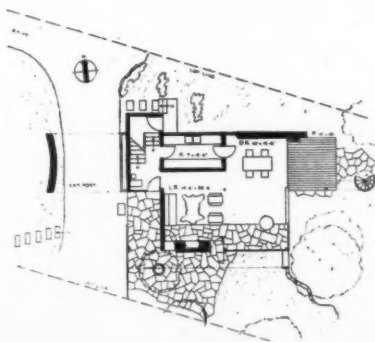
HOUSE

AT AUSTIN, TEXAS

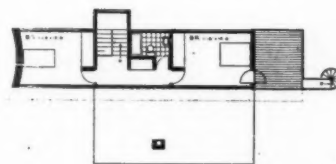
DESIGNED BY CHESTER NAGEL



This house, designed and owned by Chester E. Nagel, is situated on the outskirts of Austin, on the edge of a slope at the bottom of which flows a creek. The creek curves at this point, and the house lies on the outside of the curve. The building faces approximately south, with its sun deck and living porch at the east and the carport—enclosed garages are not needed in the locality—to the west. Prevailing summer winds are from the south-east, up the creek bed and up hill, across the



GROUND FLOOR PLAN



FIRST FLOOR PLAN





Left: The carport and the dining end of the living room. Above: view of the sun porch and deck.

long axis of the house. Texas summers are hot, summer winds there seldom rise above moderate intensity; up this creek bed comes an almost never-failing breeze. The house is so designed that, with the windows open, there is always at least a refreshing air movement through the second floor, occasionally almost a gale. This effect, says *New Pencil Points*, from which the accompanying illustrations are reproduced, is gained by windows which, on the windward side, are small and high, and on the leeward side are large. Thus the second floor becomes in effect a venturi which literally pulls air through the bedrooms. One by-product of the fenestration is that a minimum of insulation was required for the ceilings. Across the leeward side of the house, at first floor level,

the eaves project; at the second floor an eyebrow or sunshade protects the wide expanses of plate glass from the summer sun. In winter, when the sun is low, its rays strike as much of the glass as possible and heat the house. On an average cold winter day, say 32°F. in the early morning, it is sometimes necessary to warm the house with the small gas heaters in the walls, but on a typically sunny day they can, perhaps, be turned off between 10 a.m. and 9 p.m. The view from the house lies to the south and east, and from the living room, porch and sun deck can be seen almost the entire city of Austin, with the forty-storey tower of Texas University dominating it. Except for the end walls, the house is of wood frame. In principle, the second floor is bridge-like, supported at one end by the masonry wall of the carport, and at the other by the walls at the east end of the living room.

HOUSE AT AUSTIN, TEXAS

IN
The
all cu
the w
kind
spect
staff
and
ments

PH

1307

THE C

Publis

The

comm

living

plann

The c

the m

prevail

that th

and c

urban

have n

practic

The r

form-c

dimen

figurat

media

spite c

along

The

town

order

this o

the gr

One

consci

enviro

consci

by "

Conc

caused

these,

The o

can b

situati

" org

The

be (a)

to of

activi

areas

there

1308

YOUN

tion

1943

Cour

tions

S T

1309

CON

K

Jour

and

in A

Sept

195-

Jour

INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

PHYSICAL PLANNING

1307

City Planning

THE CITY. *Elie Saarinen.* (Reinhold Publishing Corp., New York, 1943). The physical order of the urban community explained in terms of a living organism. Mediaeval and modern planning compared.

The chief difference between the methods of the mediaeval and classical times and the prevailing method of yesterday and to-day is that the former resulted in expressive design and coherent physical order, whereas the urban developments of yesterday and to-day have mostly been dealing with matters of a practical and technical nature.

The mediaeval irregular plan produced good form-order because it was conceived as three-dimensional design and not as a plan configuration of mere streets. Because of this, mediaeval towns are still in good shape in spite of their age, whereas slums are spreading along developments of recent date.

The process of town building—by means of town design—must now be to bring organic order into the urban communities and to keep this organic order continuously vital during the growth of these communities.

One should not dwell in a constant state of conscious reaction to one's architectural environment, but in a lasting state of subconscious satisfaction. This is what is meant by "living in an architectural atmosphere."

Concentration in the overgrown cities has caused compactness and disorder and, through these, deterioration and the spread of slums. The only remedy is a decisive surgery which can bring openness into the compact urban situation and which is the surest road toward "organic decentralization."

The objectives of this major operation must be (a) to transfer activities from decayed areas to others functionally suitable for these activities; (b) to rehabilitate the vacated areas for such purposes as are best suited there; (c) to protect all values old and new.

1308

County of London Plan

YOUR LONDON HAS A PLAN. *Association of Building Technicians.* (October, 1943. 6d.). Objective summary of the County of London Plan with illustrations.

STRUCTURE

1309

Continuity in Steel

CONTINUITY IN CONSTRUCTION. *Dr. K. Hajnal-Könyi.* (The Architects' Journal, July 1 and 8, 1943, pp. 7-10 and 23-26. See also correspondence in Architects' Journal, August 12, 19, September 16, pp. 87-88, 123-124, 195-196, and an example in Architects' Journal, August 29, p. 142). Character-

istics and advantages of continuity. Reasons for lack of continuity in multi-storey steel structures in this country. Description of a single-storey welded structure of 80 ft. span.

Continuous structures are statically indeterminate. In a statically determinate structure one definite distribution of stresses, and one only, corresponds to any given loading, whereas in a statically indeterminate structure there is an infinity of possible stress distributions. This gives an increased factor of safety and may prevent failure under certain conditions which would cause the collapse of a statically determinate structure. In a non-continuous structure all beams are considered as simply supported or hinged at the supports and no bending moments are transmitted from panel to panel. In a continuous structure the various members are so connected with each other that loading of the beams causes bending moments in the columns and vice versa. The beams are comparatively weaker, the columns stronger than in a non-continuous structure. This is a better distribution of material, allows a saving in weight, and, at the same time, increases the rigidity of the building, especially its resistance to lateral forces such as blast, earthquake, etc.

The example of a steel structure in which continuity was destroyed at the request of the LCC, shows that the application of continuity in multi-storey buildings was made practically impossible in the London area as late as 1935. However, non-continuous steel structures are transformed into continuous structures by encasing them in concrete which is required as protection against fire. This is the reason for the favourable behaviour of multi-storey steel framed building in air raids.

There are a few good examples of continuous single-storey steel framed buildings in this

country. The aesthetic appearance of such structures is much better than that of conventional types.

Reinforced concrete buildings are automatically continuous.

1310 Coventry Housing Experiment

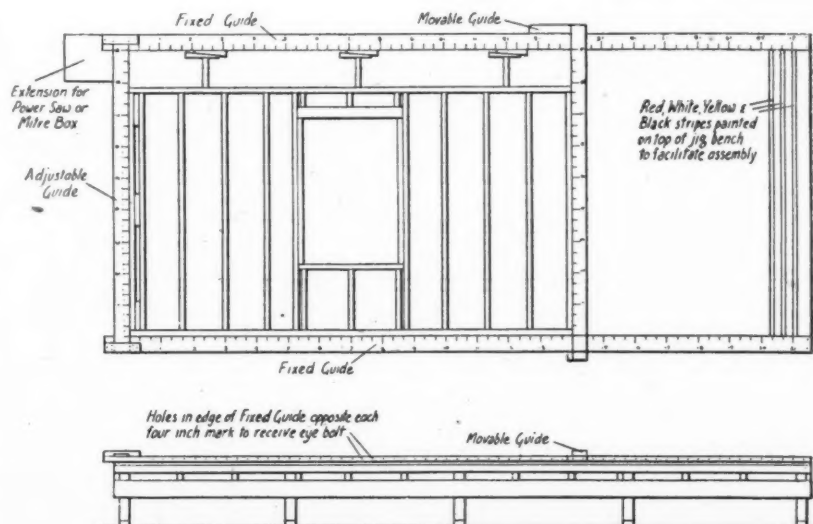
EXPERIMENTAL HOUSING. *Designed by the City of Coventry Architectural Department under the Direction of D. E. E. Gibson.* (Architects' Journal, October 7, 1943, pp. 255 to 258, and other journals). Two experimental houses with different layouts and details.

Main structure: Light welded steel frame. Ground floor: No-fines concrete. External walls: Tile-faced concrete slabs and asbestos cement sheets. Partitions: Mobile interlocking blocks. Windows: Aluminium and steel. First floor: Prefilled metal trays mounted on rubber pads. Roof cover: Interlocking units spanning from ridge to eaves. Services: Prefabricated in central duct. Electricity and gas: Compact intake unit.

1311 Prefabricated Timber Houses

PREFABRICATED TIMBER HOUSES. (Booklet published by the Timber Development Association). Outline of the principles of prefabrication and the best-known systems in timber houses, with a few suggestions for the post-war problems of housing.

In America and Sweden, two timber-growing countries, the prefabrication of timber houses is past the experimental stage, and it is mainly on practical work carried out in these two countries that the main principles of prefabrication in timber have been evolved. The leaflet gives an outline of the various systems of constructions (for more detailed description of existing systems and methods, see Information Centre No. 1224) and urges some steps that should be taken in this country to prepare a timber housing programme which uses to full advantage the modern developments in technique, in designing, in prefabrication, in plastic adhesives, in the possible quick adaptation of war-time factories to the mass assembly of sections and standardized parts, etc. It would, indeed, well pay to devote a considerable amount of research to devising the best methods of carrying out the different systems in practice, and to obtaining an efficient code of dimensional standardization, which is the necessary basis of prefabrication.



Jig table as used by the Homasote Company of America for its prefabricated timber houses.

LIGHTING

1312 Electricity Tariffs

GENERAL FACTORS AFFECTING THE UNIFICATION OF ELECTRICITY SUPPLY TARIFFS. C. T. Melling. (*Journal of the Institute of Electrical Engineers*, August, 1943, p. 309.) Discussion of tariff types and proposals for a basic uniform tariff structure.

The author reviews briefly the advantages and disadvantages of the tariff types which have been employed during the development of electric power sales, and considers the possibility of a more uniform tariff structure. He comes to the conclusion that such would be advisable and should be made obligatory; also that the prices fixed in any district should be based on value of service rather than fixed profit. He makes detailed proposals for three alternative tariffs to be available to domestic consumers, and three parallel tariffs for industrial use.

From the point of view of design practice the interest of this paper lies in the attitude of mind which the electricity interests appear to bring to domestic lighting problems. In the low-cost home the amount of light used is closely related to the cost of electricity, and since light is to-day an elementary amenity of which it is usually thought a reasonable amount should be available to all, one hoped that attention would be directed to lowering its cost. Instead, it is found that although the so-called "social" aspects of the problem are recognized in the industry, it is admitted that they cannot be primary factors in settling tariff rates under the present set-up, and that sales of electricity for lighting alone should be deliberately kept high in order to promote the use of the two-part tariff, which is beneficial to the consumer (if he wants to cook and heat by electricity) and much more beneficial to the supplier. The author puts the point this way. "When the lighting flat rate is . . . low . . . there is little . . . inducement to adopt the two-part tariff and the undertaking loses the promotional effect of its low two-part unit charge. Thus a policy designed for . . . social benefit . . . acts against the community by depriving consumers of an incentive to obtain a larger benefit from electricity on the two-part tariff . . ."

It is clear from this that the designer's very natural interest in improving lighting in the small home will have an effect strictly qualified at present by what is, on the whole, advantageous to the supplier of electricity and only incidentally to the consumer. It would be interesting to trace the whole question farther back to see if what is in the interest of the electricity supplier is finally also in the interest of the country as a whole, from the point of view of national fuel supplies. But this paper does not go so far.

ACOUSTICS

and Sound Insulation

1313 Public Address System

LNER PUBLIC ADDRESS SYSTEM. (*Electrical Times*, August 5, 1943, p. 160.) Description of new type public address systems installed at LNER stations.

Travellers using some of the larger LNER stations such as King's Cross and York, may have noticed tubular type loudspeakers of a novel type for the public address system, and if they were interested they may also have noticed that these gave exceptionally good reproduction, and were accurately localized on the respective platforms.

The system is apparently one which the

LNER has been investigating for some time, and the most recent installation—that at Edinburgh—is described in the present article. No details are given of the loudspeakers themselves, attention being devoted chiefly to the circuit arrangements and the controls.

There is, incidentally, a naive description of sound insulation of the control booth by glass-wool and fibreboard. The old idea that sound absorbents are *ipso facto* insulators dies hard.

QUESTIONS

and answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 45, The Avenue, Cheam, Surrey.

1314 Publications on Prefabrication

Q Is there any book, pamphlet, or article available dealing with the various types of prefabricated buildings that are in general use nowadays, with reference to construction, manufacture and erection?

A So much has been published on prefabrication that it is impossible for us to give you concisely the information you require. The Library of the Royal Institute of British Architects has a comprehensive bibliography in three sections.

1315 Fire Damage Claim

Q I am in course of preparing a claim for damage by fire, not by enemy action, and have prepared plans, etc., for reinstatement. Am taking out quantities, measuring up and pricing items in accordance with the Schedule of Prices for Works and Repairs to Buildings, etc., of the War Department, issued by H.M. Stationery Office, 1939, reprinted 1943.

The prices are, of course, low, and I shall be much obliged if you could advise me of the percentage I should add in order to arrive at a fair figure to claim to cover the cost of reinstatement after the war.

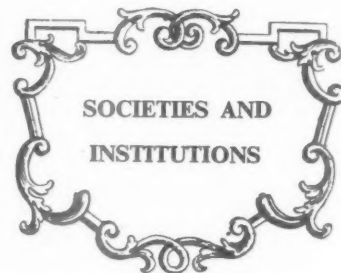
A It is impossible to predict what building prices will be after the war and you must either price your items at current rates or make your own guess at the extent to which prices are likely to rise.

Also it requires a skilled estimator to convert 1939 prices (War Department or otherwise) into present-day rates. The prices of materials have not risen consistently so that whilst one trade may be up by as little as 10 per cent. another may be up by nearly 100 per cent. The size and nature of the job is also a determining factor; tendering is keen for large priority jobs for which labour will be forthcoming, but small repairs cost an excessive amount due largely to shortage of labour and the poor quality of such labour as is available for this class of work.

If you are not able to estimate accurately, your best course is to use a more up-to-date schedule such as the Ministry of Works Standard Schedule of Prices (obtainable from H.M. Stationery Office). Even this does not give hard and fast prices as it is intended as a basis for tendering and many large contracts have been let at 10 per cent. or more off. However, this schedule does give a much more reasonable guide to current prices for a straightforward medium-sized job. Allow-

ances should, of course, be made if the job is small, or of an awkward nature.

If you have difficult items to price which do not appear in the Ministry of Works Schedule, you can determine, by using it in conjunction with the War Department Schedule, the approximate increase of similar items in the same trade.



Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economise space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries and not verbatim.

AA

Discussion

November 18, at the Architectural Association, 36, Bedford Square, W.C.1. An informal discussion among allied architects on the EDUCATION OF THE ARCHITECT. Members of the AA teaching staff first gave short talks on methods of teaching at the AA school. This was followed by a general discussion during which architect guests of the Allied Nations spoke of methods used in their countries. Chairman: Frederick Gibberd, F.R.I.B.A., Principal of the AA.

F. Gibberd: The AA was formed nearly a century ago in 1847 with the object of improving the education and general lot of young architects. Its day-school was started in 1901. The school is run by architects for architects, and is thoroughly democratic in its methods. I am the Principal but I am responsible to a Council elected by the members. My staff meets every week to decide the running of the school and the students themselves hold a meeting each week. Because of this democratic structure the school has been able to experiment and to act as a pioneer.

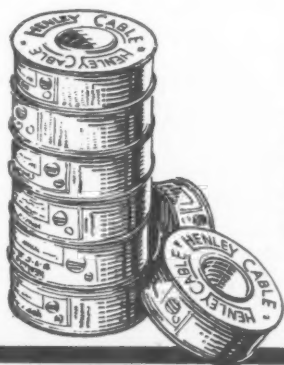
G. Fairweather: The school regards construction of buildings as an element in design and not as a procedure that follows design. The kind of instruction we give is divided into four main

Why P.V.C. THERMOPLASTIC CABLES

The cable user who for years has been buying rubber cables from a reputable maker may quite naturally feel disinclined to change over to what is to him a new and untried product. He can rest assured, however, that the confidence he has placed in his supplier will not be betrayed. It is true that the introduction of alternatives to rubber is the outcome of necessity, due to shortage of supplies of raw rubber, but these alternatives are the result of many years of research and experiment.

Whilst, therefore, we put forward HENLEY P.V.C. Thermoplastic Wires and Cables and Flexible Cords in accordance with the recognised B.S. and G.D.E.S. requirements in order to save rubber, we do so with the confidence that if they are properly installed, they will give excellent service.

Stocks are
available at
our Branches



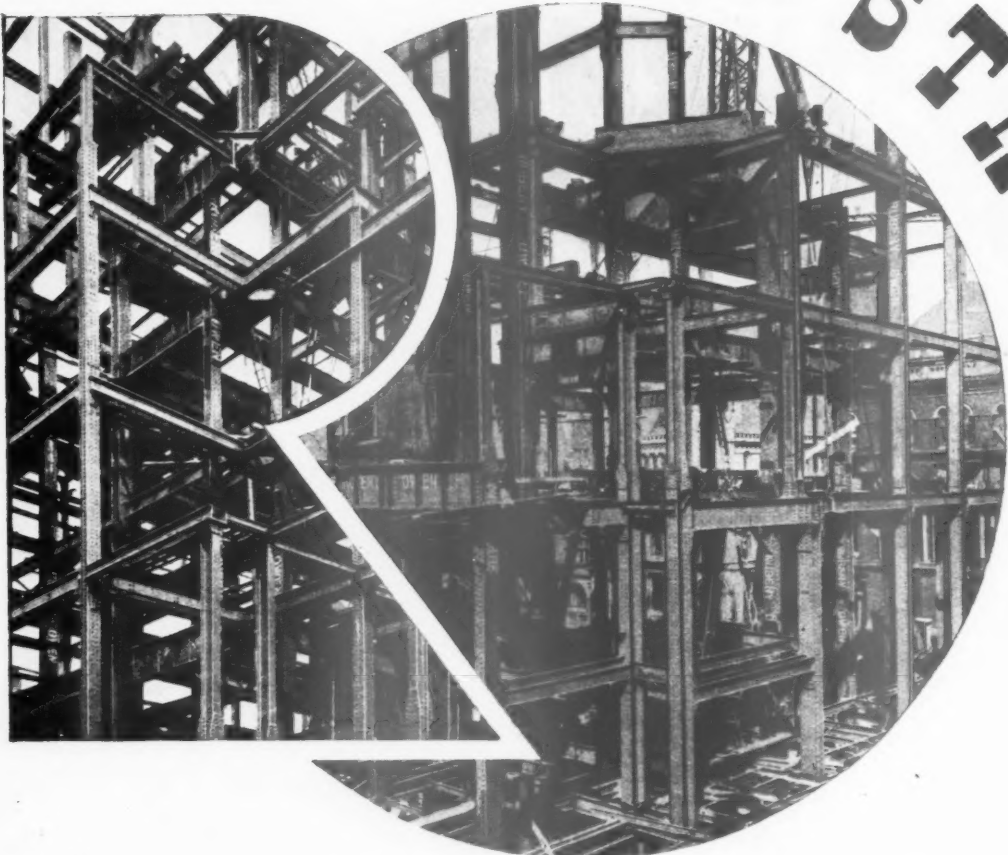
HENLEY P.V.C.

Thermoplastic Wires, Cables and Flexible Cords

W.T. HENLEY'S TELEGRAPH WORKS CO. LTD.
MILTON COURT · WESTCOTT · DORKING · SURREY

PHONE: DORKING 3241 (10 LINES)
TELEGRAMS: HENLETEL, DORKING

A NAME IN STRUCTURAL



★ STEELWORK

OUR NAME IS BASED UPON THE SECURITY AND SOUND FOUNDATION OF OUR STEEL CONSTRUCTIONAL WORK. BACKED BY YEARS OF EXPERIENCE AND A REPUTATION FAMOUS FOR ACCURACY AND RELIABILITY IT RANKS SECOND TO NONE IN THE FIELD OF CONSTRUCTIONAL ENGINEERING. THE VAST FUND OF DATA AND THE SERVICES OF OUR EXPERT TECHNICAL STAFFS ARE ALWAYS AT YOUR DISPOSAL.

RUBERY-OWEN & CO LTD
DARLSTON SOUTH STAFFS

LONDON IMPERIAL BUILDINGS, 56, KINGSWAY W.C.2 BIRMINGHAM 3 LOMBARD HOUSE, G. CHARLES ST.

head
requ
use
stabi
and
again
inclu
tance
send
mate
ion.
that
felt
(4) o
work
attach
the a
The
stock
and
from
build
in co
C.
ciatio
to in
theor
his o
stud
quali
and
to be
to di
is no
make
ideas
stand
ing
scene
scape
but
stude
aside
B.
is a
of co
to go
He
from
purp
build
into
exter
and
site.
work
stude
what
We
mem
pract
work
rathe
Dis
that
done
lang
build
in su
of d
misu
the A
was l
Mr.
stand
but t
conta
scho
on di
We
recon
ance
Any
tion
const
Cap
Fren
meth
Beau.

headings. (1) *Occupancy*—a study of the requirements in buildings that arise from the use to which they are to be put—such as stability, weathering, heat insulation, heating and ventilation, fire protection, protection against vermin, etc. (2) *Study of materials*, including susceptibility to condensation, resistance to passage of sound, strength, etc. We send the student out to sketch and to investigate materials. (3) *Study of systems of construction*. We try to get the student to appreciate that construction must be thought about and felt in association with design all the time. (4) *Office practice*, including preparation of working drawings and details. Importance is attached to making the student understand the architect's responsibilities.

The facilities at the school include a well-stocked library, a range of building materials and models, and a workshop. We get help from manufacturers; we visit factories where building parts are made and we visit buildings in course of construction.

C. Stewart : We try to develop in the student a general appreciation of line, form and colour, rather than to impose artistic formulae, say in colour theory. We encourage the student to develop his own inherent taste. At an early stage the student makes his own research into the qualities of surface textures and into pattern and form. To design buildings it is necessary to be able to draw, and the student is taught to draw through having to design. Our aim is not to produce master draughtsmen but to make it easy for students to express their ideas clearly on paper, and to instil an understanding of line and form. We aim at developing a greater consciousness of the English scene and at relating buildings to the landscape and to their sites, not only to its contours but to trees and shrubs. At all times the student is encouraged to sketch and we set aside days for imaginative sketch designs.

B. Peake : In the studio the student first finds that architecture is a social problem, that it is largely a matter of common sense. He first finds out what is to go on in a building and designs round that. He begins with a single cell building and from there goes on to multi-storey and multi-purpose buildings and later to groups of buildings, when architecture begins to develop into town-planning. He is taught to plan the exterior and interior so that they are all one, and every building is studied in relation to its site. We don't teach the preparation of working drawings in a dogmatic way, and the student is encouraged to determine himself what information the builder would need.

We keep up the old AA tradition that members of the studio staffs should be practising architects, and we try to do our work through discussion with the students rather than through hard and fast rules.

Discussion : Mr. V. Furth (Czechoslovakia) said he thought that working drawings and details should be done in one standardized way—like a universal language which everyone right down to the building foreman could understand—even in such matters as sizes and way of folding of drawings. This saved time, work and misunderstanding. He liked the freedom of the AA teaching method and the room that was left to the student's imagination.

Mr. Gibberd said he entirely agreed about standardization of working drawing methods, but thought that the average working drawing contained far too much information. In the school, the kind and amount of information on drawings was left to the student's decision.

We should see in the coming period of reconstruction either the complete disappearance or the rehabilitation of the architect. Any aesthetic system of education and application of fixed formulae was bad, for there was constant change.

Captain Girard (France) said that many French architects looked on some present methods of teaching architecture, such as the *Beaux Arts* system, as crippling the student for

life. The rehabilitation of the architect could come about only through reform in teaching, which must not close the door against the study of new techniques, and which must follow social evolution. Teaching must develop the student's imagination and the spirit of analysis, discrimination and order. Studio work should be organically linked with practical work in factory and workshop.

Major Moody (Canada) said that a school should give a background of culture and on top of that should concentrate on teaching new techniques of building unless the architect was to be shouldered out of the way by the engineer. This was an age of mass-production where the materials being used were entirely different to those of the past.

Mr. Gibberd pointed out that most of the people now working on mass-production design in this country were architects.

Mr. Van Rood (Holland) said that in his country the Government School of Architecture was in the University of Delft, where the student lived for too long in a purely technical atmosphere. During the first two or three years, the student studied only mechanics, mathematics, building laws, materials, learning more than a boy or girl of eighteen could learn with any good result. The student was twenty-one before he made his first design drawing. 90 per cent. of the students were dazed when they left the University and for the first five or six years were of little use in an architect's office. Only if they were strong and determined enough could they survive to become good architects by thirty. He thought the AA school had found the right way, for here the students had an opportunity to find their own souls.

The Chairman thanked the speakers and Miss Enid Caldicott who had done an enormous amount of work in organizing the meeting.

BBC

Discussion on the LCC Plan

November 16, on the Home Service, a discussion took place on the COUNTY OF LONDON PLAN between F. J. Osborn, Hon. Secretary of the Town and Country Planning Association, Donald Tyerman, Deputy Editor of *The Economist*, and Thomas Sharp, Reader in Town Planning at Durham University. Extracts from the discussion are given below.

Osborn : This County of London Plan assumes that in the next twenty or thirty years, only five or six-hundred-thousand people are going to move out of the county. In order to house the people left behind in London, four out of five of the new dwellings would have to be flats. This points clearly to the fact that the amount of removal in the plan is insufficient. We must get to a standard of housing where the great majority of the people can have houses and are not forced to live in flats.

Sharp : I don't know where you get your figures from, Osborn, but it's a gross misstatement to say that four out of every five of the new dwellings would have to be flats; it's certainly not in the plan. The truth is that, according to the plan as it stands, in the whole county area there'd be two-thirds of the people in houses and only one-third in flats. And I maintain there could be even more houses.

Osborn : Well, I'm going on the figures in the plan, Sharp—page 174. As a matter of fact, the chairman of the LCC Town Planning Committee says the plan

probably means eighty to eighty-five per cent. of flats, and the figures bear that out.

Sharp : We're not concerned with what someone said somewhere; we're concerned with what the published plan says and means.

Tyerman : Just a minute. Let me get clear what the plan does propose: that the London County should be divided into three parts. One part of it, the outer ring, will be rehoused at a density of a hundred people to the acre; the congested boroughs which they're going to reconstruct first, will be rebuilt at a hundred-and-thirty-six people to the acre; and the West End, which they are going to use as a dormitory for the industries and offices of central London at two-hundred people to the acre. Now you don't agree, Sharp, in your estimate of what these different population densities mean, in terms of so many houses and so many flats.

Sharp : I rather think the authors of the plan haven't done justice to themselves. They say that—in the large outer zone where they are re-housing at the rate of one-hundred people to the acre, you get something like four out of every five people in two-storey houses or three-storey flats.

Osborn : I'm sorry to contradict you, Sharp. But anybody can look it up. It shows, on an actual try-out, fifty-eight per cent. of the population in flats, even at the lowest density of one-hundred to the acre.

Sharp : Actually—at a population density of one-hundred to the acre—it's easily possible, maintaining all the necessary advantages of sunlight and so on, to get nearly all the people in family houses. You get that result at a perfectly good housing density like twenty-five houses to the acre which permits a quite satisfactory garden about thirty-five or forty feet deep.

Osborn : Yes, if you're content with a narrow street and with the public footpath right under the front windows.

Sharp : Well the whole thing can be demonstrated on plans for anybody to judge. Then—to take up—in the inner ring at one-hundred-and-thirty-six people to the acre—you could get something like two out of every three people living in houses of the same kind. Although in my own view, one-hundred-and-thirty-six people is rather on the high side, I wouldn't go beyond one-hundred-and-twenty-five. But it's a case for a not very extensive adjustment of the housing proposals rather than a wholesale condemnation of them.

Osborn : Well I agree more with the plan than with you, Sharp, as to how close you can put houses. The plan takes its own minimum standards of light and privacy. We're dealing with human beings not sardines.

Tyerman : All right, it's all a question, at bottom, of where and how people want to live. As I see it, you have two contrary pulls. The ordinary person wants to live in a house with a garden; but he also wants to live in London—or Birmingham, or Glasgow, as the case may be.

Osborn : Not necessarily—he wants to live near where he works. You offer a man a good job in a nice place with a house and garden fairly near and he'll jump for it.

Sharp : Look; we're talking about inner London. People who live in inner London, do so because they like doing so and because they are Londoners. The oversimplified question, "Do you prefer a house or a flat?" just doesn't get you anywhere. It would be more accurate to put it in this way to the minority who may have to live in flats, "Do you prefer a flat in inner London or a cottage in the suburbs or in some small town twenty-five or thirty miles out?" I think Osborn's generalisations are all too easy.

Osborn : I've sufficient respect for Londoners to believe that when they say they want houses they know perfectly well what they mean.

Sharp: Well, you condemn all this side of the plan pretty thoroughly, Osborn. To me it's reasonably right, and it would maintain a real London. But what's your alternative? It looks as though you want to make inner London like a vast Welwyn Garden City; and to do that you've got to move out the best part of half the present population into something like a hundred new towns of about twenty-thousand people each, between twenty and fifty miles away. Is that what you want? It doesn't appeal to me.

Osborn: I haven't made any such fantastic suggestion, Sharp. Certainly it means building some new towns in the Home Counties, and extending existing towns, where some of London's industries and people can have more spacious surroundings. The whole question turns on this. Can you, over a long period, say twenty or thirty years, relieve the pressure in London by moving out more of London's industry than is contemplated in the plan.

Tyerman: Yes, yes, and what is meant by "moving out." Up to now, both people and industries have moved themselves out. And the plan caters for a certain amount of moving out as part of a policy; but it doesn't say by what method this plan of moving out is to be carried through.

Osborn: No, and I think London is in very great danger unless the Government handles this issue for it. London has to face the issue of providing good living conditions in the centre in order to maintain its central prosperity. It's clear that in order to help London and other cities to re-build themselves at a density which is acceptable to ordinary people, we've got to have a declaration of Government policy—and action by Government on the guidance of industry and population. That seems to me to be absolutely urgent.

Sharp: With that of course, I entirely agree; where we differ is on what is and would be acceptable to the people and the ways and means of providing it.

Tyerman: Yes, whether you two differ or not, it's a question of what sort of housing—what sort of homes in Mr. Churchill's Work, Food and Homes Programme people really want—and whether they'll get them. If the people of Shoreditch or Battersea and so on object to what is going to be done for them, then they are in a position to exercise some kind of pressure. And surely the proper way for public opinion to express itself is by the established channels, through their own local authorities and their own councils. The real need is for Londoners and the people of other towns and cities to begin to think how these problems affect them, and what they want when reconstruction and town planning come to take place—because every city and every town in this country is in the next generation going to be re-built in some way or other.

as vitally a town planning problem. Proper sanitary conditions, amenity and convenience are the three-fold objectives of the Town Planning Acts of 1909 onwards. These three conditions—for the first of which "health" might appropriately have been substituted—can be expanded to cover all the requirements of living environment. Adequate planning seeks to balance all three, and thus to promote health and improved living. Regional schemes prepared after the last war by groups of local authorities aroused a public interest in planning from which the country has not yet benefited owing to the lack of adequate powers. Executive powers need strengthening to secure really effective action if the opportunity of the present time is to be grasped in the work of reconstruction.

Planning must be extended effectively into the national field if full account is to be taken of the wider aspects affecting the health of the people which are to be dealt with, such as land use, population, communications, power grids, agriculture, forestry, national parks, water catchment areas, industry and employment. With all these aspects questions of health are interwoven: many unsatisfactory conditions arising from particular industrial concentrations, of which mining is an example, could be removed as the result of planning on a national basis. The weakness of the single-industry districts has been disclosed in times of depression and the consequential decline in health and loss of morale. The very important experiments in the development of trading estates with alternative light industries have pointed the way to a planned solution, but a full appreciation of the success of such schemes in their maturity has been obscured by the war. In the world's largest regional planning scheme, that of the Tennessee Valley Authority, planning for health was the primary consideration and major problems presented by mosquito and malaria had to be overcome by the doctors and scientists of the State departments before the project could be launched effectively.

The solution of the problem of replanning existing areas which need it, is not confined to reduction of population or renewal of bad housing. In the worst cases rebuilding with new houses and new factories equipped for living and for working under proper conditions of sanitation, of light and air, is the only solution. Removal of the causes of fatigue, due to long and difficult travel or constant exposure to the ill effects of smoke, fumes and noise are long overdue. Education to-day is in advance of general living conditions of the home, with the result that some children grow up ill-contented and in search of release from dull and dismal surroundings. The coalfields present a particular example, where the great social welfare experiment administered by the Miners' Welfare Commission has brought inestimable benefits to the miner, to his family and to the women especially. Washing and changing clothes at the mine have revolutionized the life of a mining community, have improved health, reduced fatigue and made lighter the work of the miner's wife in the home. So long as the majority of miners live in houses that are old, damp and without proper conveniences, however, the real value of this welfare work is greatly reduced.

Houses, however well planned and equipped, fail in their purpose where they are unsuitably located or lack nearby workplaces, playgrounds, and shopping facilities or are inadequately served by schools, churches and centres of corporate life. Instead of a full healthy life which the good dwelling connotes, an unreal existence in isolated and dreary surroundings leads, within the experience of medical officers and social workers, to serious health and mental effects, which point the need for the greatest care in planning post-war reconstruction schemes. An essential protection the community needs is against the danger and noise of through traffic—a protection to be secured by a precinctal arrangement of roads or the presence of open spaces and green wedges as buffers between built-up areas, by

segregating industry, by planning or rearranging railway and bus stations and by other ways.

Mind and body work together; the pace of life has quickened and it is important to safeguard the physical condition against failure under strain of noise, travel fatigue and bad atmosphere. The planner can make a positive contribution to offset the strain imposed by modern life.

Elimination of noise is of first importance. The medical profession will doubtless agree that many illnesses if they do not originate with noise are aggravated by it. Many palliatives now practised are useful but the problem must be tackled at its source. Traffic noises are unduly extended by drivers saving time in proceeding through side streets and by the erection of houses fronting on roads designed for fast traffic. Speed limits result and the potential advantages of motor transport are nullified through lack of proper planning. Not only road traffic but railway traffic in urban areas is a source of noise which could be mitigated or removed by replacing viaducts by underground routes—at the same time freeing valuable land surface for other purposes.

Clear fresh air and sunlight are next in importance. Much improvement has resulted from the more extensive use of gas, electricity and smokeless fuel, but a great advance would result from gathering together the main sources of smoke—by re-grouping factories into industrial estates and by the adoption of district heating. Electrification of railways and segregation of fast motor traffic will remove fumes and dust from residential areas. A more generous spacing of buildings, particularly flats, and a more open type of development for commercial buildings will allow the unpolluted air and sunlight to exert their beneficial effects.

The elimination of travel fatigue and expensive transport to work is the third great benefit which proper planning can bestow on citizens. Better health and production will be the reflection of the removal of noise and danger and the good planning of workplaces in a cleaner atmosphere.

Planning on a neighbourhood or community basis can be accompanied by the provision of additional parks and recreation space, not only to preserve and emphasize the identity of the communities, but to link up with green walks and wedges of parkland running parallel with a stream or river, or passing out of the urban area as a parkway to open country. Adjacent to recreation grounds an essential feature is the community centre with provision for cooked meals, facilities for meetings and, in suitable cases, a local medical clinic. The location of the hospital in relation to open spaces and traffic is also important.

The solution of the problem of successful planning depends on a fuller appreciation by all responsible of the effects of physical and occupational environments on the health of the people. In the words of Octavia Hill, "We all want quiet: we all want beauty for the refreshment of our souls." To achieve this, the planner requires the help and advice of the doctor if he is to make a useful contribution to offset the fatigue arising from the noise, speed and general strain of modern life, the last of which can be eased by a return to simplicity.

CHADWICK TRUST

J. H. Forshaw

November 11, at the Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. Lecture given under the Bosson Gift by the Chadwick Trustees on TOWN PLANNING AND HEALTH by J. H. Forshaw, M.C., M.A., F.R.I.B.A., M.T.P.I., Architect to the L.C.C. Chairman: Frederick R. Hiorns, F.S.A., F.R.I.B.A.

J. H. Forshaw: The main aim of town planning is to secure the health and welfare of the people in their homes, at work and in their leisure. Medical advice and guidance are therefore essentially a part of planning, but it was not until recent years that health was recognized

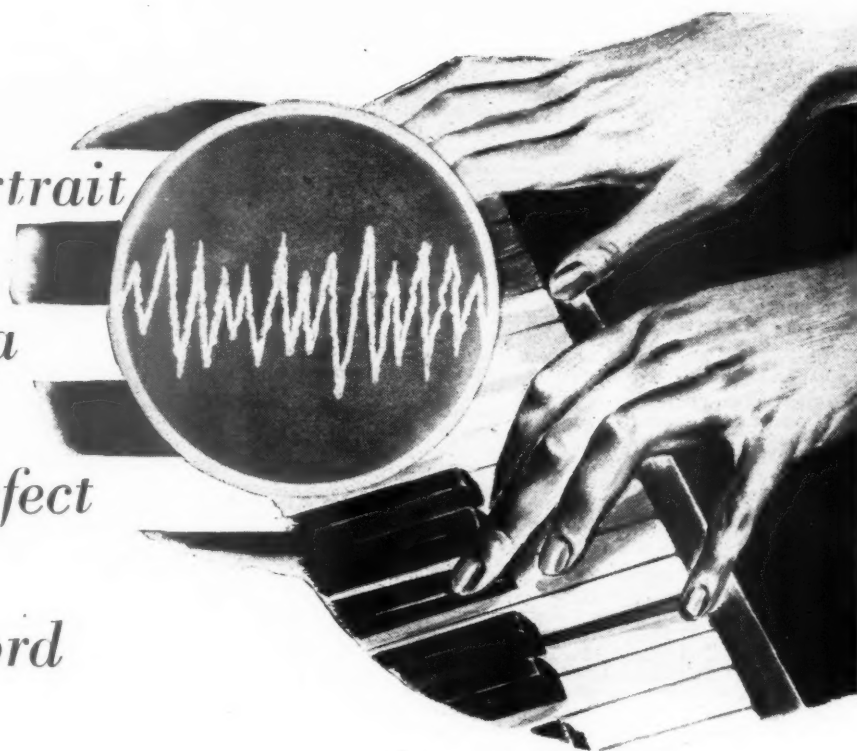
RSA

Essay Competition

The Royal Society of Arts has just concluded an essay competition in which candidates were asked to give a reasoned scheme (a) to increase the general appreciation by the public of well-designed things, and (b) to improve the method of education and training of those who desire to become designers for industry.

The Service authorities assisted the Royal Society in making the competition known, and

Portrait
of a
perfect
chord



Every note that comes over the direct line from the B.B.C. to a Rediffusion area has its own portrait. It brings it, like a passport photo, from the studio. The note—and its portrait—must remain undistorted until it reaches the listener. Like a passport officer the Rediffusion engineer sees that it *does*. That gives a new simplicity to listening. For the Rediffusion subscriber a switch in the wall turns on his programme at will.

All the worries of wireless have gone; all the enjoyment remains. *More* enjoyment. Because Rediffusion gives programmes a quality that few homes have ever known before. A wired broadcasting service that links the home direct to the B.B.C. by private wire, it introduces perfect radio reception without a receiving set. After the war it will be available for subscribers in any area wired for Rediffusion.

REDIFFUSION

BROADCAST PROGRAMMES
BY PRIVATE WIRE

Issued by BROADCAST RELAY SERVICE LTD.

PROPRIETORS OF REDIFFUSION SERVICES AND MANUFACTURERS OF COMMUNICATION EQUIPMENT
VICTORIA STATION HOUSE, VICTORIA STREET, LONDON, S.W.1. TELEPHONE VICTORIA 8831

the British Red Cross Society and Order of St. John of Jerusalem undertook the distribution of papers to prisoners of war and civilian internees, who had a section to themselves. From various camps in Germany 52 entries were received. 281 essays were received in the section for members of H.M. Services and Merchant Seamen. Entries came from all parts of the world where our Forces are serving—Africa, Southern Rhodesia, Ceylon, and Iceland, as well as from Great Britain. The women in the Services did not show so much interest as the men, but W.R.N.S. and the Nursing Services were represented.

The first prize (£20) for the Forces was awarded to Flight-Lieut. Frank H. Heaton, R.A.F.; 2nd prize (£10) to Corporal S. Carr, F.S.S.; and 3rd prize (£5) to Corporal Etheridge, R.A.F.

The 1st prize (£20) for the Prisoners of War went to Captain Rex King, N.Z.E.F.; 2nd prize (£10) to 2nd/Lieut. Geoffrey F. Ransom, R.A.S.C.; and 3rd prize (£5) to Lieut. J. E. Barrie Grayson, M.R.S.T.

In the opinion of the writers of the essays the greatest hope of success in raising the standard of taste lies with the young. There should be, it is said, a system of education which encourages children in their natural bent for making things. A further competition on similar lines is being arranged by the Royal Society of Arts.

SBC

Prefab. Film

The USA prefabrication film, *A CITY COMES TO ALEXANDER'S CORNERS*, is now being shown in the Scottish Building Centre, 425, Sauchiehall Street, Glasgow. At its opening performance,

Professor E. H. B. Boulton, M.C., M.A., Technical Director of the Timber Development Association, introduced the film as follows:

E. H. B. Boulton: After the bombing of Pearl Harbour, America realized that it had to build ships and build them fast. For the first few months naval dockyard workers were housed in caravans, but were not too happy in this form of accommodation. It was therefore decided to provide them with homes so that they, with their families, could live adjacent to their work. The contract called for 5,000 houses in six months, and was actually completed in just under five months.

The film shows most excellent planning and organization between factory and mass produced prefabricated units, and co-ordination with the prefabrication of footings, fittings and plumbing on the site. By co-ordinating all units, as many as 40 houses were completed per day. This was done by the unit system of construction and assembly of parts on special jigs, the method of transport in which special vehicles are used, such as the Ross carrier, portable saws, electrically driven nut runners, etc., etc.

The millwork shows doors fitted to the frames and windows, glazed and then transported about 300 miles to the site. The assembly of all walls, door and window sections was accomplished in as short a period as 24 minutes per house.

These houses are demountable, and can either be taken down and removed to another site, or they have at least a very high salvage value. The sanitary units, baths and refrigerators fitted in every house are of a very much higher standard than the majority of such fittings in permanent buildings in this country.

The object of showing this film at the Scottish Building Centre is to see if some of the 500,000 houses required for the post-war period can

be built by Scottish industry and enterprise, to help solve this vital problem of post-war housing.

Timber houses are accepted in Scotland, and as many as 2,147 have been erected since 1937. The question may arise: will timber be available after the war? One-fifth of the earth's surface is covered with forests of which 75 per cent. is productive, and, as in such countries as Sweden, Finland, Russia (including Siberia) forestry and timber are major industries, employment must be found for these peoples in the forest and the timber industry.

ANNOUNCEMENTS

Mr. J. W. Mackintosh, architect and surveyor, has opened an office at 18, Orchard Street, Bristol, 1, at which address he would be glad to receive trade catalogues.

Mr. Brian Peake, A.R.I.B.A., A.A.DIPLOMA, is now carrying on his practice at 35, Bruton Street, W.1. Mayfair 7308.

Messrs. W. H. Saunders & Son, Architects, Consulting Structural Engineers and Surveyors, have moved to 2, Carlton Crescent, Southampton, where they will be pleased to receive trade catalogues, etc.

OBITUARY

We regret to record the death of Mr. Cecil Richardson, F.C.I.S., a director and the secretary of Messrs. Fredk. Braby & Co., Ltd., at the age of 63 years. He joined the firm in 1898 and was appointed secretary in 1917, in succession to the late Mr. Walter Braby, who then became chairman of the company. Eleven years later on the death of his father, Mr. J. E. Richardson, he took over the additional duties of accountant, which he relinquished in 1937 to Mr. A. G. Purves, F.I.A.C., who still holds this appointment. Mr. Richardson had been a member of the Board since October, 1928.

Whatever your requirements in Floor and Wall Surfacing

—you can come with confidence to Prodorite Limited, who specialise in Acidproof and Industrial Floor and Wall Surfaces of all descriptions. Our years of research and practical experience put us in a position to offer an unequalled service.

We can offer Floor and Wall Surfaces for EVERY purpose and shall be happy to have the opportunity of putting up a proposition to meet your individual requirements.

Art Tile Flooring and
Prodorglaze Wall Surfacing
by Prodorite Ltd.

**EAGLE WORKS,
WEDNESBURY**

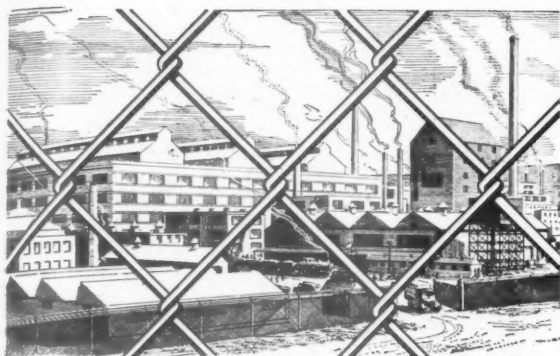
Telephone: Wednesbury 0284
(Private Branch Exchange)



**ARTILLERY HOUSE,
ARTILLERY ROW,
LONDON - S.W.1**

Telephone: Abbey 1547 and 1548





THE PEAK OF PROTECTION.

The Protection given by Penfold fencing to factories, yards, docks, reservoirs, municipal and industrial undertakings, etc. means bigger production through extra safety. Tough, impermeable, longlasting metal fences. Penfold means 100 per cent. all round Protection.

Penfold Products include Chain Link Diamond Mesh (cross slatted for close fence work), Hinged Joint, Strained Wire, Barbed Wire, Gates, Light Steel Structures, Conveyor Belts, Machinery Guards, and every description of wrought iron work.



Our output is subject to priority claims but we shall be glad to advise you on your fencing problems.

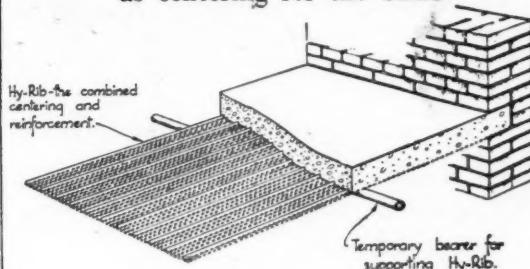
PENFOLD FENCING LTD.

Dept. 71, Imperial Works, WATFORD

Telephone 2241

HY-RIB is the answer to your centering problem

Use the reinforcing steel as centering for the slabs



HY-RIB is a centering for concrete during construction

HY-RIB is a reinforcement for the structural slab

Over 11,000,000 square feet of HY-RIB combined centering and reinforcement has been used in wartime buildings.

For the guidance of Constructional Staffs we provide working drawings for particular applications of Hy-Rib.



HY-RIB SALES, 6 COLLINGHAM GARDENS, EARLS COURT LONDON, S.W.5 TELEPHONE: FROBISHER 8141

An advertisement of The Trussed Concrete Steel Co. Ltd.

4/326A

FOR CANTEENS * HOTELS * SCHOOLS * COLLEGES



EAGLE

RANGE 221



The power of an aero-engine is unleashed at the touch of a throttle; so the pent-up energy of the Raducer fire-box in the Eagle Range can be instantly released by a touch of the controls.

Lying dormant, if need be for 24 hours, a movement of the air-control energises the fuel-bed and unfetters the surging power which only the Raducer principle can achieve.

Rapid transition from shut-down temperature to cooking heat, and the maintenance of this for many hours without flagging, is the secret of the Raducer fire-box.

Product of Radiation Ltd

Telegrams
RANGES.
BIRMINGHAM.

EAGLE RANGE & GRATE CO. LTD.
ASTON. BIRMINGHAM. 6.

Telephone
EAST. 1278
(2 lines.)



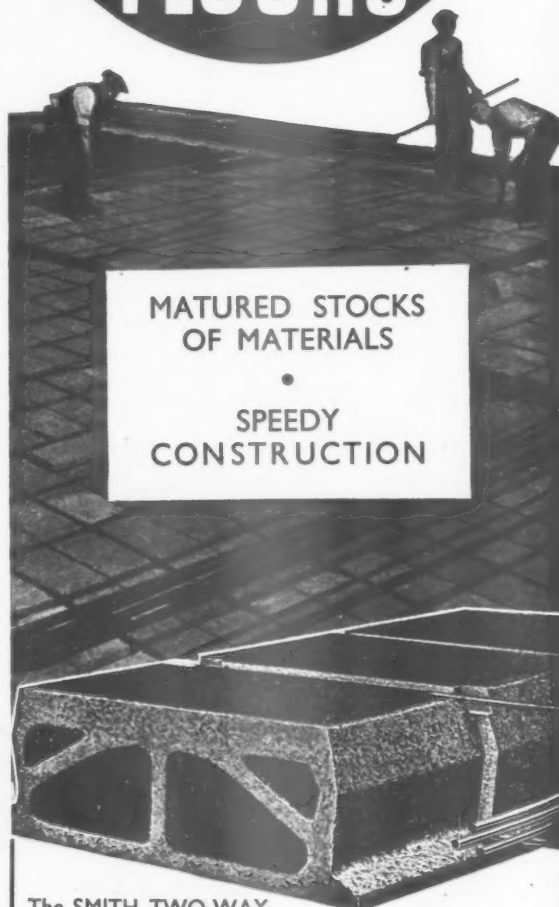
Jumping Crocs! . . .

Pardon the exclamation, and it strikes us this fellow needs a lot of feeding. We're glad he isn't billeted on us anyhow. Talking of appetites, though, reminds us that the war effort, too, swallows all our resources, these days. Maybe you have had difficulty in getting M.K. fine quality switches, switch plugs and electrical accessories. If so, please remember, we have been doing our best to keep you supplied. First things must come first and since all our resources are concentrated on "national priorities" a certain shortage has been unavoidable. When victory has been won, M.K. quality products will be with you again.



M. K. ELECTRIC LTD.
EDMONTON N.18

M. K. 164 a



MATURED STOCKS
OF MATERIALS

SPEEDY
CONSTRUCTION

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.

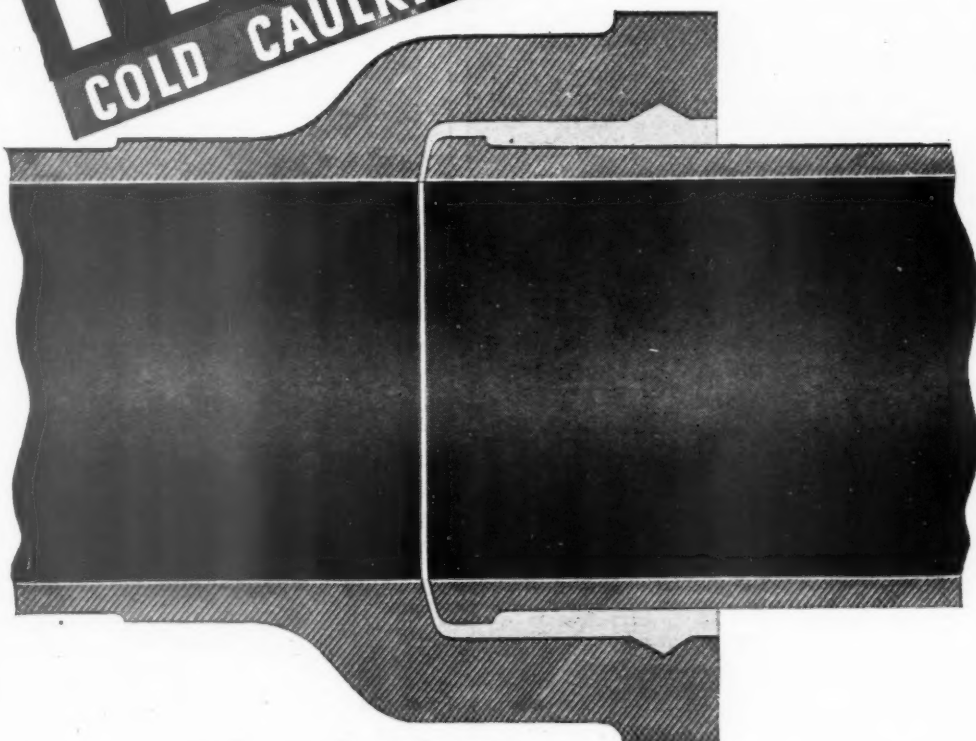
The employment of patent telescopic centers permits the immediate use of the floor with the additional advantage of their removal in the minimum of time.

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

SMITH'S 2-WAY REINFORCED
FIREPROOF FLOORS
employing Unique Telescopic Centering

PHILPLUG

COLD CAULKING COMPOUND



Supersedes LEAD-

Lead is in short supply. Philplug Cold Caulking Compound provides an efficient substitute and is 100% efficient as a jointing material. Joints made with Philplug are equal to ordinary lead caulked joints. Philplug is the cheapest jointing material obtainable—1 lb of Philplug makes 8 times as many joints as 1 lb of lead. Tests have proved that Philplug is far more flexible than other materials under similar conditions of use. All that is required for making a Philplug joint is cold water, a caulking tool and a hammer. Philplug is prepared and applied cold. No permit or licence is needed to purchase Philplug—*unlimited supplies are available*. Philplug is packed in dry form in 1lb, 7lb and 28lb lever lid tins and will keep indefinitely if stored away from damp.

Write now for particulars to—(Co-distributors):

BURN BROS. (LONDON) LTD.,

6/8, STAMFORD STREET, LONDON, S.E.1

WATERloo 5261





VENTILATION

Specify the Positive Flow Ventilator for all applications where Positive Extract or Input is required. The P.F. Ventilator is controlled by Push Button Starter and can be provided with Reversing Switches for changing the direction of air flow. Architects are invited to write for Data Sheet 249A.

POSITIVE FLOW VENTILATORS LTD.

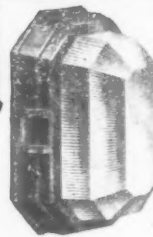
ASSOCIATED WITH DALLOW-LAMBERT & CO., LTD.

SPALDING ST., LEICESTER
20 KINGSWAY, LONDON

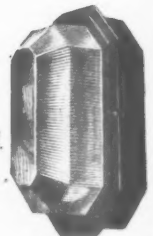
Phone: 27832-3
Phone: CHAncery 8325-6

WARDLE PRISMALUX

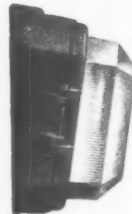
DIRECTIONAL LIGHTING UNITS



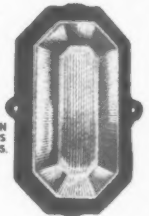
STANDARD PATTERN
FOR PASSAGES, CORRIDORS
STAIRWAYS, PORCHES.



RECESSED PATTERN
FOR POSITIONS WHERE MINIMUM
PROJECTION IS DESIRABLE.



TILTING PATTERN
FOR SUBWAYS, CABLE AND
CONDUIT RUNS, ARCHES, ETC.

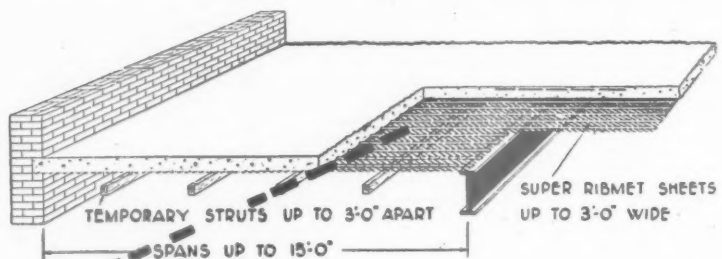


DETACHABLE COVER PATTERN
FOR CONFINED SPACES, CORNERS
OF PASSAGES AND CELLARS.

BOOKLET L.580/1 GIVES FULL
DETAILS AND UP TO DATE PRICES

WARDLE ENGINEERING CO. LTD.

OLD TRAFFORD MANCHESTER 16
LONDON OFFICE 34, VICTORIA STREET S.W.1



LOOK

Every pound of steel in Super Ribmet pulls its weight as reinforcement. Not an ounce is wasted! Every square yard of Super Ribmet saves the use of 1 cubic foot of imported timber shuttering.

Use Super Ribmet, the most modern, efficient combined centering and reinforcement for all forms of concrete decking. Super Ribmet couples the advantage of prefabrication with *in situ* construction.

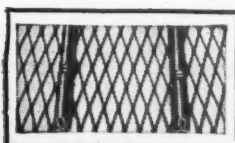
SUPER RIBMET

Write, 'phone or call

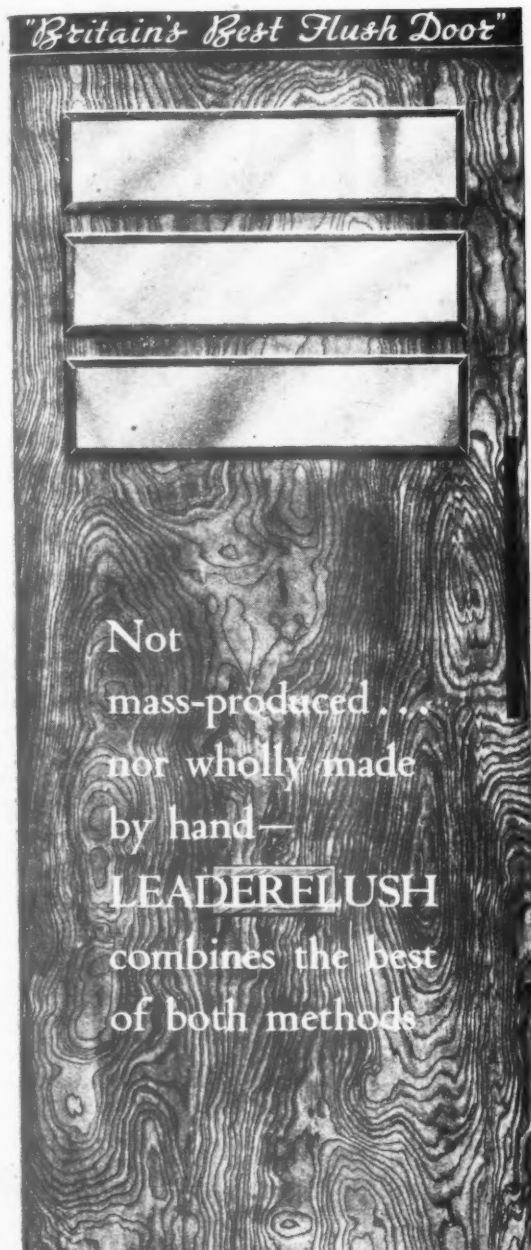
THE EXPANDED METAL COMPANY LTD.

BURWOOD HOUSE, CAXTON ST., S.W.1. PHONE: WHITEHALL 1736
AND AT BIRMINGHAM • GLASGOW • MANCHESTER • WEST HARTLEPOOL
ABERDEEN • BELFAST • CAMBRIDGE • CARDIFF • EXETER AND LEEDS

Established over 50 years.



"Britain's Best Flush Door"



Not
mass-produced...
nor wholly made
by hand—
LEADERFLUSH
combines the best
of both methods

LEADERFLUSH LTD.
TROWELL NOTTINGHAM

COGENT



simplifies the photography of **Blue prints**

Ilford Ortho Line Film is a new material which has been prepared specially for the photography of blue prints. It has been found that even poor blue prints give good reproductions on this new film when illuminated with incandescent lamps and photographed through a yellow filter (the Ilford Delta is the best filter for this purpose). Ilford Ortho Line Film represents an important addition to the range of Ilford products for drawing office requirements.

One of the best methods of making copies of blue prints (and also the best method of ensuring against the loss of your drawing office records) is to take a reduced negative on half-plate film ($6\frac{1}{2}'' \times 4\frac{3}{4}''$), then to make a contact image on to another piece of film and enlarge this up to any convenient size on to Ilford Document Paper No. 55. The resulting image corresponds to a tracing but is made far more quickly and cheaply. As no errors can be introduced, checking is not required. From the enlargement further blue prints or dyeline prints can be made as required.

Ilford Limited offer expert advice on all matters concerning Plan Copying. If you require information or technical assistance kindly write to:—

ILFORD LIMITED • ILFORD • LONDON

GALVANIZED TANKS CYLINDERS & CALORIFIERS



More than 250,000 are
in use testifying to the
quality of articles carrying
this brand. See Information
Sheet No. 598

Robert Jenkins & Co. Ltd.
IVANHOE WORKS, ROTHERHAM
Estd. 1856

JOINERY JOINERY JOINERY

SHARP BROS. & KNIGHT LTD.

JOINERY MANUFACTURERS

BURTON-ON-TRENT

Telephone: Burton-on-Trent 3350 (4 lines)
Telegrams: Joinery, Burton-on-Trent

LOOKING AHEAD
TO A
BRIGHTER FUTURE
POST-WAR
RECONSTRUCTION
WILL BE JUDGED
BY
'MODERN
STANDARDS'

★ **ADASTRA** ★
LIGHTING STANDARDS

Send for Catalogue AJ/220
POLES LTD TYBURN ROAD
BIRMINGHAM 24

ARDOR

Ardor Insulation is a special
construction of high purity
aluminium foil made in
standard rolls, giving highest
efficiency with all the advan-
tages of: Lightness in weight,
easy erection, proof against
fire, vermin, etc.

SOLE MANUFACTURERS
ARDOR INSULATION CO. LTD.
ST. MARY CRAY, KENT. ORPINGTON 2980.



COLOURPHALT

REGD.

RED OR BROWN
FOR DECORATIVE
HARDWEARING
FLOORING

THE
LIMMER & TRINIDAD

LAKE ASPHALT CO., LTD.

19 GROSVENOR PLACE, LONDON, S.W.1 SLOane 7123

Make a note of this name

FOR

- AIR
CONDITIONING
- HEATING
- VENTILATING

*Cheethams
of Oldham*



H. CHEETHAM & CO. LTD.

MANCHESTER ST. OLDHAM. PHONE MAIN 3881-2-3 'GRAMS' 'HYGROLIT' OLDHAM

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey.

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

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: 75 Eaton Place, London, S.W.1. Tel: Sloane 5615

WEST SUSSEX COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointment in the County Planning Department:—

(1) A SENIOR DRAUGHTSMAN on the temporary staff. Salary to be on the Grade 2 scale, commencing at £230 and rising by annual increments of £15 to £325. Owing to extended office hours, overtime payment and war bonus will increase the commencing salary to approximately £300.

Applicants must be neat and efficient draughtsmen. Preference will be given to candidates who have had any previous experience or ordnance survey draughtsmanship.

(2) JUNIOR DRAUGHTSMAN. Salary to be according to qualifications and experience, preference being given to candidates with Local Government experience.

Applications stating age, qualifications, experience and any other relevant particulars, together with copies of not more than three recent testimonials, must reach me at the County Hall not later than first post on Saturday, the 11th December, 1943.

T. C. HAYWARD,
Clerk to the County Council.

County Hall, Chichester. 992

LONDON COUNTY COUNCIL.

Vacancies will occur at the L.C.C. School of Building, Ferndale Road, Brixton, S.W.4, for a permanent whole-time (1) Principal (2) Head of the Senior Day and Evening Building Departments, as from 3rd January, 1944.

The activities of the Institute include a junior technical (building industry) school for boys housed partly at the main institute, partly at the Clapham College Annexe, and a section evacuated to Bracknell, Berkshire; a senior day technical school (building industry and related professions); day classes for builders' apprentices and evening courses for building crafts, building technology and the professions and vocations related to building and civil engineering.

Salary Scales—Principal—£850 × £50—£1,060; Head of Department—£580 × £25—£725.

The Principal is expected to possess teaching ability and to have had organizing and administrative experience; it will be part of his duty to keep in close touch with the building industry and with the professions and institutions which are served by the school. The Head of the Department should preferably hold a Fellowship, or an Associateship, of the Royal Institute of British Architects and be experienced in building construction; his duties will include some teaching in both day and evening classes and responsibility to the Principal for the organization and direction of the work of his department.

Apply to the Education Officer (T1), The County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope necessary). All particulars and form T1/40 to be returned accompanied by copies of three recent testimonials by 13th December, 1943.

994

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charge given under each heading.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

DRAUGHTSMAN. Urgently required by Film Studio. Experienced in preparing set plans and complete details from designs under supervision of Art Director. Good salary for suitable applicant. Write Box 195.

Architectural Appointments Wanted

ARCHITECT ASSISTANT, age 25, ex-service man, requires position in London; 8 years practical experience on various types of work, including factory (R.C. and steel) design, layouts of housing estates, site supervision, specifications and bills of quantities. Box 195.

CHARTERED QUANTITY SURVEYOR, P.A.S.I., requires work on housing, post-war reconstruction, town planning schemes or war damage. Fully experienced. Studying for final T.P.I. exam, 1944. Box 196.

JUNIOR requires post in architect's office (London area), keen and willing. At present attending Municipal College and School of Building. Box 197.

A.R.I.B.A., 25, exempt, seeks responsible position in London. Box 198.

DRAUGHTSMAN requires spare time work in London. War damage surveys, post-war planning, or general work for architects, builders, etc. Moderate fees. Box 200.

CHIEF ARCHITECT of a Government Department desires change. Aged 32, married. Exempt (medically). Preferably Eastern Area. Experienced Government and Local Government service. Please state salary, and if housing accommodation available. Free at month's notice. Box 201.

ARCHITECTURAL DRAUGHTSMEN, experienced in all classes of architectural draughting, desire additional work. Complete drawings carried out from rough sketches. Moderate fees. "Designs," 244, Gammons Lane, Watford, Herts. Telephone: Garston 2302. 984

ENGINEERING AND ARCHITECTURAL ASSISTANT. Eleven years' wide experience of civil and structural engineering calculations, site organization and supervision and quantities. Able at short notice to execute detail draughting efficiently and expeditiously. Have own drawing office in London. Travel no object. Age 28. Medically exempt. " Rahmen—Structures," 708, Chelsea Cloisters, Sloane Avenue, London, S.W.3. Kensington 5535. 206

YOUTH (17), keen, intelligent; has G.S.C.; desires situation in architect's office with view to being articled. Leatherhead and Dorking district. Marshall, 12, Brook Cottages, Cobham Road, Fifeham. 207

CHIEF ASSISTANT (Chartered Architect), desires change to an executive or similar position of responsibility with a Municipal, Industrial or Commercial Undertaking. Wide experience including recent design and supervision of large factory contracts of national importance. State details and salary. Box 208.

ARCHITECTURAL DRAUGHTSMAN desires post in London or City (preferable) area. Taking the R.I.B.A. Course. Liable under the Essential Works Order. Box 209.

Other Appointments Vacant

Four lines or under, 4s.; each additional line, 1s.

ASSISTANT EDITOR wanted for Architectural Paper. Write, with full particulars of qualifications, salary required, &c., to Box 51.

Classified Advertisements continued on page xliii

ELLISON ELECTRIC SWITCHGEAR
See Information Sheet Nos. 411, 414 & 415. Copies may be obtained from GEORGE ELLISON Ltd. FERRY BARR, BIRMINGHAM. 228

WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
BULWELL 78237-8

M. McCARTHY & SONS, LTD
BULWELL • NOTTINGHAM

STEELWORK BY SHARMAN & SONS

SWAN WORKS, HANWORTH, MIDDX.

"Phones: Feltham 3007. Sunbury 2367" "Grams: "Sharmans Feltham."

FIRE PROTECTION

See Information Sheet No. 78. Copies may be obtained from:

CLARKE & VIGILANT SPRINKLERS LTD.

Atkinson St., Deansgate, Manchester, 3
Phone: Deansgate 2727 B
and
10 13, Bedford St., Strand, W.C.2
Phone: Temple Bar 83145.



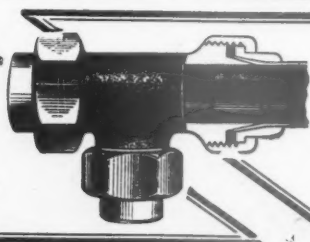
TRAFFOLYTE for WALL PANELLING AND DOORS • FURNITURE AND COUNTER TOPS

METROPOLITAN-VICKERS ELECTRICAL CO., LTD., TRAFFORD PARK, MANCHESTER, 17.

W/P201

SAMPLES AND PRICES FREE ON REQUEST

Phone: DEA. 4754
Grams: DONABROW



THE BROWNALL JOINT FOR LIGHT GAUGE COPPER PIPES

Extensively used on Government and Municipal buildings, Hospitals, Baths, Hotels, Factories and Housing Estates. Brownall Joints withstand every scientific and practical test. Expert technical service for Architects always available.

DONALD BROWN (Brownall) LTD. Lower Moss Lane, MANCHESTER 15

PAINTS TO SPECIFICATION

Manufactured to all Government
and British Standards,
or your own individual specifications.



ALLIED PAINTS & CHEMICALS LTD.
Tyseley • Birmingham • Tel.: ACOcks Green 2223
Contractors to Ministry of Supply & Air Ministry

COMFORT THE SUFFERING

Give to the Duke of Gloucester's
Red Cross and St. John Fund—
and give a little extra.

Contributions should be sent to
the Fund at St. James's Palace,
London, S.W.1.



PREVENTABLE in the FACTORY

Concrete floors are prone to dusting. This can be easily avoided with Tretol Fluat, a chemically acting liquid easily applied by unskilled labour. Its impregnating action leaves no skin to be worn off at a later date. Old and new floors so treated are resistant to acids and oils, and are permanently free from dusting. Contains no Silicate of Soda.

Tretol Ltd., 12 North End Rd., London, N.W.11. Tel. Speedwell 2866.
Works: Slough, Bucks.



TAYLOR WOODROW CONSTRUCTION LIMITED,

BUILDING AND CIVIL
ENGINEERING CONTRACTORS

London Office: 10 ST. GEORGE ST. W.1

also at

RUISLIP ROAD, SOUTHAL, MIDDX.

and branches throughout the Country.

Telephone:
WAXlow 2366 (8 lines).

Telegrams:
"Taywood, Southall."

STEPHENS' STAINS FOR WOOD

*Enable you to reproduce easily
and economically*

MAHOGANY·OAK·WALNUT·EBONY etc.
*and ensure a pleasing & lasting
surface to your woodwork.*

Specimens and particulars free from
HENRY C. STEPHENS, Ltd., Gillespie Rd., Highbury, N.5.
PROPRIETORS OF STEPHENS' INKS

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 6d.
ADVERTISER of proven ability and with valuable existing contacts with Architects, Government Departments and the building industry generally, would like to hear from progressive and well-established company requiring the services of a keen and responsible sales executive. Box 205.

Miscellaneous

Four lines or under, 4s.; each additional line, 1s.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 53, Great Marlborough Street, W.1. Gerrard 4223-4224-4225.

SPECIFICATIONS AND BILLS OF QUANTITIES, etc., expeditiously and accurately typed or duplicated. Translations and Facsimile, Typewriting. All work treated confidentially. Miss G. Saunders, Typewriting Bureau, 17, Dacre Street, Westminster, S.W.1. Telephone: Whitehall 2605.

WANTED. Student requires bound or single copies of *Architectural Review*, 1936-1943. What offers? Box 964.

CONSULTING ENGINEERS with wide experience of structural design are prepared to co-operate with architects working on post-war schemes. Box 980.

ARCHITECTURAL STUDENT undergoing training in country town desires to purchase books, lecture notes, etc., for his studies. Anything suitable for a student would be acceptable. Prices, etc., Box 983.

WANTED. One complete set of information sheets, either loose or bound, please state price. Box 988.

ARCHITECTURAL METAL WORK. Advertisers are prepared to consider purchase of goodwill of an established business for post-war development. Full particulars in confidence to Managing Director. Box 990.

MERCHANT NAVY OFFICER, studying architecture for post-war career, wishes to purchase *Building Construction*, Vols. I and II. By Mitchell. To replace copies lost with his ship in recent action. Please write Box 991.

WANTED: Set of Drawing Instruments, Slide Rule and Miniature Camera. Particulars to 27, School Lane, Genoside, near Sheffield. 993

Educational Announcements

Four lines or under 4s.; each additional line, 1s.

R.I.B.A. QUALIFYING EXAMINATIONS

Mr. C. W. Box, F.R.I.B.A., M.R.San.I.
 Courses by Correspondence and Personal in Studio.
 115, Gower St., London, W.C.1.
 Telephone: Euston 3305 and 3906.

R.I.B.A. AND T.P. INST. EXAMS. Private Courses of tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, St. Catherine's College, Cambridge. 231

SOUND INSTRUCTION by Postal Method

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

Architecture
 Architectural Drawing
 and Designing
 Building Contracting
 Building Construction
 and Interior Work
 Building Construction
 and Quantities
 Building Specifications
 and Quantities
 Quantity Surveying
 Structural Steelwork
 Civil Engineering

Surveying and Mapping
 Municipal Engineering
 Plan and Map
 Draughtsmanship
 Structural Engineering
 Concrete Engineering
 Structural Drawing
 Construction Draughtsmanship
 Sanitary Engineering
 Air Conditioning
 Heating and Ventilation

Special Courses for the Diplomas

of the R.I.B.A., I.O.B., C.S.I., Inst.C.E.,
 Inst.M. & Cy.E., Inst.Struct.E., R.S.I.,
 Inst.S.E., Town Planning Inst., etc.

Special Terms for members of H.M. Forces.

Write to-day for Syllabus of our Courses
 in any of the subjects mentioned above.

INTERNATIONAL

CORRESPONDENCE SCHOOLS, LTD

Dept. 141, International Buildings
 KINGSWAY, LONDON, W.C.2



SEND US YOUR
 ENQUIRIES FOR
 ALL YOUR
CALORIFIER
 REQUIREMENTS

HOLDEN & BROOKE LTD.
 SIRIUS WORKS, MANCHESTER 12

LARGE DEPT. FOR BOOKS ON BUILDING

FOYLES
 * BOOKSELLERS TO THE WORLD *

119-125 CHARING CROSS RD., LONDON, W.C.2

Open 9 a.m.—8 p.m., including Saturday.
 Telephone: GERard 5660 (16 lines).

ARENS WINDOW CONTROLS

THE MODERN METHOD OF OPERATING ALL
 TYPES OF VENTILATORS

NO UNSIGHTLY RODS, LEVERS OR CORDS, ETC.

SEND FOR INFORMATION SHEET No. 441

ARENS CONTROLS LIMITED

Tunstall Rd., East Croydon. ADDiscombe 3051-2-3-4

LLOYD BOARD



LLOYD BOARDS LIMITED
 86 STRAND · LONDON · W.C.2

THE MODERN HOUSE

By F. R. S. YORKE, A.R.I.B.A.

Fourth Edition recently published.

The book includes a selection of the most successful examples of advanced house design from the leaders of the movement. Containing more than 200 pages, 7½" x 10", illustrated by more than 500 photographs, plans and constructional details, of houses from all over the world, it outlines the requirements of the new type of home and discusses plan, wall, window and roof. The fourth edition contains several new houses, mainly American, built since 1937 and they take the place of projects and earlier examples which appeared in the last edition. Price 21s. Postage 7d. inland.

THE ARCHITECTURAL PRESS

War Address:

45 THE AVENUE CHEAM, SURREY

NH **PAINTS AND VARNISHES**
 Chosen for
 Quality & Durability

NOBLES & HOARE LTD.

London Office: 57, BROAD STREET AVENUE, LONDON, E.C.1

TELEPHONE: LONDON WALL 1394

R

2

ING

S

W.C.2

S

ALL

ETC.

-2-34

E

bles
ent.
by
ails,
ire-
vall,
new
lace
last

SS

EY

D

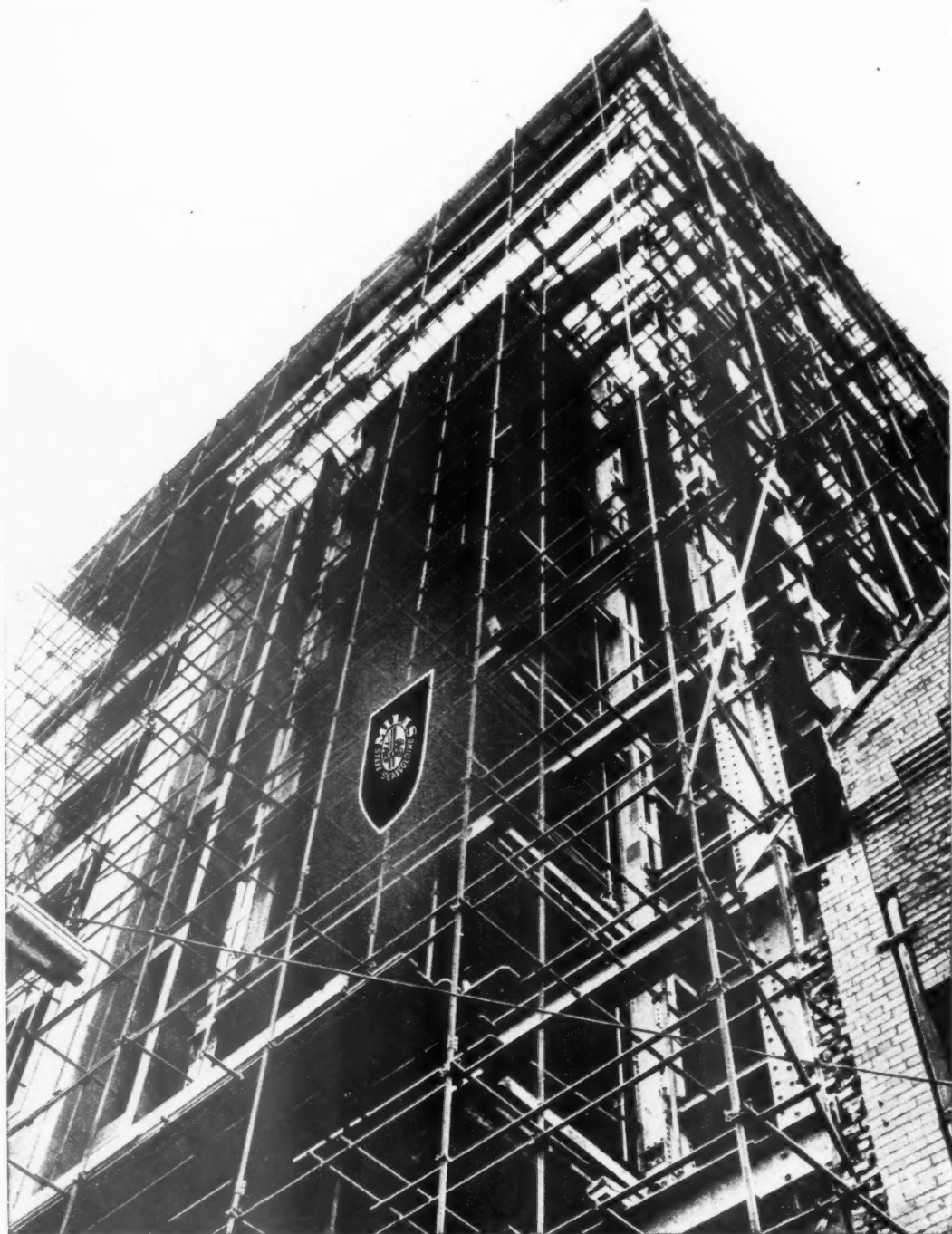
S

ity

TD.

, E.C.2

2



MILLS

STEEL SCAFFOLDING

LONDON - - Riverside 5026-9

BIRMINGHAM - - Smethwick
0594

BRISTOL - - - Bristol 57646

CARDIFF - - - Cardiff 5413

MANCHESTER - - - Woodley
2231

NEWCASTLE - - Newcastle
26990

GLASGOW

Murrays (Scaffolding) Ltd.
Douglas 7191

NORTHERN IRELAND

James P. Corry & Co. Ltd.
Belfast 23671

SOUTH AFRICA

Hunt, Leuchars & Hepburn

INDIA

Guest, Keen & Williams

MILLS SCAFFOLD CO. LTD., TRUSSLEY WORKS, HAMMERSMITH GROVE, LONDON, W.6



SHENLEYBURY FARM for the MIDDLESEX COUNTY COUNCIL
GENERAL VIEW of the PIGGERIES

Architect :—W. T. Curtis, F.R.I.B.A.

The above is one of the many new buildings which have been provided. The piggery now has accommodation for about 200 store pigs, 16 sows and 4 boars, together with fodder and litter storage, food preparation room and also a fully equipped slaughter-house. Other buildings provided include a new cowhouse; dairy, incubation and brooder house and poultry houses for 1,200 head of poultry; a Dutch barn; a closed barn; cart sheds; sheep pens; stock yards; stables; and 10 cottages for Resident Staff and accommodation for day workers.

One of our buildings in the peaceful years.

JOHN LAING & SON LTD.

BUILDING AND ENGINEERING CONTRACTORS

MILL HILL, N.W.7
DALSTON ROAD, CARLISLE

Established 1848

TELEPHONES: MILL HILL 3242
CARLISLE 1820

