

# 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

★ 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. 3, Albemarle Street, W.1.	Regent 4782-3.
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.

No. 2542] [Vol. 98  
THE ARCHITECTURAL PRESS,  
War Address: Forty-five The Avenue,  
Cheam, Surrey. Phone: Vigilant 0087-9

Price 9d.

Registered as a Newspaper

**"P.L.C." SLIDE RULES**

now only available where required for work of national importance. We look forward to the time when we shall be able to meet the requirements of all our friends: in the meantime all orders will, wherever possible, be dealt with in rotation.

**A. G. THORNTON LTD**  
Drawing Instrument Specialists  
41 GARTSIDE ST. MANCHESTER 3.

T 74

## TAYLOR WOODROW CONSTRUCTION LIMITED,

BUILDING AND CIVIL  
ENGINEERING CONTRACTORS

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

also at

**RUISLIP ROAD, SOUTHALL, MIDDXX.**

and branches throughout the Country.

Telephone :  
WAXlow 2366 (8 lines).

Telegrams :  
" Taywood, Southall."

Using Steam or Hot Water

**"SPIRAL TUBE"**

UNIT AND  
FLENUM TYPE

**AIR HEATERS**

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

## 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.



TRADE MARK

## ROBERT ADAMS

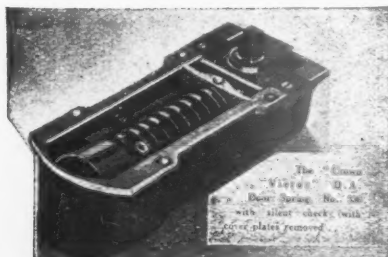
ROBERT ADAMS (VICTOR) LTD.  
OF 3-5, EMERALD STREET, W.C.1.

139a STAINES ROAD, HOUNSLOW

TELEPHONE: HOUNSLOW 5714

## 'VICTOR' DOOR SPRINGS

NOTED FOR QUALITY AND GREAT DURABILITY



## TVA

adventure in planning

By Julian Huxley

(Ready Now)

An account of the reclamation of the Tennessee Valley, formerly one of the most backward regions of the U.S.A. Dr. Huxley, who has done long and detailed research into all aspects of the work of the Tennessee Valley Authority, has now produced a book which, for the first time, describes this gigantic enterprise for the benefit of English readers. There is a Foreword by the Hon. J. G. Winant, Ambassador of the United States, and notes on the illustrations by Gordon and Flora Stephenson. 144 pages with about 150 illustrations. Size 8½ ins. × 5½ ins.

PRICE 8s. 6d.  
postage 6d.

THE ARCHITECTURAL PRESS  
45 The Avenue • Cheam • Surrey

ED,

W.I

DX.

chall."



# RECONSTRUCTION

Many thousands of new homes will be needed when the time comes for reconstruction.

Rightly, there will be the demand that these shall mark a step forward in providing some of the comforts which have been lacking in pre-war dwellings: that they shall be equipped with the labour-saving and economical appliances for heating, cooking and hot-water supply which continued progress in design make available.

Radiation Ltd., with the combined technical knowledge and experience of its constituent Companies, is able to give expert guidance on the most suitable and efficient methods of meeting varied requirements.

## Radiation Ltd

COMPRISING

ARDEN HILL & CO. LTD. ★ NAUTILUS FIRE CO. LTD.  
DAVIS GAS STOVE CO. LTD. ★ RICHMONDS GAS STOVE CO. LTD.  
EAGLE RANGE & GRATE CO. LTD. ★ WILSONS & MATHIESONS, LTD.  
FLETCHER, RUSSELL & CO. LTD. ★ JOHN WRIGHT & CO. LTD.

*Radiation House, Aston, Birmingham 6; and 7 Stratford Place, London, W.1*

# Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accrington Brick & Tile Co., Ltd. . . . .	—	Expanded Metal Co., Ltd. . . . .	—	M.K. Electric, Ltd. . . . .	—
Adams, Robert (Victor), Ltd. . . . .	ii	Flexo Plywood Industries, Ltd. . . . .	—	Morris, Herbert, Ltd. . . . .	—
Aga Heat Ltd. . . . .	—	Franki Compressed Pile Co., Ltd. . . . .	—	Newman, Wm., & Sons Ltd. . . . .	—
Aircrow Co., Ltd. . . . .	x	Good Housekeeping Institute . . . . .	xi	Newsom, H., Sons & Co., Ltd. . . . .	—
Allied Paints & Chemicals Ltd. . . . .	—	Gray, J. W., & Son, Ltd. . . . .	—	North Wales Slate Quarries Assoc. . . . .	—
Anderson, C. F., & Son, Ltd. . . . .	xx	Greenwood's & Airvac Ventilating Co., Ltd. . . . .	—	Oliver, Wm. & Sons, Ltd. . . . .	xxxiv
Anderson, D., & Son, Ltd. . . . .	—	Gyproc Products Ltd. . . . .	—	Peglers, Ltd. . . . .	—
Architectural Press Ltd. . . . .	ii, xxxiv	Haden, G. N., & Sons, Ltd. . . . .	—	Penfold Fencing Ltd. . . . .	xxx
Ardor Insulation Co., Ltd. . . . .	—	Head, Wrightson & Co., Ltd. . . . .	—	Petters Ltd. . . . .	xxxiii
Arens Controls, Ltd. . . . .	xxxiv	Helliwell & Co., Ltd. . . . .	xxxv	P.I.M. Board Co., Ltd. . . . .	—
Bakelite Ltd. . . . .	—	Henleys Telegraph Works Co., Ltd. . . . .	—	Plastilume Products, Ltd. . . . .	xxxix
Benjamin Electric Ltd., The . . . . .	xiii	Hills, F. & Sons, Ltd. . . . .	—	Poles, Ltd. . . . .	—
Birmetals, Ltd. . . . .	xviii	Hopton-Wood Stone Firms, Ltd. . . . .	—	Pyrotex Ltd. . . . .	—
Braithwaite & Co., Engineers, Ltd. . . . .	viii	Horseley Bridge & Thomas Piggott, Ltd. . . . .	—	Radiation Ltd. . . . .	iii
Briggs, William & Sons, Ltd. . . . .	xv	Hy-Rib Sales . . . . .	vii	Reynolds Tube Co., Ltd., and Reynolds Rolling Mills, Ltd. . . . .	—
British Reinforced Concrete Engineering Co., Ltd. . . . .	—	I.C.I. Metals Ltd. . . . .	—	Ross, S. Grahame, Ltd. . . . .	—
British Steelwork Association, The . . . . .	—	Industrial Engineering, Ltd. . . . .	—	Ruberoid Co., Ltd. . . . .	—
British Trane Co., Ltd. . . . .	xxviii	International Correspondence Schools, Ltd. . . . .	—	Rustproof Metal Window Co., Ltd. . . . .	—
Broad & Co., Ltd. . . . .	v	Interoven Stove Co., Ltd. . . . .	xxxiv	Sanders, Wm. & Co. (Wednesbury), Ltd. . . . .	iv
Broadcast Relay Service, Ltd. . . . .	—	Jenkins, Robert, & Co., Ltd. . . . .	—	Sankey, J. H., & Son, Ltd. . . . .	ii
Brockhouse Heater Co., Ltd. . . . .	xxx	Kerner-Greenwood & Co., Ltd. . . . .	xxv	Sankey, Joseph & Sons, Ltd. . . . .	xix
Brush Electrical Engineering Co., Ltd. . . . .	—	Kerr, John, & Co. (M/r) Ltd. . . . .	—	Scaffolding (Great Britain), Ltd. . . . .	xxxvi
Cable & Wireless Ltd. . . . .	—	Ketton Portland Cement Co., Ltd. . . . .	xxxv	Sharman, R. W. . . . .	xxxiv
Cellon Ltd. . . . .	xix	King, J. A., & Co., Ltd. . . . .	—	Sharp Bros. & Knight Ltd. . . . .	—
Celotex Ltd. . . . .	—	Laing, John, & Son, Ltd. . . . .	—	Smith & Rodger Ltd. . . . .	xxxv
Cement Marketing Co., Ltd. . . . .	—	Lamont, James H. & Co., Ltd. . . . .	xxxiii	Smith's English Clocks, Ltd. . . . .	—
Clarke & Vigilant Sprinklers, Ltd. . . . .	—	Lillington, George, & Co., Ltd. . . . .	—	Spiral Tube & Components Co., Ltd. . . . .	ii
Copper Development Association . . . . .	xxix	Limmer & Trinidad Lake Asphalt Co., Ltd. . . . .	—	Standard Range & Foundry Co., Ltd. . . . .	—
Crabtree, J. A., & Co., Ltd. . . . .	ix	Lloyd Boards, Ltd. . . . .	—	Stelcon (Industrial Floors), Ltd. . . . .	xxx
Crittall Manufacturing Co., Ltd. . . . .	—	McCall & Co. (Sheffield), Ltd. . . . .	—	Stuart's Granolithic Co., Ltd. . . . .	xxxvii
Davidson, C., & Sons, Ltd. . . . .	xxii	Main, R. & A., Ltd. . . . .	xvi	Taylor, Woodrow Construction, Ltd. . . . .	ii
Doulton & Co., Ltd. . . . .	xvii	Matthews & Yates, Ltd. . . . .	—	Thornton, A. G., Ltd. . . . .	ii
Durasteel Roofs Ltd. . . . .	xxxi	Mellor Bromley & Co., Ltd. . . . .	vi	Tretol Ltd. . . . .	—
Eagle Range & Grate Co., Ltd. . . . .	—	Metropolitan-Vickers Electrical Co., Ltd. . . . .	—	Trussed Concrete Steel Co., Ltd. . . . .	xxxix
Electrolux, Ltd. . . . .	xxiv	Mills Scaffold Co., Ltd. . . . .	xxxvi	Turners Asbestos Cement Co., Ltd. . . . .	xii
Elgood, E. J., Ltd. . . . .	xxxv			United Steel Companies, Ltd., The . . . . .	—
Ellison, George, Ltd. . . . .	xxxiv			Wardle Engineering Co., Ltd. . . . .	—
En-Tout-Cas Co., Ltd. . . . .	xxx			Zinc Alloy Rust-Proofing Co., Ltd. . . . .	—
Esse Cooker Company . . . . .	xxxii				

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

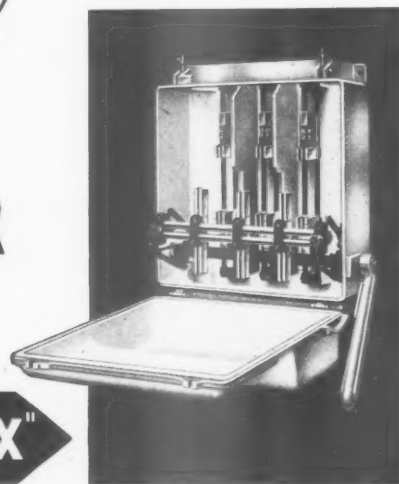
## FOR VICTORY

### Sanders for SWITCHGEAR

There is no mistaking the meaning of the upraised fingers—V for Victory—the Victory of the United Nations.

Similarly, in the electrical field the name Sanders—Wednesbury has become indissolubly linked with the phrase "Sanders for Switchgear"—Switchgear for all purposes, industrial and domestic.

**"SUPERMAX"**



# SANDERS



## WEDNESBURY

WM. SANDERS & CO. (WEDNESBURY) LTD.  
Falcon Electrical Works, WEDNESBURY, STAFFS.  
London Office: 78, Neal St. W.C.2. 'Phone: Temple Bar 894.

SWITCHES & SWITCHFUSES  
400 amps. 500 volts.

The electrical and mechanical efficiency of these switches and combined switchfuses, coupled with their ability to stand up to the most severe conditions of service, have gained for them a popularity in all branches of industry which is greater today than ever.

XXIV

XXX

XXXIII

XXXII

XXXI

III

IV

X

XIV

LXXX

LXXXV

LXXXVI

II

XXX

XXXVII

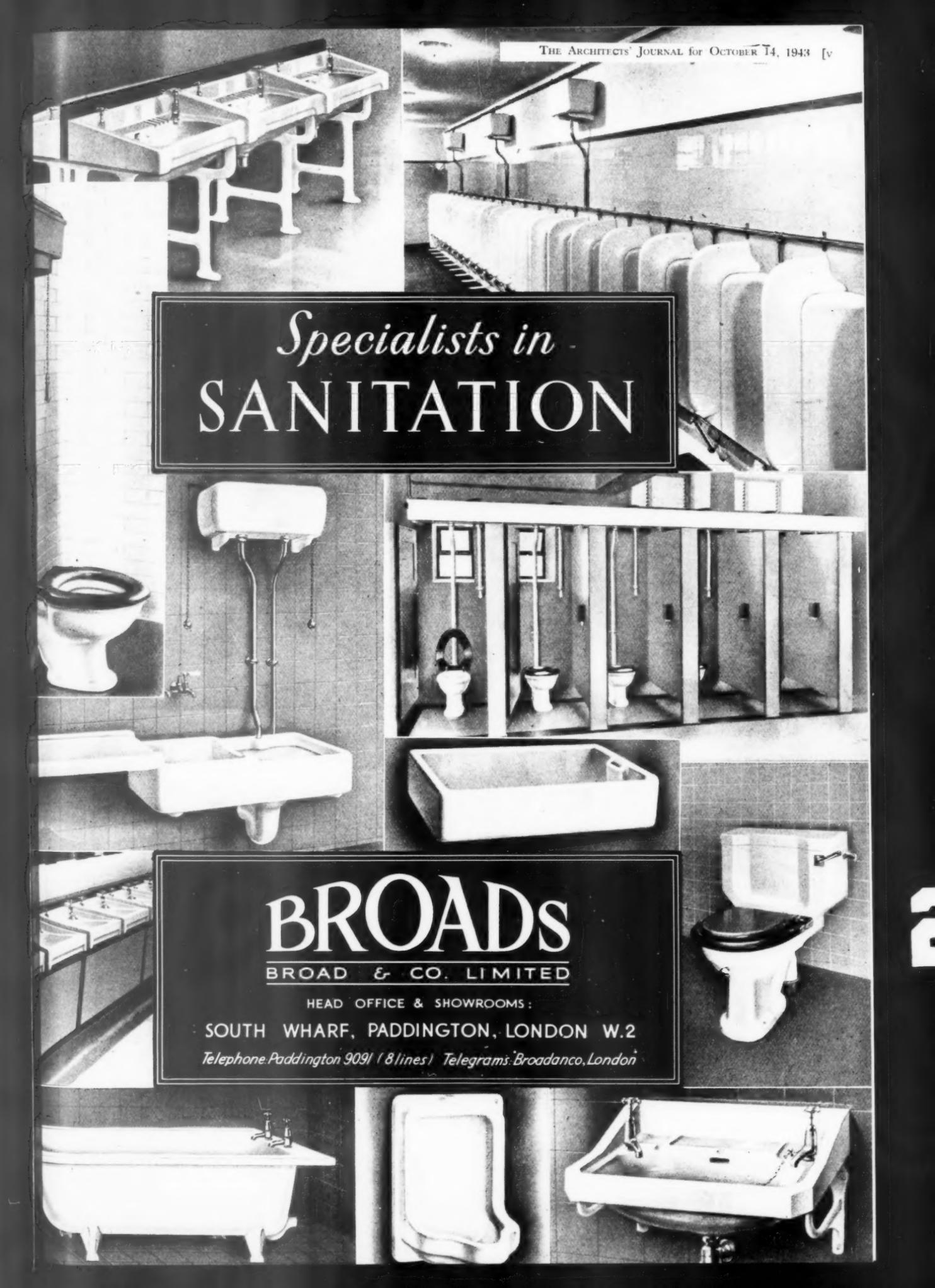
II

II

XXIX

XII





*Specialists in*  
**SANITATION**

**BROADs**

**BROAD & CO. LIMITED**

HEAD OFFICE & SHOWROOMS:

SOUTH WHARF, PADDINGTON, LONDON W.2

Telephone: Paddington 9091 (8 lines) Telegrams: Broadanco, London

# ***MELLOR-BROMLEY***



***& Co. LTD.***

AIR CONDITIONING  
ENGINEERS

CONSTANT  
CONTROLLED  
HUMIDITY

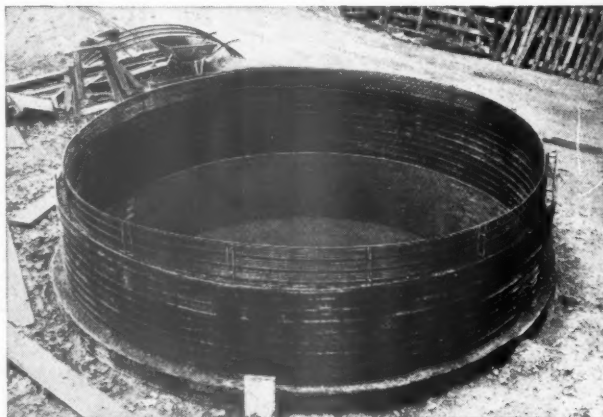
MELLOR BROMLEY & CO. LTD.  
MINOTAUR WORKS, LEICESTER

# Circular Concrete Structures

reinforced and centered with

## CURVED HY-RIB

The erection of circular concrete walls is an easy and economical process when carried out with Hy-Rib sheets, which eliminate timber shuttering and are supplied ready curved to the required contours. The Hy-Rib sheets are fixed in two layers to provide the centering for the inner and outer surfaces of the concrete core. "Ladder" frames composed of rods welded together are, if desired,

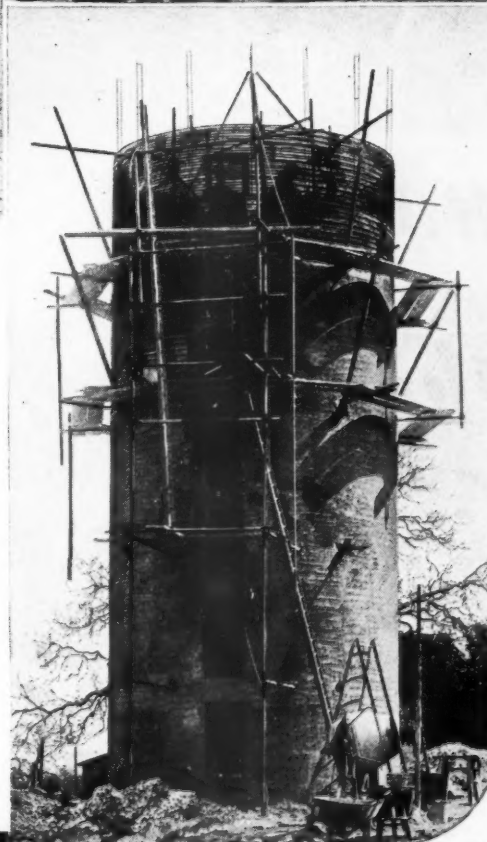
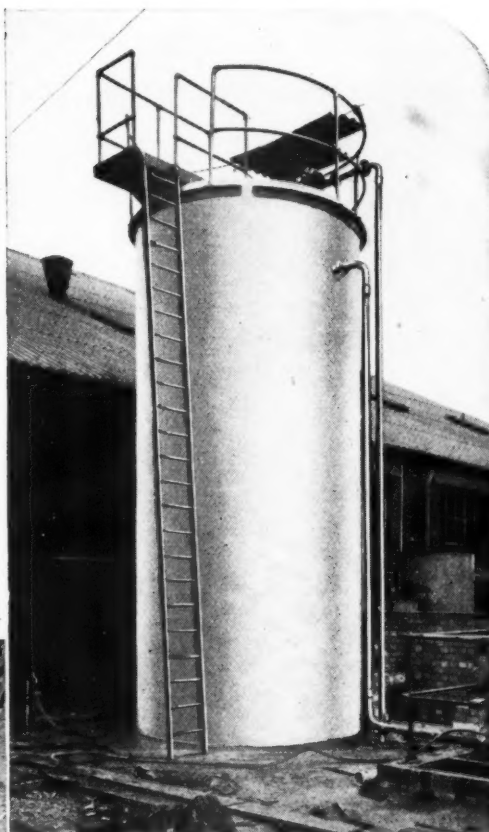


supplied with the Hy-Rib sheets to act as spacing members between the two layers of Hy-Rib. The rod frames also act as stiffeners for the curved Hy-Rib sheets and the circular walls can then be constructed without temporary propping of any description. The reinforcing value of the Hy-Rib sheets may be utilised as "ring tension" reinforcement, thereby effecting the utmost economy of design.

Illustrations: Above: Circular Tank in course of construction. Top right: Water-Softening Plant. Bottom right: Tower Silo typifying the use of Hy-Rib sheets for tall circular structures.



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





*for every  
storage  
need  
there's a . . .*

Braithwaite Pressed Steel Tanks are in use all over the World. Built up from standard unit sections, they can be erected at ground level or on supporting structures to suit any site however restricted or difficult of access. For further details you are invited to apply for a copy of the latest Braithwaite Pressed Steel Tank Brochure.

**B R A I T H W A I T E**  
**P R E S S E D S T E E L T A N K**

BRAITHWAITE & CO. ENGINEERS LTD. 35 KINGS HOUSE, 10 HAYMARKET, LONDON, S.W.1

Telephone: Whitehall 3993

## BRITAIN'S CONTRIBUTIONS TO THE WORLD



Church and Village of North Bovey, Devon.

J. Dixon-Scott, A.R.P.S.

# I D E A L I S M

Idealism is not an exclusively British characteristic; yet no nation has done more than Britain to foster the idealism inherent in mankind. It is therefore not inappropriate that the church tower or spire should invariably mark the highest point in our towns and villages.

Those who argue that Britain's ideals are pointless because they are unattainable, miss altogether the

abiding stimulus of inspired effort. As a nation, we may never achieve our ideals; but the thought of them gives us both direction and energy—two essential requisites for real and lasting progress. So in business. The firm making progress in meeting the requirements of to-day will be the firm striving diligently to anticipate the needs of to-morrow.

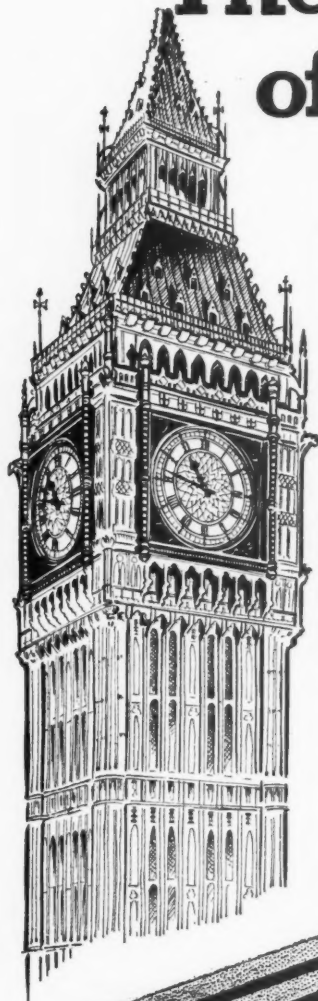
# C R A B T R E E

*A name synonymous with Progress in Accessories and Switchgear*

"Crabtree" (Registered)

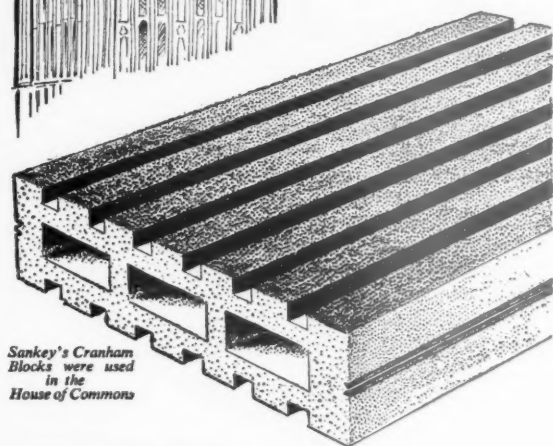
C.452/198. Advt. of J. A. Crabtree & Co. Ltd., Walsall, England

# The Test of Time



When Sankey's Cranham Blocks are chosen for new partitions in important old buildings, the choice is no haphazard one: but because of their sterling qualities of fire and damp resistance; heat and sound insulation; and the special key for plastering. In addition, their great mechanical strength ensures that they will stand "the test of time;" and being light in weight, will impose no undue strain upon the foundations.

Please send 1d. stamp for full particulars.



Sankey's Cranham Blocks were used in the House of Commons

**SANKEY'S**

# CRANHAM BLOCKS

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

ESTABLISHED 1857.

22 ALDWYCH HOUSE, ALDWYCH, LONDON, W.C.2  
Telephone: HOLborn 6949 (14 lines).  
Brickwork, Estrand, London.



# KITCHEN VENTILATION

When expenditure permits, a complete exhaust ventilation plant for removing kitchen fumes is advised. Through a system of well designed double hoods, with drip gutters and ducting to a fan, fumes are conveyed to the atmosphere at roof level. We design, make and instal the complete equipment.

Where rigid economy is necessary; in the kitchens of British Restaurants, Schools, Nurseries and Communal Centres, our District Engineers will gladly advise on the selection and location of Airscrew exhaust fans. Although less effective than the hood system, conditions will be greatly improved.

One kitchen exhaust fan can be made to ventilate the dining room also; by the introduction of a suitable air inlet between the two rooms. Blackout devices are fitted to these fans as shown in our booklet F. 102, which will be sent on request.

# AIRSCREW FAN SYSTEMS

THE AIRSCREW COMPANY LTD.

GROSVENOR GARDENS HOUSE, WESTMINSTER, LONDON, S.W.1.  
Telephone: VICTORIA 4527-8 Telegrams: AIRSCREW, SOWEST, LONDON

# ★ Which is BEST?



*"It all depends . . . . ."*

How often has the Institute given that reply when asked which is the best type of cooking stove—coal, electricity or gas? Obviously it wants to know, first, the circumstances and the particulars conditioning selection. Is it for rural, sub-rural, suburban or urban housing?

Then, as to size of cooker, how large are the anticipated families? Is the cooking load relatively constant, or is it subject to wide fluctuations?

These, and many other considerations, are constantly in the Institute's mind when it tests cooking stoves. It does not test them to find out which is best, but to find out under which conditions each gives its best performance.

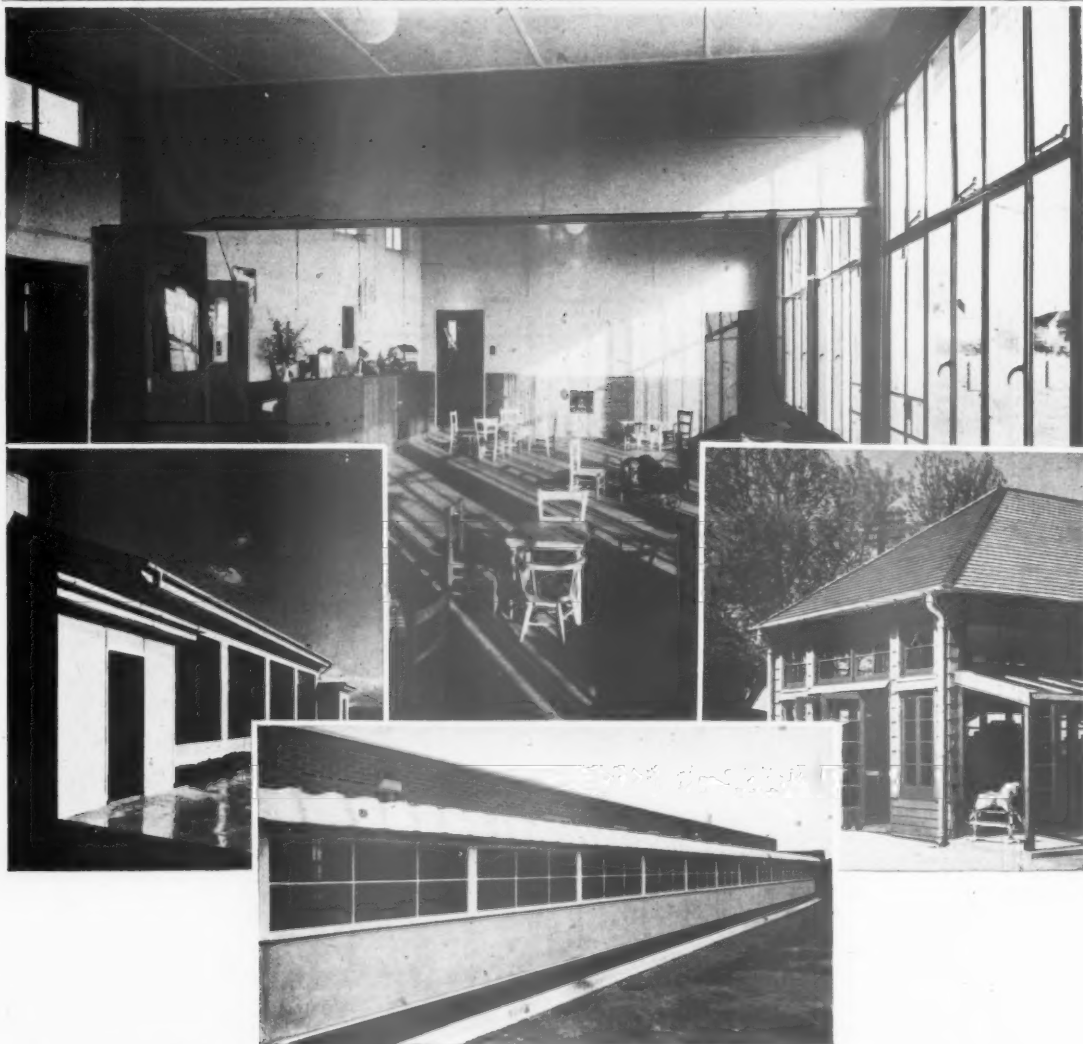
That is why the Institute can give Architects a really helpful service.

## THE GOOD HOUSEKEEPING INSTITUTE

30, GROSVENOR GARDENS, LONDON, S.W.1. SLOane 4591

# Asbestos-Cement

## *SOLVES THIS PROBLEM*



## *The nation's need for Schools*

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.**

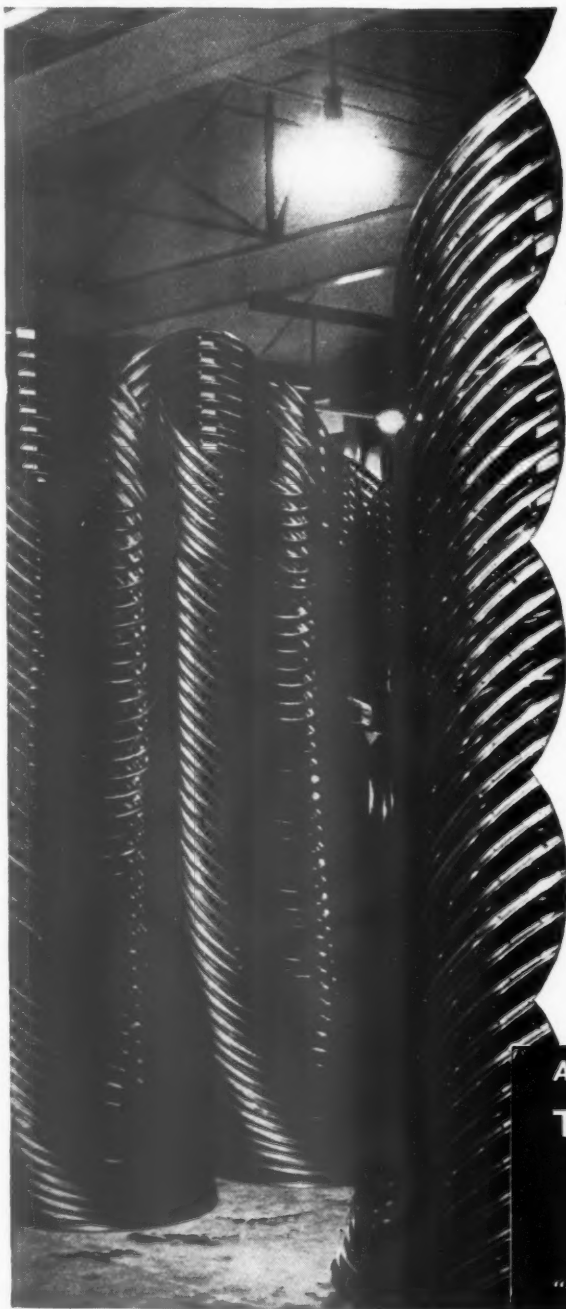
**TRAFFORD PARK  
MANCHESTER 17**

For the vital needs of education, in post-war as in pre-war years, Asbestos-cement will supply the solution to many a constructional problem. Here are some applications of Asbestos-cement materials to existing school buildings of various types. The individual products used are listed below.

"POLITE" Asbestos-cement  
Flat Building Sheets.  
"TURNALL" Decorated Sheets.  
"TURNALL" Trafford Tiles.  
"EVERITE" Asbestos-cement  
Rainwater Goods.

# BENJAMIN LIGHTING

## Unique Lighting Service No. 3



Stores lighting is only one of the problems that have been thoroughly investigated by Benjamin but it is an important one.

Benjamin Lighting Engineers are constantly engaged in research into the many problems arising in order to ensure that correct lighting is provided on the job to enable workers to see well. Questions are involved not only of selecting the correct fittings, but also of their placing and mounting. Only by the study of all the factors involved can good illumination be ensured.

For stock bin lighting a special unit has been developed and the technique of its application studied, so that light can be provided where it is wanted, in the bins, without throwing glare into the eyes of the storekeepers.

The same research is going on into lighting problems in various industries and in connection with all sorts of machines. The best way can be found for lighting any particular plant you are dealing with, in fact we probably know it already. Among all the factories for which we have already planned the lighting all over the world, there is almost certainly one similar to your job, so that we shall be able to deal with the lighting with a knowledge of actual results obtained.

*P.S.—The illustration is of  
stacks of bicycle wheel rims*

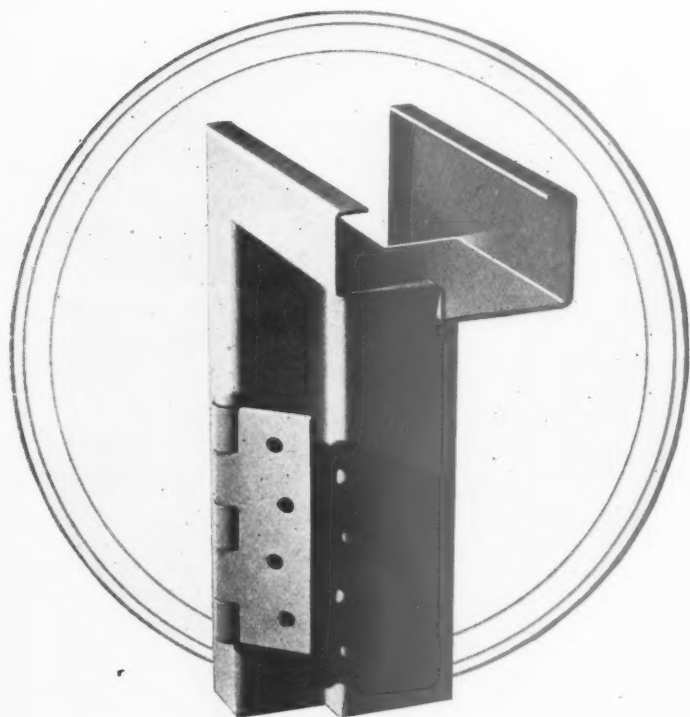
Announcement of

**THE BENJAMIN ELECTRIC LTD**

Brantwood Works, Tottenham,  
London, N.17.

Telegrams :  
"Benjalect, Southtot, London."

Telephone :  
Tottenham 5252 (5 lines)



# SANKEY

## METAL TRIM

DOOR FRAMES • WINDOW CILLS  
PRESSED STEEL SKIRTING  
PICTURE RAIL • CORNER BEAD  
ETC., ETC.

Metal Trim will undoubtedly play an important part in post war reconstruction, and those interested are welcome to a copy of our catalogue. For the time being, of course, we are only able to execute orders carrying Government permits.

## JOSEPH SANKEY & SONS LTD.

WELLINGTON, SHROPSHIRE.

---

LONDON OFFICE: 168 REGENT ST., W.1

---

# Flat roof by Briggs...



## *Waterloo Bridge House, London*

Designed by Messrs. Howard & Souster, F.R.I.B.A., F.S.I., and constructed by Messrs. Harry Neal Ltd. is yet another fine building with a **FLAT ROOF** BY BRIGGS.

**W**HENEVER a Briggs "CHALLENGE" Flat Roof is specified, our engineers co-operate from the beginning, carefully superintending the roof construction. So it was with Waterloo Bridge House. Much has happened since a "CHALLENGE" Flat Roof was chosen for this important building. But, when normal times return, Briggs will contribute to the rebuilding of the peace with an organisation strengthened by war-time experience and research. Briggs, as always, will be on top of the job.

## *William Briggs & Sons Ltd., DUNDEE*

May we reserve your 1944 Calendar? To comply with regulations please send 1d. stamp with your request.

LONDON: VAUXHALL GROVE, SW8 • ALSO AT GLASGOW, EDINBURGH, LIVERPOOL, BRISTOL, ABERDEEN, NORWICH

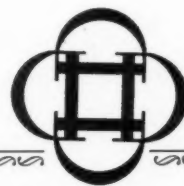
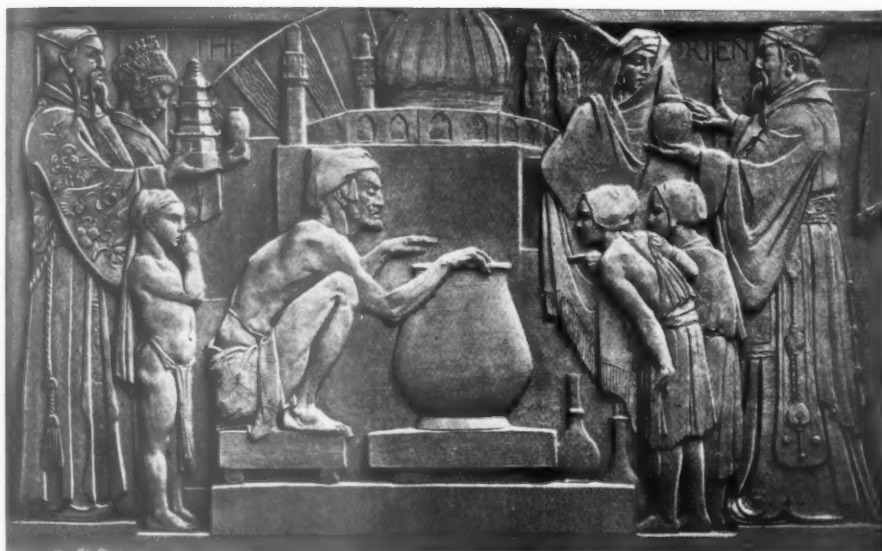
## LARGE-SCALE APPARATUS FOR THE COOKING AND SERVING OF FOOD



General view in the Principal Kitchen  
of a large Canteen Installation by



R. & A. MAIN LIMITED  
LONDON AND FALKIRK



*This illustration is taken from the central portion of the decorative panel over the main entrance to Doulton House.*

## Pottery through the Ages

**T**HE decorative panel, part of which is shown above, was designed by Gilbert Bayes and executed in Coloured Salt-Glaze Stoneware by Royal Doulton. It is an outstanding feature of Doulton House.

In it are indicated some of the more important countries and periods associated with the history of Pottery-making from Antiquity to the Renaissance. No chronological sequence is attempted, the general effect is to show in panoramic outline the making, transport and merchandising of pottery through the ages. A smaller panel on the North facade of the building shows the arrival of Dutch potters at Lambeth in the 17th Century, a reminder that the site on which Doulton House now stands has long been associated with pottery making.

Archeological research has given to various epochs such names as Stone Age, Bronze Age, Iron Age. The present era, so far, has no such cognomen. Whether it will be known as the Machine Age, the Aluminium or the Plastic Age may be decided by posterity! But, though the demand for pottery was never so great, it will almost certainly not be known as the Age of Ceramics. For a good and sufficient reason. Pottery is common to all ages; its history is as old as the History of Man.

As far as many utilitarian wares are concerned, there is little resemblance between modern pottery and that of the ancients—or for that matter the products of even fifty years ago. The basic material is still clay of some kind; but developments in the composition of the various “bodies”; the use of new mineral constituents; new methods of glazing, forming and firing have led to the production of wares of unusual mechanical strength and increased resistance to corrosion and changes of temperature. This has immensely widened their scope in industry. In this research, the House of Doulton has played a leading part. Their steadfast refusal to rest on laurels already won is one of the secrets of the world-wide fame of all “Royal Doulton” products.

To-day in the midst of labour difficulties, transport problems, and demands for all manner of products essential to the war effort, this research is still being carried on. Improvements in quality of material and of design are being effected. When, in what we confidently hope will be the not too distant future, reconstruction is possible, Doultons will be ready to meet the demand for all these products in ceramic ware they have so long supplied to the building industry—bathroom and sanitary equipment, stoneware drainpipes, architectural terra cotta, etc. Their knowledge, skill and experience will be available for rebuilding a better Britain.

## DOULTON & CO., LIMITED

LAMBETH, LONDON, S.E.1

# light metal sheet and strip

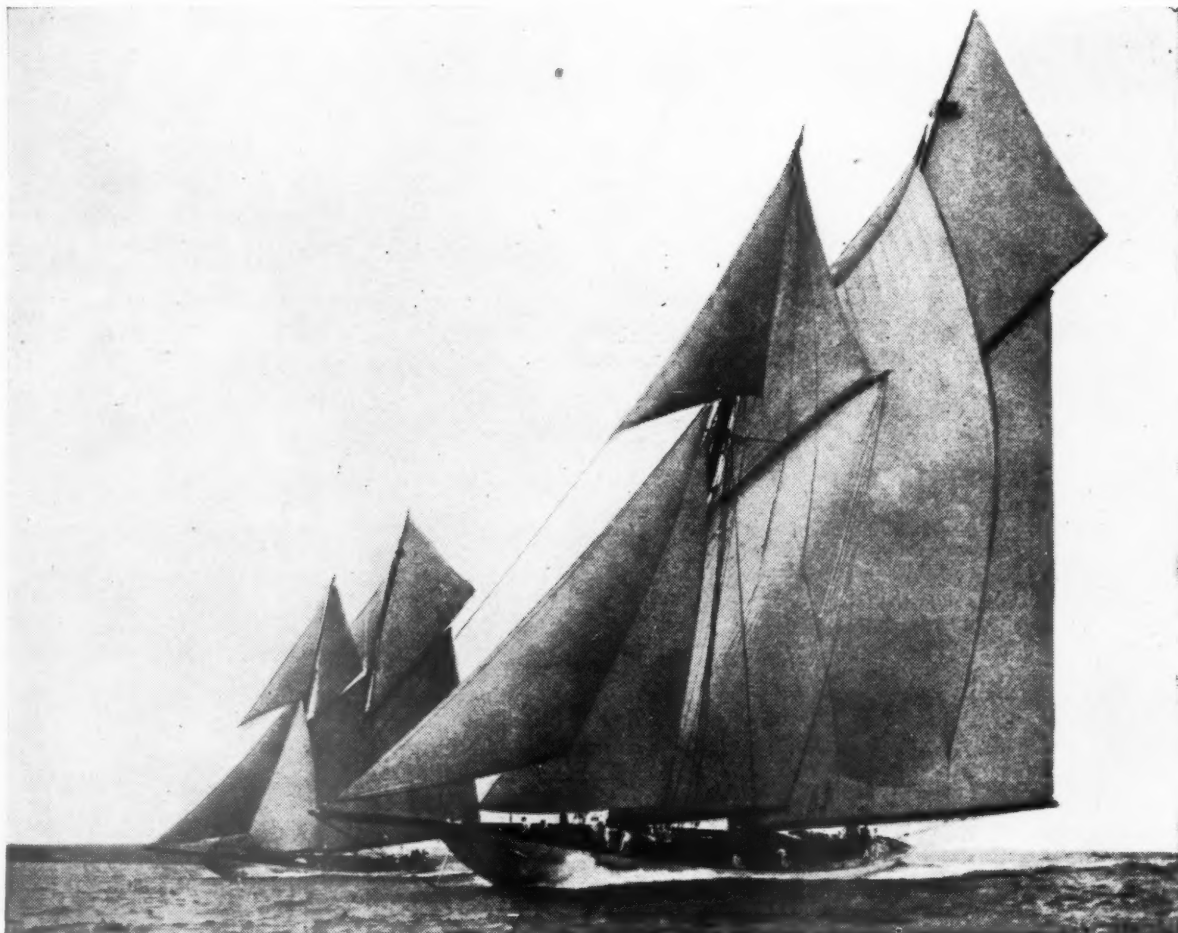


**BIRMETALS**

**BIRMETALS-LIMITED-BIRMINGHAM-32**







*International Regatta at Spithead. Kaiser's yacht 'Meteor' wins International Cup for Schooners. August 7, 1911.*

## WHEN WE WERE YOUNG

Three years later the Kaiser was an entry in another International Regatta, but he won no prizes. And now the same nation under another leader has challenged the world for mastery. We've lived in stirring times since Cellon was founded in 1911. Not only in politics and arms have there been turmoil and commotion; industry has had its revolution, science has advanced out of all relation to its past progress. So, Cellon's career has been set in a period of change, advancement and improvement. Its position in industry shows that it has taken full advantage of the opportunities provided.

CELLON LTD., KINGSTON-ON-THAMES. TELEPHONE: KINGSTON 1234 (5 lines)

**CELLON**  
CERRIC CERRUX

*The perfect finish*

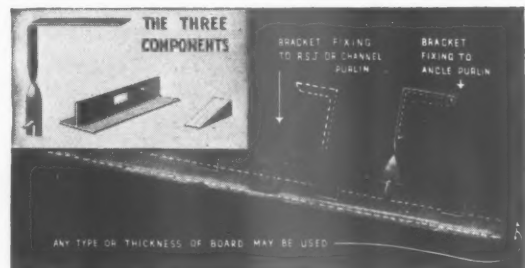
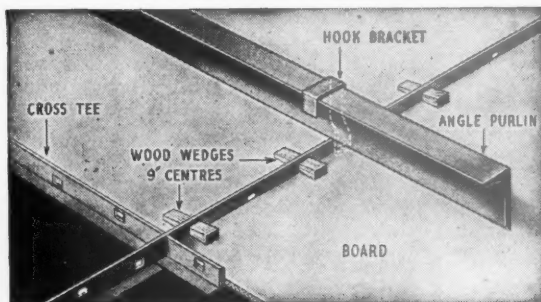


## FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

The Wallboard is secured to sherardised, pressed steel, slotted T-section by wedges. Below are shown the methods of attaching the support to various forms of purlin.



Escalator Tunnel at St. John's Wood Underground Station. Architect: S. A. Hoops.



### 8 POINTS TO BE NOTED

1. Fixed to **UNDERSIDE** of purlins — steel or wood — covering unsightly hook bolts, clips, etc.
2. Assures the insulating value of air-space between roof and underside of purlins. No dust or dirt.
3. Can be fixed to steel or wood purlins of roofs and joists of flat ceiling.
4. No unsightly nail heads showing.
5. Can be applied to new or old buildings of any construction independently of the roofing contractor,
6. Any thickness of board can be used, from  $\frac{1}{4}$ " to  $\frac{3}{4}$ ".
7. This method can be used for applying linings to exterior walls.
8. The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

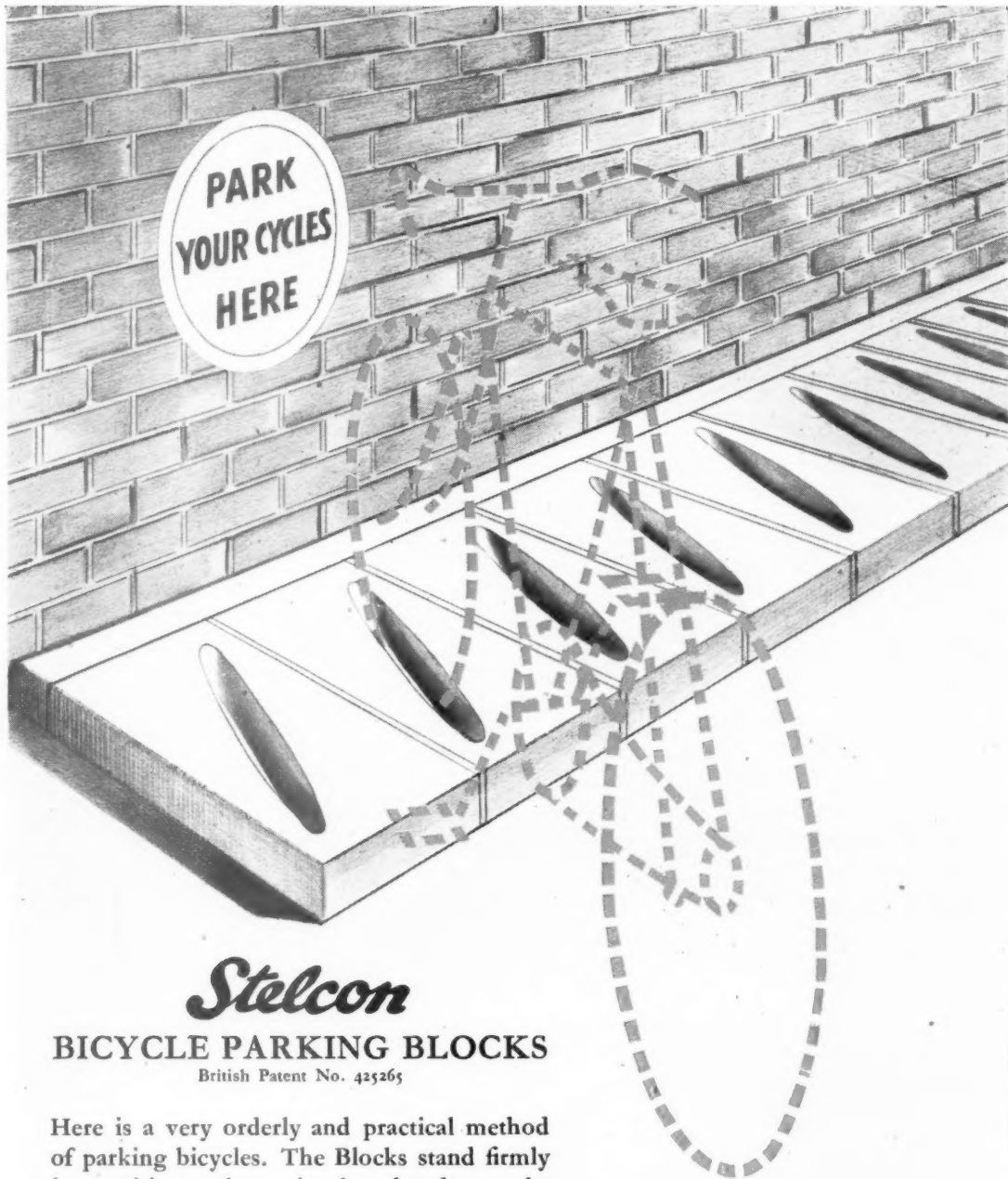
*Full particulars, specification and a typical layout will be sent on request*

## C. F. ANDERSON & SON, LTD.

### Wallboards for Government Work

Send us your "certificate of requirements" and we will arrange for licence application to Control

HARRIS WHARF, GRAHAM STREET, LONDON, N.1. TELEPHONE: CLERKENWELL 4582



***Stelcon***

**BICYCLE PARKING BLOCKS**

British Patent No. 425265

Here is a very orderly and practical method of parking bicycles. The Blocks stand firmly in position when simply placed on the ground but if they are laid flush with the surface they cause no obstruction when not in use, thus leaving the area free for other purposes if ever necessary. Concrete units for shed accommodation can also be supplied. Full details will gladly be sent on request.

**STELCON (INDUSTRIAL FLOORS) LIMITED**

**CLIFFORD'S INN**

Telephone: HOLBORN 2916

**LONDON · E.C.4**

## It's a good sign



IT SEEMS to us that when our  
present trouble is over, the outlook  
for building and construction is bright  
and shining. In the most practical sense of the

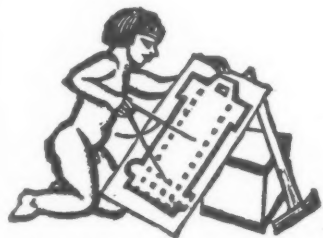
word, a lot of Europe will need re-making . . . New world, new techniques! It's a good sign  
that enquiries concerning IBECO, famous industrial waterproof kraft, are increasing weekly. For  
IBECO is the modern answer to many constructional problems — as a concreting underlay, as  
a curing carpet, as a wall liner for temporary or permanent wooden structures, as a  
sarking material under roofs, as a proofing layer under floors, as a waterproof  
covering for raw cement in sacks . . . Bitumenised in the actual course of  
manufacture IBECO is *integrally* waterproof, and is unimpaired by handling,  
trampling, or folding. It is light, easy to manipulate, low in cost, British  
made. For present jobs or future projects you need the facts about IBECO.

Technical data, samples and current prices sent on request.

**IBECO** WATERPROOF KRAFT PAPER

C. DAVIDSON & SONS LTD., (DEPT. K.21), MUGIE MOSS, BUCKSBURN, ABERDEEN.

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. 0d. 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 OCTOBER NOVEMBER AND DECEMBER

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 to JAN. 17

**EXETER.** *Rebuilding Britain Exhibition.* (Sponsor, RIBA.) OCT. 18 to Nov. 8

**LONDON.** *Town Planning Joint Examination Board. Exhibition of Set Pieces submitted by Candidates in the 1943 Examination.* At 66, Portland Place, W.1. 10 a.m. to 6 p.m. OCT. 14-15

*AA Members' Sketches Exhibition* (including a section for photographs) completed since the outbreak of war. At 34-36, Bedford Square, W.C.1. OCT. 14-Nov. 5

*Arnold Whittick. The Forces and Planning.* At 1, Grosvenor Place, S.W.1. (Sponsor, TCPA.) OCTOBER 14

*Stepney. To-day and To-morrow Exhibition.* At the Whitechapel Art Gallery. 11 a.m. and 6 p.m. every day, including Saturdays and Sundays. Exhibition is an attempt to illustrate the problems which have to be faced in building the new Stepney. (Sponsor, Stepney Reconstruction Group.) OCT. 14-24

*Practical Planning Exhibition and Conference.* At the Institution of Civil Engineers, Westminster. Exhibition includes graphic charts showing necessity for national and regional planning; models, photographs and plans illustrating development of existing towns and planning of new ones; examples of practical planning in twenty-six counties and cities; and a full-size model kitchen and a room with a second insulated floating floor. (Sponsor, Institution of Civil Engineers and Institution of Municipal and County Engineers.) 10 a.m. to 6 p.m. Admission free. Lectures: October 20, *Improved Layout and Construction of Roads and the Use of Motorways*, with special reference to Road Safety, chief speaker, Lord Leathers, Minister of War Transport; October 27, *Alternative Materials and Methods of Construction in Buildings*, chief speaker, Lord Portal, Minister of Works. On October 21 there will be two conferences devoted specially to questions of interest to women: in the morning, *The Planning of a Town as affecting the Home*, chairman, Miss A. M. Lupton, M.B.E., vice-chairman Housing Centre; in the afternoon, *The Planning of a Home*, Chairman, Miss Caroline Haslett, C.B.E. OCT. 14-30

*East Suffolk Reconstruction Survey.* Exhibition. At 13, Suffolk Street, S.W.1. (Sponsor, HC.) OCT. 18 to Nov. 6

*F. J. Osborn. A National Planning Policy.* At Abercorn Rooms, Great Eastern Hotel. 12.30 p.m. (Sponsor, TCPA.) OCTOBER 19

*G. D. H. Cole. Agencies for Post-war House Building.* At 13, Suffolk Street, S.W.1. 1.15 p.m. (Sponsor, HC.) OCT. 19

*Discussion. The Problem of Sewage Disposal in Rural Areas.* At 90, Buckingham Palace Road, S.W.1. (Sponsor, Royal Sanitary Institute.) 2.30 p.m. OCT. 20

*Conference on Country Towns in a National Policy.* At Kingsway Hall, W.C.1. Speakers: Professor A. W. Ashby, George R. Bull, W. R. Davidge, Lord Harmsworth, Dr. Julian Huxley, Miss Mary Glasgow, F. J. Osborn, R. L. Reiss, G. N. C. Swift and representatives of country towns. (Sponsors, TCPA.) OCTOBER 22-23

*Percy J. Waldram. Daylight Illumination in Factories and Workshops.* At 39, Victoria Street, S.W.1. 6.30 p.m. OCT. 24

*Professor C. H. Reilly. Citizen or Peasant.* At 1, Grosvenor Place, S.W.1. (Sponsor, TCPA.) OCTOBER 28

*F. R. Yerbury. Commercial Design To-day in Sweden.* At Royal Society, Burlington House, Piccadilly, W. *In the Chair:* Lord Sempill. Buffet lunch 2/6 from 12.45 to 1.30 p.m. Talk and discussion 1.30 to 2.30 p.m. NOVEMBER 3

*J. H. Forshaw, Architect to the London County Council. Town Planning and Health.* At Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. (Sponsor, Chadwick Trust.) 2.30 p.m. NOVEMBER 11

**PURLEY.** *When we Rebuild and Your Inheritance Exhibitions.* At the Central Library, Banstead Road. OCT. 14-18

**RHYL.** *TCPA Conference.* Speakers: Clough Williams-Ellis and W. A. Eden. 11 a.m. OCTOBER 16

**ROYAL LEAMINGTON SPA.** *E. H. Doubleday, Regional Officer for MOTCP. Town and Country Planning and Health.* At the Town Hall. (Sponsor, Royal Sanitary Institute.) 10.30 a.m. OCT. 16

**STOKE-ON-TRENT.** *When We Build Again Exhibition.* (Sponsor, TCPA, in conjunction with Cadbury Bros.) OCTOBER 18-23

*TCPA Conference.* Speakers: Dobson Chapman, Max Lock and Paul Cadbury. OCTOBER 23

**WAKEFIELD.** *Design in the Home Exhibition.* At the City Art Gallery. (Sponsor, CEMA.) OCT. 14-16

**WOLSTANTON, Stoke-on-Trent.** *Housing in Gr. Britain Exhibition.* (Sponsor, HC.) OCT. 18 to 30

**WINCHESTER.** *Your Inheritance Exhibition.* (Sponsor, HC.) OCT. 31 to Nov. 7

## NEWS

THURSDAY, OCTOBER 14, 1943  
No. 2542. VOL. 98

News .. .. .	263
Dr. Julian Huxley and the TVA ..	264
This Week's Leading Article ..	265
Astragal's Notes and Topics ..	266
Letters .. .. .	267
TVA Bridles Water-Power ..	268
Physical Planning: 11 .. ..	269
Prices: Fourteenth War-time List	274
Information Centre .. ..	278
Societies and Institutions ..	279

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.

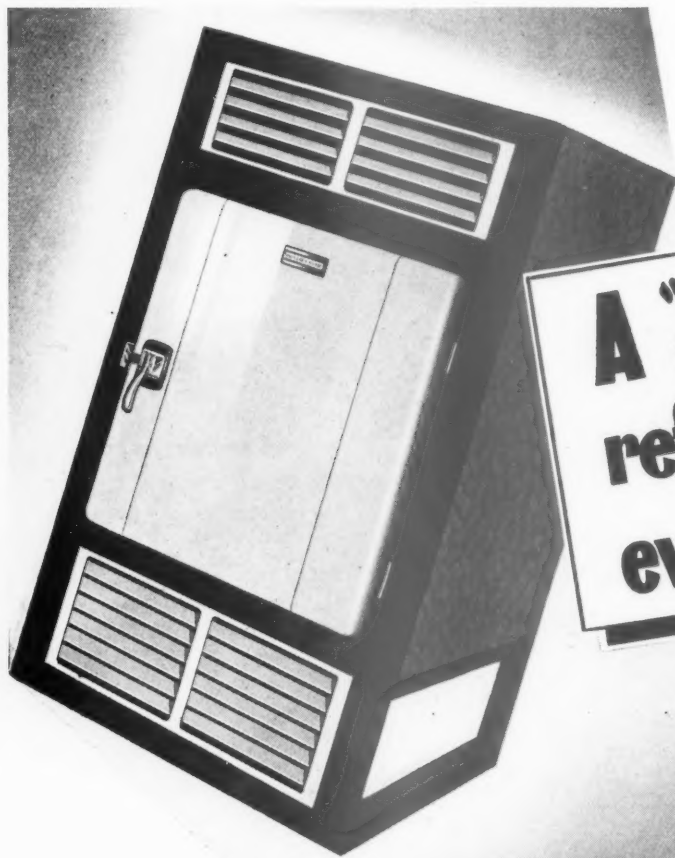
Any feature marked with more than two stars is very big building news indeed.

**Tenants have now been selected for THE BROWN WAY COTTAGES, at Hildenborough, Kent, the first two of the farm workers' cottages which were opened last month by Mr. Ernest Brown, the Minister of Health.**

**If a scheme which is to be placed before the Chancery Court is approved, the KNOLE ESTATE, KENT, WILL BECOME THE PROPERTY OF THE NATION. Lord Sackville and the National Trust announce that Lord Sackville and the trustees of the Knole Estate, Sevenoaks, have decided to make application to the Court for approval of a scheme under the National Trust Act, 1939.**

Under the scheme, if the Court approves, Knole and some 53 acres of its park will be handed over to the Trust for permanent preservation. With the property the owner will present endowment towards the upkeep of the property. Part of the house would be let to the Sackville family for private occupation. The rest would be in the full control of the National Trust for showing to the public, and Lord Sackville would leave the historic and valuable contents on loan in the house.

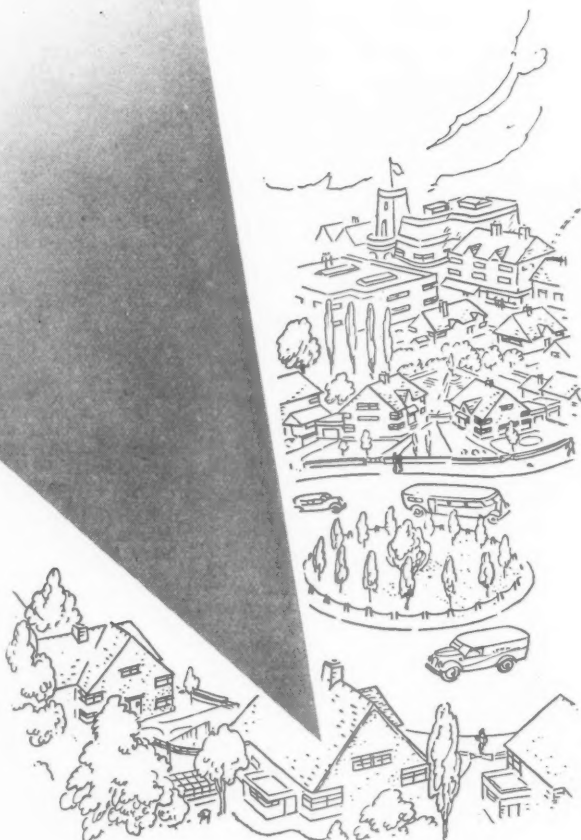
The Great Hall was built about 1460 by Bourchiar, Archbishop of Canterbury, who



A "built-in"  
refrigerator in  
every home

**For Tomorrow's Houses . . .**

The Model M.15 Electrolux builds happily into a kitchen fitment, and so simplifies the floor outline. It can be built-in at elbow height to form one unit with a ventilated cupboard underneath it for vegetables. Or, alternatively, it can go under the work-table since it is exactly the right height.



**ELECTROLUX LIMITED**

Works: LUTON, BEDFORDSHIRE Tel: LUTON 4020

## from AN ARCHITECT'S Commonplace Book

NEVER MIND THE MAYONNAISE [from TVA—Adventure in Planning, by Julian Huxley. (Architectural Press, 8s. 6d.)]. Mr. Wank, the chief architect of the TVA, has narrated how, at the outset, there was a good deal of mutual suspicion to be overcome between the architects and the engineers. "Engineers apparently accepted the architect for what he said he was: dispenser of divine revelation in the realm of aesthetics. But they also told him to chase himself if he ventured beyond. Small wonder the engineer felt bewildered when the slightly younger edition of the architect came back and said that he was no longer interested in columns and cornices, but that he would like to see how the engineer was making out on the disposition of the structure to its surroundings and of its component parts to each other. The matter was finally resolved, upon the mutual discovery that both were interested in good, honest, efficient structures, and never mind the mayonnaise."

had purchased Knoke four years previously from William, Lord Saye and Sele. The house was later occupied by Lord Leicester. When he gave up possession Queen Elizabeth presented it to her cousin, Lord Sackville. It has been the family's home ever since.

Middlesbrough is to have an ARCHITECT AS MAYOR. On November 9 Mr. R. Ridley Kitching, F.R.I.B.A., is to be elected Mayor for 1943-1944.

The Lord President of the Council has appointed Messrs. J. Benstead and E. Thornton to be members of the Advisory Council of the Privy Council for SCIENTIFIC AND INDUSTRIAL RESEARCH. Sir John Greenly retired from the Council on completion of his term of office on September 30. Mr. Benstead is the General Secretary of the National Union of Railwaymen. Mr. Thornton is the Secretary of the United Textile Factory Workers' Association.

Mr. George C. Robb has been APPOINTED COUNTY ARCHITECT OF STIRLINGSHIRE. Prior to the appointment he was deputy county housing architect, Lanarkshire.

No decision has yet been reached on the appointment of a TOWN PLANNING CONSULTANT FOR CROYDON.

The consultant is to be appointed to draw up a scheme for the post-war redevelopment of the borough on lines suggested by the Council; these are as follows: Mainly residential, with more shopping, cultural and entertainment facilities; an industrial area in the west and a new light industry in another part; a population of at least 250,000, "without undue resorts to flats." More schools, open spaces, allotments, and playing fields, and a sports arena; a bus station, parks for 2,000 cars, and a central block of buildings to include law courts and technical and arts colleges.



Mr. W. S. Morris at the PRACTICAL PLANNING Exhibition which opened last week at the Institution of Civil Engineers.

★ The Women's Institutes of Northamptonshire have promoted a COMPETITION FOR A PAIR OF COTTAGES for rural workers.

The assessor is Mr. Davy Braddell, F.R.I.B.A. First premium: will be 75 guineas; second premium, 50 guineas; and third premium, 30 guineas. Time for sending in is January 31, 1944. Full conditions can be obtained from the Hon. Mrs. Macdonald-Buchanan, Cottesbrooke Hall, Northampton.

MOW has just issued Economy Memorandum Number 5 (Revised) which supersedes E.M.5, page 28 of THE STANDARD OF WAR-TIME BUILDING, issued by the Ministry in May last.

All users of The Standard of War-time Building should obtain a copy of E.M.5 (Revised), dealing with Linseed Oil and Putty, from The Directorate of Building Programmes, Room 705, Ministry of Works, Lambeth Bridge House, London, S.E.1.

★ A scheme for TRAINING MEN FOR THE POST-WAR BUILDING INDUSTRY, in accordance with the proposals of the Government's White Paper,

has been recommended to the LCC by its Education Committee.

The Committee points out that the Council employs, particularly in the Heavy Rescue service, a large pool of building trades operatives and maintenance staffs, and recommends that training courses be instituted as and when occasion offers. The suggested courses would provide skilled men as instructors, partly-skilled men to qualify as skilled men, refresher courses for skilled men, and training labourers suitable to become skilled men. The first step would be the training of suitable craftsmen from those in the Council's service, including Civil Defence personnel.

Two hundred building trade volunteers from all parts of the country, who are working for MOW special repair service, insisted at Hull last Sunday that they be allowed to WORK EVERY SUNDAY from October 17 on bomb-damaged houses.

People are clamouring for houses, but we are reduced by stages to a 46-hour week, said Mr. J. C. Phipps, of London, their spokesman. We could do with the extra money a longer working week would give us, and we want to provide the people with houses, but red tape is holding us up.

Proposals for the RE-DEVELOPMENT OF MANCHESTER are contained in a report recently drawn up by the City Surveyor, Mr. R. Nicholas.

The Report says: The work of formulating proposals is full of complications; a vastly different and more complex matter than has been the case in the past. It goes very much deeper than the mere rebuilding of slum areas (whether they be areas of residential, commercial, or industrial buildings); the provision of new roads and road widenings, so urgently needed to prevent the strangulation of city life and to cope with a future substantial increase in traffic; the provision of open spaces and the sorting out of the present mixed building users into areas specifically devoted to each particular purpose. All these things can be accomplished without improving the present drabness and dreariness, at least for the majority of the inhabitants, of living in cities. There must be provided, if planning is to be really worth while, centres through which the life of the city can flow. Without these centres, and without their careful, correct, and understanding planning, living in cities will continue at its present low level of indifferent sprawl, with the majority of its inhabitants uninterested in its welfare.

The basic surveys so far completed include the preparation of drawings and diagrams



## Julian Huxley and the TVA

To some people the initials TVA are still meaningless. They stand for the Tennessee Valley Authority, of America, which has just completed an experiment—on a massive scale never before attempted in history—to promote the use of electric power in agriculture, the home and industry: an experiment in reforestation, scientific farming, industrial development, the formation of national parks, development of road and river transport, and the laying out of vast recreational areas. The core of the plan is a great series of works along the Tennessee River and its tributaries. This vast American democratic experiment in physical planning, carried out on a site about the size of England, is described for the first time in *TVA Adventure in Planning*, by Julian Huxley, the scientist, publicist and writer. Dr. Huxley knows the United States well, having lived there for a time as a young man and having been there repeatedly since. Though he has achieved distinction in various branches of biological research, he has never been content to remain merely the

pure scientist. He has done a good deal in the popularization of science, and has been prominent in the movements for making both the scientist and the general public more awake to the social implications of scientific discovery and to the possibilities of planning. In pursuance of these aims he helped in the establishment of PEP and the British Association's Division for the Social and International Relations of Science. While in charge of the Zoo, he introduced various innovations, such as the Children's Zoo, the Zoo Magazine and the series of Zoo films. He has acted as adviser or commentator in a number of other films, besides making one himself, has written a volume of verse and an important book on religion. He has travelled widely, from Arctic Spitsbergen to Equatorial Africa; his *Africa View* revealed his interest in the complex problems of the Dark Continent. Extracts from Dr. Huxley's lecture on the TVA, given recently at the Housing Centre, appear on page 282.

illustrating the user, age, height, and condition of all buildings throughout the city, other than two-storey development. All the major statutory mains throughout the area have been recorded and plotted so that they may be taken into account when considering planning proposals. A time plan has been prepared indicating the estimated period which will elapse before buildings, in particular in the commercial area, will normally be demolished and replaced. A survey of industry, especially in certain areas where it is thought desirable it should be removed, has been begun.

*The British Colour Council is to publish a COLOUR DICTIONARY FOR INTERIOR DECORATIONS. Each colour is to be standardized and have its own name.*

The Council is reducing the number of colours to 220 basic shades. The dictionary will carry their number, name and an illustration of the actual colour.

*In a report to Viscount Simon, the Lord Chancellor, the Land Transfer Committee recommends the COMPULSORY REGISTRATION OF LAND SALES and purchases in areas most likely to be developed after the war.*

The committee advises that registration should be in stages starting with areas likely to be first developed. The committee was set up under the chairmanship of Lord Rushcliffe to study the suggestion of the Scott Report on land utilization in rural areas that registration of title should be made compulsory over the whole of England and Wales.

*In the furniture trade there are men doing the SAME JOB BUT HAVING DIFFERENT DEFERMENT AGES.*

Joiners and cabinetmakers have hitherto both been eligible for deferment at 30. Under the new scheme joiners born in or before 1910 may be deferred, while the year for cabinetmakers is 1905. Representations may be made to MOLNS. Men doing exactly the same work now have different ages for deferment, said a furniture trade official. Extension of deferment age for cabinetmakers may seriously interfere with Utility furniture production.

*In the new St. George's Chapel at Biggin Hill, Kent, an altar reredos, designed by Flying Officer Wylton Todd, A.R.I.B.A., has been erected as a MEMORIAL TO FIGHTER PILOTS of the sector killed or reported missing during the Battle of Britain.*

The names of the dead or missing pilots, over two hundred, will be embossed in gold on the altar and inscribed by hand in a book of remembrance.

## ADVENTURE IN PLANNING

**T**HIS week an important publication appears on the book-stalls—the first comprehensive account to be published in this country of the Tennessee Valley Authority.\* In this illustrated book, Dr. Julian Huxley describes the remarkable achievements carried out by the TVA in the short space of the ten years since the Tennessee Valley Authority Act, one of the earliest New Deal measures, was passed in May 1933. The book is important because it provides a very able account of the outstanding example of successful, decentralised, democratic state planning—"the first large-scale regional planning organization, which operated, as far as possible, on the democratic principles of persuasion, consent and participation."

Before the TVA appeared on the scene, great areas of the vast tract of land of the Tennessee Valley—nearly as large as England and Wales—were rapidly becoming a man-made desert. Soil erosion was one of the chief reasons why the Tennessee district was singled out for the great TVA experiment, but it was not the only reason. There was the great Government-built Muscle Shoals nitrate plant in the area which, vital to war production, had to be maintained in good working order. Moreover, control of the Tennessee River was essential if disastrous floods on the Mississippi were to be prevented. This flood-control could also bring improved navigation and, through hydro-electric development, could provide the power necessary to revitalise the whole backward region of the Valley. The water-power development in the nine great dams on the main river and the further eleven on the tributaries is the outstanding achievement of the TVA. It is a greater engineering feat than the Panama Canal, and will eventually produce over two and a half million kilowatts in power.

The range of activities of the TVA, apart from dam construction and the development of navigation, flood-control and power-production, is immense. It includes afforestation, chemical engineering, anti-erosion measures, improvement of agriculture and fisheries, recreation, housing and town-planning, health measures especially in malaria control, building work of every sort, road building and transport, wild life conservation and national park maintenance, the encouragement of co-operatives and rural industries, electricity distribution, education, publicity, personnel training and research and experiment of all kinds—in short, as the terms of reference of the TVA Act broadly express it, the control board is "authorised and directed to make studies, experiments and demonstrations to promote the use of electric power for agriculture, domestic and industrial purposes, and instructed that it may co-operate with the widest possible variety of other agencies from State and local governments to educational and research institutions, so as to ensure the application of electric

\* TVA: Adventure in Planning. By Julian Huxley, with a Foreword by the Hon. John G. Winant, Ambassador of the United States, and notes on the illustrations by Gordon and Flora Stephenson. Architectural Press. Price 8s. 6d. net.

power to the fuller and better balanced development of the resources of the region."

In its architecture the TVA has had an important cultural effect throughout the world. Those who see the magnificent dams and their attendant buildings will wonder at the strange irrationality that finds a distinction and even a conflict between engineering and architecture. Says Dr. Huxley: "The separation between purely functional engineers' building and purely imitative or superficial architects' building, which characterises the past hundred and fifty years, has been left behind by the TVA. There is conscious collaboration between the architect and the engineer, and the great dams are planned from the outset as works of art as well as utilitarian constructions."

As the American Ambassador writes in a foreword to Dr. Huxley's book, the work of the TVA is "a unique experiment in government, as well as an engineering feat of tremendous significance."



*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

## LAST WEEK'S BIG NEWS

At last, so Mr. W. S. Morrison tells us, we are to know the "deliberate findings" of the Uthwatt Report. "These include," he stated categorically last week, "the proposals for giving effect to the two pledges already given—that they (the Government) accept the principle of the public acquisition of all land in reconstruction areas, and the principle that, in order to prevent post-war reconstruction from being prejudiced by speculation, the compensation payable for the public acquisition or control of land should not exceed the standard of

values at March 31, 1939. . . . These pledges mean, that local authorities can go ahead with the making of plans, secure in the knowledge that they will have possession of the land in these areas."

Nice work. But is this knowledge sufficient to produce adequate local plans? Is it possible to plan locally except in relation to a regional survey, and do local authorities yet possess proper and adequate personnel to produce effective local planning? The answer is obviously no. I have some knowledge of the proposed plans for my own district. From what I can gather, they appear to me to be, frankly, horrific.

## ICE EXHIBITION

Now it's the turn of the engineers to show their planning paces. The Practical Planning Exhibition organized jointly by the Institutions of Civil Engineers and of Municipal and County Engineers, I found, in spite of a display, which, though lacking continuity and saying little that is new, is lively, not so much disappointing as depressing.

I did not look at the show as an architect out to compete with engineers in reconstruction, because obviously the plea which Mr. Morrison made in his opening speech for co-operation between planners, engineers, architects, landscape specialists and the rest is a reasonable

one. I looked at it as a simple layman asking the question, "Very interesting, but what's it for?" The engineers have a clear answer, and that is the cause of my depression. The answer is—not primarily for human happiness, except incidentally through the provision (at a price) of a refrigerator and a kitchen cupboard or two, but—for *Export Markets*. That means bluntly—stated deliberately and without intentional drama—planning, not for life, but for death.

★

If the primary object of planning is to provide bigger exports and that lunatic notion known as a "favourable balance of trade" by which a nation becomes, by some mysterious process, more prosperous the more it sends out of the country and the less it takes in, then there is one logical method of planning and one only. It is to build our towns below the surface of the earth where they are permanently bomb-proof. This will be essential if the international scramble for markets, already the chief cause of two world wars, not to mention Naziism, is to start all over again when this lot is over. What's wrong with an effective home market? Practical planning, maybe. Heaven save us from practical exporters.

## MAN-MADE DESERTS

Even a superficial investigation into the modern world-wide phenomenon of soil erosion is a rather terrifying experience. To those who dare face it, I recommend Messrs. Jacks and Whyte's *The Rape of the Earth—a World Survey of Soil Erosion*, published by Faber.

★

It is not generally realized that human life depends very largely on the top vegetable soil which covers the earth's surface. "The depth is sometimes only a few inches, occasionally several feet," writes Whyte, "but within it lies the whole capacity of the earth to produce life. Below that thin layer comprising the delicate organism known as soil is a planet as lifeless as the moon. . . . As the result solely of human mismanagement, the soils upon which men have attempted to found new civilizations are disappearing, washed

away by water and blown away by wind." To-day, we are told, destruction of the earth's thin living cover is proceeding at a rate and on a scale unparalleled in history. Already probably nearly a million square miles of new desert have been formed and a far larger area is approaching desert conditions. In the USA, the problem of erosion has become a dominant factor in national life. In South Africa, according to General Smuts, "erosion is the biggest problem confronting the country, bigger than any politics."

From Australia to Africa, from China to the States, in almost every inhabited country, man-induced erosion is taking place. The Yellow River, aptly named, for it is coloured with the yellow subsoil that still pours into it, transports an annual load of 2,500 million tons of soil to the sea. The Tennessee River, within living memory once a clear blue stream, now flows turbidly into the Ohio, thence into the Mississippi, which finally carries millions of tons of life-giving soil to waste in the ocean.

"I had taken the pea-soup appearance of so many American rivers for a fact of nature," writes Dr. Huxley in *TVA—Adventure in Planning*, just published by the Architectural Press. "The realization that it was a recent man-made phenomenon was staggering. Here, under my eyes, was the basic productivity being stripped from a vast area and hurried

along to sterile waste in the sea. I also saw outcrops of bare rock which three generations back had been covered with a rich soil over a yard in depth . . . the amount of soil annually washed or blown out of the fields of the United States is conservatively estimated at 3,000 million tons."

Taken in its early stages, soil erosion is apparently not difficult to check, but in advanced stages, when it threatens the entire social structure, its control is extremely difficult, the restoration of fertility being enormously costly in time, labour and material. The authors of *The Rape of the Earth* ascribe the downfall of several former civilizations, including that of the Roman Empire, chiefly to soil exhaustion and erosion. What about us? We can at least take heart that the urgency of the problem of halting soil erosion is now fully realized. In the USA and in Russia the problem is being tackled in a big way through state intervention. The TVA experiment is an example of how the problem can be coped with effectively, restoration of soil fertility being one of TVA's chief objectives.

Those who live in north-western Europe, however, need not worry, for here is one spot at least where, owing to the mild, maritime climate, soil will not seriously erode away, even under the worst mismanagement.

#### ASTRAGAL



A hillside in the Tennessee Valley, devastated by soil erosion. It is one of the primary objects of the TVA to restore top soil to the Valley. See Astragal's note.



## LETTERS

(C. R. Fowkes.

M. Colt.

Arthur Welford, A.R.I.B.A.

### Experimental House

SIR,—I refer to the Experimental House in Kent, shown in the JOURNAL for September 23. Under the heading Construction, it is stated that "most of the sections are standard, about 25 per cent. only being specially made." This may mean:

- a That 75 per cent. of the sections are similar, the remainder being of various types.
- b That 75 per cent. of the sections were pre-formed, the remainder being formed at the site.
- c That 75 per cent. of the sections conform to some recognized or proprietary standard, the remainder being specially made.

Now that we are all taking a more lively interest in such matters, description of constructional processes to be of value need more careful definition.

London

C. R. FOWKES

We have submitted Mr. Fowkes's letter to Mr. Colt, designer of the house in question, who replies as follows:

SIR,—I hope the following explanation will clear up any ambiguity in the description of my house at Pluckley as pointed out by Mr. Fowkes.

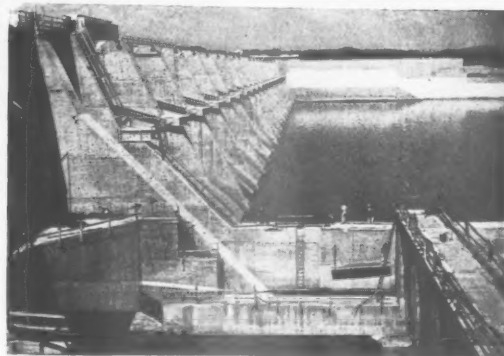
My cottage was entirely prefabricated in a factory and the construction generally adheres to the methods of a proprietary article, experimental details excepted. About one-quarter of the sections was made up specially in the works to make good the rearrangement necessitated by my design. Most of these still adhered to the same method of construction. However, out of these a few special details were carried out for me such as the front door surround, landing window, oriel window and staircase. These were designed to fit into the standard construction.

Actually the house as built was made up from an old house of a design which did not suit the requirements. It was a standard proprietary article. Some of the sections needed very little alteration but the house was not of such standard construction as is associated with Swedish houses. The whole house, however, was entirely prefabricated and merely assembled on the site with the

## T.V.A. BRIDLES WATER - POWER



Illustrations from TVA—Adventure in Planning, by Julian Huxley (Architectural Press). Hydro-electric development is the outstanding feature of the great planning achievement of the Tennessee Valley Authority. Above, the huge aluminium-covered door at Norris power house, designed to admit large machines. Right, three of the nine dams on the main river; from top to bottom, Norris, Pickwick and Watts Bar dams. See this week's leading article and the lecture by Dr. Huxley on page 282.



result that the house, after the foundations were complete, was roofed in and weather-proof in ten days. That is to say, eight-and-a-half working days. This was with a gang of only three men, no particular effort at "stunt" speed building being attempted.

Much propaganda has been made for all sorts of prefabricated buildings in systems which have not been tried before. Sectional timber housing is one of the simplest and best, as witness the army huts of both wars which stand up well although not architecturally very satisfying. What I have proved in the house at Pluckley is that a proprietary article can be easily adapted to an architect's individual whims without heavy expense so that the character is not subjugated to a standard looking product. I think many architects are nervous of trying this method since they imagine their designs might look quite different when they have had to make small compromises. After all, in small houses well designed standard details of construction should satisfy most architects just as we are satisfied with ready-made baths, door furniture, etc. In *Thorne Roughets* all mouldings, etc., were of the simplest and yet were the standard as used by the builders in numbers of other houses; the same applied to the window weatherings and general construction,

except of course those details previously explained as experimental. The landing window, door case and oriel window were specially made up from my details and easily incorporated in the structure. Also the loggia and staircase. I know of several other architects who have done the same thing with the firm in question and I understand the result was entirely satisfactory.

Ashford

M. COLT

### Housing Frustration

SIR.—It is said that four million new houses will be wanted in the shortest possible time after the war.

Well, what is to prevent it?

Nothing material, having regard to our new and colossal output potential. But financially, ah! that is a different matter. We shall be told—are being told—that there will not be enough money because of all the war debts that have been knocked up. Note that the wages of blood, sweat and tears is Debt.

But shall we really be too poor? Not a bit of it; we shall be richer than before in material things, and money consists mainly of figures in books at banks which ought to reflect facts and not the reverse. It is costless credit in fact, wrongly claimed by its creators and

lenders as theirs, but in reality it is common property; a means of getting things done and, if properly accredited and managed, no debt at all.

Work is paid for in the doing. Its cost is its contemporary consumption.

As an example of frustration by finance the case of the 3,000 new cottages for farm workers will serve. These are costing—in all-in first cost—about £1,000 each. The money to finance their building is being created within the banking system by book entry, at interest and on mortgage of local rates.

These "loans" of costless book figures will cost the rate taxpayer from two-and-a-half to three times first cost of the cottages in interest and repayment of capital over the period of, say, the forty years which the loans will run. The last cost to the rate taxpayers of each cottage will be from £2,500 to £3,000.

This is frustration by artificial debt. If we wish to avoid it we must decide now that beneficial ownership of all new-created money lies with the public. Further, that public credit for public purposes cannot possibly bear interest against the public.

If we really want four million houses we can have them; but not under the control of orthodox finance.

Woodbridge.

ARTHUR WELFORD

# PHYSICAL PLANNING

## 11

## index

### The bogles

7. Economics  
F. Schumacher
8. Land Ownership  
Part I. E. S. Watkins
9. Land Ownership  
Part II. E. S. Watkins
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

*J. B. Wikeley, whose synopsis of and commentary on the Town and Country Planning (Interim Development) Act 1943 is published this week, is a barrister-at-law and is at present engineer to the Chesterfield Rural District Council, and a registered architect. His contribution puts the latest piece of planning legislation in its true perspective and along with last week's summaries completes our review of the present position. Next week sees the start of a new section on the technical problems before planners.*

Towards the end of April "the little sprat of a Bill," as it was called, dealing with Interim Development, was introduced to a House of Commons impatient for the harpooning of whales. So minor did it seem that clauses, which in 1932 would have created a storm of opposition, were accepted without any protests except those on the score of insufficiency; and the Bill actually emerged with a new clause (Section 8) strengthening the protection of trees and woodlands.

The Bill received the Royal Assent on July 22, so that now the relevant legislation on planning matters is contained in the Acts of 1932 and 1943. These Acts between them take planning control to the wildest as well as to the most populated parts of England and Wales—but not, be it noted, of Scotland—and give what may be regarded as dangerous powers to prevent undesirable development.

The word dangerous is used advisedly, because so much depends on two conditions which it is not in the power of these Acts to secure: first, the intelligent determination of what is "undesirable"; and second, the implementation of these negative controls by a positive planning policy. The first condition relies on the personnel, official or consultative, who will in fact wield the powers. This includes the Minister and his advisers (since the Minister's powers are materially increased by the 1943 Act), and both the officials and the committees of local authorities, who form the first sieve through which the schemes and projects of individual developers must pass. The importance of this is unlikely to be recognized during the present phase of the war, when new buildings and alterations of use are comparatively rare. But in the first flood of reconstruction proposals, and more especially in the period when rebuilding gets under way, control will need to be excellently administered if it is to become neither unduly restrictive nor merely slipshod. As to the second condition, the framers of this Act clearly intended it to be an effective safeguard against speculation and panic due to unconsidered building proposals, pending the introduction of a more comprehensive Bill dealing with the powers of planning authorities to acquire land and to promote development that is urgently needed. If this Interim Development Act is used to good purpose by planning authorities, this object will be attained; but they will need not only good planners, but more extensive powers, to make its use really effective.

The details of the 1943 Act are simple. Every authority becomes a planning authority, or relinquishes its powers to a joint committee or a county council, for the purpose. The applicant for permission to build, to change the use of his land or buildings, to tip rubbish (or even to rebuild for the same purpose as before), submits his case to the planning authority in the normal way. The authority is asked, but not compelled, to deal with the application promptly, but the onus is on the developer to show that the proposal is a reasonable one and that he actually intends to build. He can appeal against decision; but inasmuch as the Minister is now responsible for the wider aspects of planning and must see that national as well as local considerations are borne in mind, he also can weigh up the merits of a case, and he may support or reverse the local authority's decision. This Section 6 is the second step towards national planning (the first being the setting up of the Ministry under the "Minister of Town and Country Planning Act, 1943"), and if local authorities grumble at it, the Minister may well reply that it is only a little one. Nevertheless, a new conception of planning is slowly emerging; and it is doubtful if we shall ever again see statutory schemes of the kind that were laid before Parliament under the 1932 Act. The intention is faintly, but clearly perceptible; that planning is a continuing and a flexible process; and that control should be firm and equitable, but based on a much broader interpretation of the public interest.

*The Town and Country Planning (Interim Development) Act, 1943, received the Royal Assent on 22nd July, 1943. The Act does not materially differ from the Bill as printed, apart from the addition of two sections: Section 8 as to interim protection of trees and woodlands and Section 12, being special provisions as to London and the addition of a Sub-Section 7 to Section 5 which refers to the deposit of waste materials. These additional Sections are of considerable importance. The objects of the Act as set out in the preamble are primarily: (1) to bring under planning control land which is not subject to a Scheme or resolution under The Town and Country Planning Act, 1932, and (2) to secure more effective control of interim development. It is to be noted that the Act applies solely to "the interim development period," that is, the period between the taking effect of the resolution to prepare a Scheme and the date on which the Scheme becomes operative.*

The Act brings all land under planning control: for the present, effective planning will be mainly in the interim period before a Scheme is operative, and the Act strengthens control during that period.

## TOWN AND COUNTRY PLANNING (INTERIM DEVELOPMENT) ACT, 1943

by J. B. Wikely, M. Eng., A.M. Inst. C.E., Barrister-at-Law.

### section one

On 22nd October, 1943, all land without exception is deemed to be under planning control, either interim or by operative scheme.

By SECTION 1, at the expiration of three months from the commencement of the Act, i.e. on the 22nd October, 1943, all land which is not already the subject of a Scheme or of a resolution to prepare a Scheme under the principal Act, is to be subject to a resolution which shall be deemed to have been passed by the appropriate local authority and to have been approved by the Minister. This means that the whole of England and Wales will, on the date referred to, be subject to planning control either under an operative Scheme, or under the combined effect of the 1932 and 1943 Acts so far as they affect interim development control. The effect of sub-section 1 will be welcomed by all who are interested in town planning and is undoubtedly a forward step of prime importance. Nor perhaps will the proviso to the sub-section cause surprise, the Minister being empowered thereunder by Order to direct that Section 1 of the Act shall have effect in relation to any land specified in his Order substituting for the local authority a reference to some other local authority or county council or joint committee. The Order must, however, be made before the 22nd October, 1943.

SUB-SECTION 2 makes it unnecessary to publish or serve notice of a resolution which takes effect by virtue of this Act.

### section two

- (1) Repeals automatic permissions for development as given in Section 10 of the 1932 Act;
- (2) Allows the IDA\* to postpone their decision if the development is not to be carried out at once;
- (3) Automatic permission, in default of a decision by the IDA after two months, is now turned into automatic refusal;
- (5) But the IDA must deal promptly with applications, and give reasons for their decisions.

SECTION 2 of the Act relates to the refusal and postponement of applications for interim development and is one which will no doubt give rise to some controversy and which, unless administered by interim development authorities in the true spirit of the legislation, will cause no little resentment amongst developers and land-owners.

SUB-SECTION 1 means that the proviso to Section 10 (3) of the principal Act is repealed and consequently there is no requirement upon the local authority to grant, for instance, permission for the erection of a new building on the site of an existing building, consent for which could previously be demanded by right.

SUB-SECTION 2 introduces a new procedure by which the Interim Development Authority may, unless the applicant shows to their satisfaction that the proposed development would be carried out immediately if his application were granted, serve a notice of postponement by which the consideration of any interim development application may be postponed either generally or during a specified period. The applicant may, however, appeal within 28 days to a court of summary jurisdiction against any such notice and, further, if it appears to the Minister that there are exceptional reasons requiring the immediate determination of any interim development application, he may give directions to the authority to determine the application and, where necessary, the Minister may by Order cancel any notice of postponement.

SUB-SECTION 3, which it appears has been subject to little effective criticism during the passage of the Bill through Parliament, will be an everlasting delight to the procrastinating local authority. It will be remembered that under Section 10 (3) of the principal Act, where an application for permission to develop land is made under an Interim Development Order, such application is deemed to have been granted unless within two months the interim development authority have given notice to the applicant that they have decided to the contrary and stated their reasons for so doing. This presumption is reversed and an application is now deemed to have been refused at the expiration of two months from the date of its receipt unless either: (a) notice has been given to the applicant that the application has been determined by the authority or has been referred to the Minister for decision, or (b) the consideration has been postponed by notice of postponement (*supra*).

It is further provided that where an Authority has served a notice of postponement and specified a period of postponement, the application shall be deemed to have been refused, unless within two months after the expiration of such period notice of determination has been given by the Authority.

SUB-SECTION 5, which has been added since the printing of the Bill, specifies that it is the duty of an interim development authority to consider applications with reasonable despatch and to give notice

\*The letters IDA are an abbreviation of Interim Development Authority.

to the applicant of their decision, and where application is refused or granted subject to conditions, to give a statement of the reason for their decision. This clause has probably been inserted in deference to the criticisms of those who see in this section the danger of undue delay in dealing with applications by those authorities whose policy has in the past appeared to have been vacillating or merely negative. To the majority of interim development authorities who efficiently administer their planning Schemes, such a reminder of their duty will hardly be necessary, and it is sincerely to be hoped that those authorities who have not previously administered planning schemes will have full regard to their duties and not treat the words of this sub-section as merely precatory.

### section three

- (1) Allows for temporary permissions to be given, which carry no rights for building to be regarded as "existing";
- (2) But if the scheme becomes operative meanwhile, the buildings can serve their term and may be then removed without compensation;
- (4) Temporary permissions may be extended by the IDA when applied to.

SECTION 3 refers to the granting of temporary permissions for interim development and defines their effect. It is thought that the practice of dealing with applications for temporary consent has varied considerably according to the interim development authority dealing with the application. This section will tend to resolve some doubts which have existed with respect to the granting of temporary permissions.

SUB-SECTION 1 enacts that a building, work or use shall not be deemed to be an existing building, existing work or existing use, as the case may be, by reason only of the grant of a permission for a limited period only. The effect of this is that the building does not secure protection as an "existing building" under the principal Act.

If, however, a planning scheme comes into operation before the expiration of the period for which a particular permission has been given, then so far as the service of notices and the taking of action to remove the building is concerned, the pertinent provisions of the principal Act apply as to an existing building. In calculating any compensation which is payable as the result of any such action, regard is to be had to the power of the responsible authority to take such action, without the necessity of the payment of compensation, after the expiration of the period for which the temporary permission was granted.

Under SUB-SECTION 4, an interim development authority may extend the period for which the temporary permission has been granted on the application of the interested person at any time before the expiration thereof, and the owner has the right of appeal to the Minister as in the case of original applications.

In some cases, a permission is granted subject to a condition or an agreement for securing the subsequent removal of a building although without reference to a specified period of time. By SUB-SECTION 5 such a permission is deemed to have been granted for a limited period only.

### section four

Allows the IDA to change its mind as its planning scheme nears completion:

- (1) By revoking or modifying permissions before the Scheme becomes operative;
- (2) By authorising the Minister to take a hand;
- (3) And to send an inspector to hear appeals from interested parties;
- (4) And by allowing the IDA to compensate an owner or agree to purchase.

SECTION 4 is a section of the utmost importance and refers to the revocation and modification of permissions for interim development. Such revocations or modifications must be made before a Scheme comes into operation and are made by an order of the local authority with the consent of the Minister. The authority must be satisfied that it is expedient, having regard to the provisions of the Scheme, that the development for which permission was previously granted should not be carried out or completed, or that it should not be carried out or completed to the extent or in the manner allowed by the permission.

SUB-SECTION 2 authorises the Minister to give directions to interim development authorities requiring them to submit to him for his consent an order for the revocation or modification of any specified permission, and if such direction is not complied with the Minister may himself make the order on behalf of the authority.

The interim development authority is required to serve notices on the owner and occupier of the building or land affected, and on any other person who in their opinion will be affected by the order. There is a right of appeal by the interested persons to the Minister who must afford them an opportunity of appearing before and being heard, normally by an Inspector at a Public Inquiry.

By SUB-SECTION 4, the authority is permitted to pay compensation to any person whose property is injuriously affected by the revocation or modification of a permission on the same basis as might have been made under the principal Act if a fresh application for such permission had been made; and the provisions of the principal Act, which enable an applicant to require his land to be purchased in certain cases and those which provide for compensation for abortive expenditure for the purpose of complying with conditions confirmed or imposed by the Minister on appeal, are made applicable. (As to abortive expenditure incurred before the making of the order see Section 7 *infra*).

This is a useful provision as in the most carefully prepared scheme conditions may undergo some radical change and thereby render undesirable development for which an interim consent has been given.

### section five

Gives the IDA strong powers to prevent development without permission:

- (1) By allowing them to pull down a building, and prohibit or reinstate the use of land, where mere alteration is impracticable;
- (3) And to have their powers enforced by the Minister's direction;
- (4) and (5) Fines may be imposed, and expenses summarily recovered by the IDA;

Perhaps one of the greatest factors militating against practical planning since 1932 has been the lack of effective sanctions against persons developing or putting land to a use contrary to the provisions of a scheme. Previous to the commencement of this Act an owner could develop land without a permission, provided that he complied with the relevant Acts and byelaws, although in so doing he ran the risk of having his building pulled down or altered without compensation when the scheme came into operation. Although a strong case can be made against the power to impose penalties before a scheme is operative, the lack of this power has been a serious handicap to planning authorities. SECTION 5 gives to such authorities an effective answer to their pleas.

Under the section, if any development of land is carried out after the 22nd July, 1943 (or the 22nd October, 1943, where a resolution takes effect under the Act), otherwise than in accordance with the terms of the interim development order or of a permission granted thereunder, the interim development authority, if it is necessary or expedient so to do having regard to the provisions proposed to be included in the scheme, may:

- (a) remove or pull down any building or work so erected;

(7) The tipping of waste is included in this control.

(b) prohibit, by order, the use of land which is being used otherwise than in accordance with the permission and, where necessary, reinstate the land.

But if it is reasonably practicable by means of alterations or adaptations to bring the building or work into compliance with any permission the authority must, instead of removing or pulling down the building or work, so alter, or adapt it.

The procedure as to the service of notices in relation to any action proposed to be taken under this section is set out in the First Schedule to the Act. A person served with a notice may appeal within 28 days to a court of summary jurisdiction which, if not satisfied that the interim development authority is entitled to take the proposed action on the grounds specified in the notice, must allow the appeal.

By SUB-SECTION 3, the Minister is empowered to give general or specific directions for controlling the exercise by interim development authorities of their powers under this section, such directions being enforceable by order of mandamus.

The expenses reasonably incurred in taking action under this section may be recovered as a civil debt from the person carrying out the development.

The imposition of pecuniary penalties is provided for in SUB-SECTION 5 against a person using land or buildings in a manner prohibited by an order made under this section, i.e. by the interim development authority under (b) supra or by the justices. There is a maximum fine of fifty pounds on summary conviction and thereafter a maximum fine of twenty pounds a day for the continuing offence.

SUB-SECTION 7 has been added, and states that the use of any land for the deposit of waste materials or refuse shall be deemed to constitute development of the land even if comprised in a site already used for the purpose if the effect of the further use is to extend the superficial area.

The deposit of waste materials appears to be "development" within the meaning of the principal Act and certainly a scheme may deal with the prohibition, regulation and control of such deposits (Second Schedule). The effect of this sub-section may, however, tend to prevent further spoliation of the countryside by spoil tips and will be followed with interest. With the fullest regard to the requirements of industry, it is submitted that tipping in some parts of the countryside should be prohibited and that wherever it is to be allowed conditions should be imposed as to contour and soiling or planting.

## section six

Gives the Minister overriding powers of decision, of hearing specific cases, of requiring information from the IDA, and of requiring the IDA to consult with other authorities.

Some apprehension will no doubt be felt by those jealous of local autonomy by the provisions of SECTION 6 of the Act but, as stated in Circular 2 of the Ministry of Town and Country Planning, "it is essential that these schemes should be viewed in the perspective of wider requirements. . . . His (the Minister's) object in the exercise of these powers will be to ensure, first, that suitable provision for matters of other than local importance is made in local schemes and, secondly, that no Planning Authority, by failing to make use of its planning powers, or by failing to co-operate with its neighbours, prejudices the interest either of its own district or of any adjoining area."

By this section the Minister may, if it appears to him expedient "having regard to considerations affecting the public interest whether generally or in the locality concerned" direct that any interim development application, or any class of such application, be referred to him for decision. Before dealing with an application so referred, the Minister, if desired either by the authority or the applicant, is to afford them an opportunity of being heard.

The Minister is further given power to require interim development authorities to furnish him with such information as may be necessary to exercise his functions under this section.

Provision may also be made by an interim development order for requiring interim development authorities before dealing with applications of any class or generally, to consult with such authorities as may be specified in the order.

Where there is an appeal to the Minister in respect of an interim development application, he may reverse or vary any part of the decision of the authority whether such part is the subject of the appeal or not.

## section seven

Lays down the rules for paying compensation if claimed within 12 months for work begun before control was imposed, or in consequence of permission being revoked.

SECTION 7 provides for compensation to owners for abortive expenditure where development lawfully begun cannot be completed because of the refusal or revocation of an interim development application. The discretionary power of the authority voluntarily to award compensation under Section 10 (4) of the principal Act is preserved.

Compensation under Section 7 may arise :

- (a) where work has been begun or contracted for before the land became subject to a planning scheme ; or
- (b) where the work has been begun under the protection of a permission revoked under Section 4.

As respects (a), if the expenditure or liability is incurred before the 22nd July, 1943, where a resolution was in force at that date, or before a resolution takes effect if after that date (which at the latest will be the 22nd October, 1943), the person incurring the expenditure is entitled to recover an amount equal to the expenditure so incurred or to any sum reasonably paid in discharge of his liability under his contract accruing in consequence of the abandonment of the work.

In respect of (b), where expenditure or contractual liability has been incurred before the issue of an order modifying or revoking a permission whereby work is rendered abortive, a like right to compensation arises.

The cost of the preparation of plans may be included but, apart from this, no compensation is payable in respect of work carried out under (b) before the date on which the permission was granted.

A claim for compensation is barred twelve months after the determination of the application or, as the case may be, the date of the order revoking or modifying the permission.

**section eight**

Allows the IDA to make "interim preservation orders" to prevent wilful destruction of woodlands, and secure their replanting. The Minister must approve; but orders cannot bind government departments acting under Emergency Powers.

Although, under the principal Act, schemes could provide for the preservation of trees an interim development authority had no power to compel their preservation. The Bill did not meet the need and this section was added. Now, the authority, having regard to any provision to be inserted in the scheme for the preservation of trees or woodlands, may, if expedient, make an "interim preservation order" with respect to trees, groups of trees or woodland areas.

Such order may make provision for:

- (a) prohibiting felling, topping, lopping or destruction of trees except by consent;
- (b) securing the replanting of an area felled by permission; and
- (c) the imposition of pecuniary penalties in respect of contraventions of the order.

An interim preservation order does not take effect until approved by the Minister, who must be satisfied as to provisions therein included for appeals by aggrieved persons to the Minister, and for the making of contributions towards damage suffered by any person in consequence of the refusal of a consent required under the order or the imposition of conditions.

SUB-SECTION 3 requires the Minister to make regulations with respect to the submission and approval of interim preservation orders. Such regulations have already been made (The Town and Country Planning Additional Regulations, 1943) and are now in force. They relate to the deposit of maps, the giving of notices and the lodging of objections.

Compensation payable under the principal Act in respect of injurious affection of property is extended to include compensation for any additional injurious affection of the property as the result of an interim preservation order.

Operations authorised by government departments under the emergency legislature are excluded from the effect of this section.

**section nine**

Permits a Joint Committee (or sub-committee nominated by them) to be the IDA. Joint Committees may be constituted by the Minister on his own initiative.

An interim development order may constitute a joint committee the interim development authority, and a joint committee may delegate to any sub-committee properly appointed any of their functions with respect to interim development.

Under the principal Act the Minister may constitute a joint committee at the request of any one or more of several local authorities. This is amended by SUB-SECTION 3 and such request is no longer necessary.

Land acquired by a joint committee being an interim development authority is to be vested in the local authority for the district in which the land is situated and is held in trust for the joint committee until the scheme comes into operation and thereafter is to be held as may be provided in the scheme.

**sections ten to thirteen**

Requires the Minister's approval for restrictive agreements with owners.

By SECTION 10, an agreement under Section 34 of the principal Act restricting the use of land is not to have effect until approved by the Minister. As the Minister is able to amend the provisions in a scheme so his consent is made necessary to agreements which may have the effect of excluding land from the provisions of the scheme.

Gives the Minister power to revoke subsequent orders.

SECTION 11 gives the Minister with retrospective effect power to vary or revoke an order made under either the 1932 or the 1943 Acts. Sub-section 2 provides, for what it is worth, for the laying before Parliament of any interim development order made after the commencement of the Act.

Brings Metropolitan Boroughs into consultation where the IDA is the LCC.

SECTION 12 is new and relates to London. Notice of interim development applications made to the London County Council and referred to the Minister for decision shall be given to the metropolitan borough council on reference to the Minister if the application is one of which notice is required by the principal Act.

Includes County Councils as local authorities: as in the 1932 Act, County Districts may relinquish their powers to them.

SECTION 13 widens the construction of the principal Act in certain respects. The term "local authority" is to include any county council by whom a resolution is deemed to be passed by virtue of this Act and "interim development authority" includes a joint committee being an interim development authority as defined by this Act.

Defines terms; such as IDA.

Certain provisions of the principal Act are now to be construed as including references to this Act, e.g. the relinquishing by councils of county districts of their powers under the Acts to the county council.

Quotes as a short title, "The Town and Country Planning Acts 1932 and 1943"; and excludes Scotland and Northern Ireland.

This Act is a comparatively short one of one fifteen sections but is of particular importance to local authorities, landowners and developers. Its provisions will be welcomed by town planners and the use by the Minister of his wider powers and the exercise of their functions by those local authorities who have had interim development control thrust upon them, are matters which will be watched with lively interest.

Ministry of Works and Planning: Circular No. 1	..	..	..	..	..	21 July, 1942. HMSO, 1d.
Minister of Town and Country Planning Act	..	..	..	..	..	4 February, 1943. HMSO, 2d.
Ministry of Town and Country Planning: Circular No. 1	..	..	..	..	..	30 March, 1943. HMSO, 1d.
Town and Country Planning (Interim Development) Act	..	..	..	..	..	22 July, 1943. HMSO, 3d.
Ministry of Town and Country Planning: Circular No. 2*	..	..	..	..	..	11 August, 1943. HMSO, 1d.

[\*In this Circular further memoranda are promised on the effects of the 1932 and 1943 Acts, on the amount of survey work required, and on the best use to be made of available staff. Statutory Rules and Orders are also to be expected shortly, dealing with Interim Development.]

# P R I C E S

## FOURTEENTH WARTIME LIST

### EXPLANATORY NOTES

There has been no important increase in prices since the last wartime list.

Rates of Wages have not risen since April 2, 1943, and are now as follows:—

#### LONDON DISTRICT

Within 12 miles radius .. .. .

From 12-15 „ „ .. .. .

#### Craftsmen.

2s. 1½d.

2s. 1d.

#### Labourers.

1s. 8d.

1s. 7½d.

#### GRADE CLASSIFICATIONS

	A	A <sup>1</sup>	A <sup>2</sup>	A <sup>3</sup>	B	B <sup>1</sup>	B <sup>2</sup>	B <sup>3</sup>	C
Craftsmen ..	2s. 0d.	1s. 11½d.	1s. 11d.	1s. 10½d.	1s. 10d.	1s. 9½d.	1s. 9d.	1s. 8½d.	1s. 8d.
Labourers ..	1s. 7d.	1s. 6½d.	1s. 6¼d.	1s. 5¾d.	1s. 5½d.	1s. 5d.	1s. 4¾d.	1s. 4½d.	1s. 4d.

*T. A. Davis*

F.S.I.

## CURRENT MARKET PRICES OF MATERIALS

BY DAVIS AND BELFIELD, Chartered Quantity Surveyors

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit for the General Contractor.

#### CONCRETOR

##### Cements

† All delivered in paper bags (20 to the ton) free.

\* Paper bags charged at 7/- extra per ton; jute sacks charged at 35/6 per ton and credited on return at 1/6 each, when received in good condition within two weeks.

	6 Tons and over	In 80-ton freights F.A.S. Safe Wharf in River Thames, London Area.
*Portland .. .. .	per ton 51/-	48/6
*"417" Ultra rapid hardening .. .. .	per ton 71/-	—
*Rapid hardening .. .. .	per ton 57/-	54/6
*Water repellent .. .. .	per ton 81/-	—
Atlas White (1 barrel 376 lbs.) .. .. .	per barrel —	6 ton upwards

*Colorcrete rapid hardening, buff and red	per ton	91/-	0 ton upwards
*Colorcrete rapid hardening khaki ...	per ton	91/-	
†Colorcrete rapid hardening dark ...	per ton	—	
†Colorcrete non-rapid hardening ...	per ton from 175/- to 330/-		
†Snowcrete (paper bags free)...	per ton	225/-	
	1-9 cwt.	10-19 cwt.	1 ton and upwards
*Ciment Fondu, delivered Central London area ... ..	per cwt.	15/3	14/9 12/8

##### Aggregate and Sands (Full Loads)

2" Unscreened ballast .. .. .	per yard cube	10/10
¾" (Down) Washed, crushed and graded shingle .. .. .	per yard cube	11/4
¾" (Down) Ditto .. .. .	per yard cube	12/4
2" Broken brick .. .. .	per yard cube	14/6
¾" Ditto .. .. .	per yard cube	16/-
Washed pan breeze .. .. .	per yard cube	9/6
Coke breeze 1" to dust .. .. .	per yard cube	—
¾" Sharp washed sand .. .. .	per yard cube	13/10
White Silver Sand for white cement (one ton lots) .. .. .	per yard	40/-

(For Sands for Bricklaying and Plastering see respective trades)

##### Pavings

Brick hardcore .. .. .	per yard cube	—
Concrete ditto .. .. .	per yard cube	—
Clean furnace clinker and boiler ashes .. .. .	per yard cube	4/6
Coarse gravel for paths .. .. .	per yard cube	—
Fine ditto .. .. .	per yard cube	—
Clean granite chippings .. .. .	per ton	38/2

#### CONCRETOR—(continued)

##### Pavings—continued

Red quarry tiles, 6" x 6" x ½" .. .. .	per yard super	8/1
Ditto 6" x 6" x ½" .. .. .	per yard super	6/9
Buff ditto 6" x 6" x ½" .. .. .	per yard super	8/10
Ditto 6" x 6" x ½" .. .. .	per yard super	7/5
Hard red paving bricks, 2" 1½" .. .. .	per 1,000	230/6
Ditto 1½" .. .. .	per 1,000	208/3

##### Reinforcement

Home trade maximum basis price for mild steel rods, ½" diameter and upwards, ex mills delivered to station or siding .. .. .			
per ton £16 19 6			
Extras for:—			
¾" and ½" diameter .. .. .	per ton	10/-	
¾" diameter .. .. .	per ton	15/-	
¾" diameter .. .. .	per ton	20/-	
¾" diameter .. .. .	per ton	30/-	
¾" diameter .. .. .	per ton	40/-	
¾" diameter .. .. .	per ton	60/-	
Lengths of 40 ft. to 45 ft. .. .. .	per ton	10/-	
Lengths of 45 ft. to 50 ft. .. .. .	per ton	15/-	

##### Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate) .. .. .	per gallon	21/-
Ditto (for obtaining a bond) .. .. .	per gallon	13/1½

Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.

#### BRICKLAYER

##### Common Bricks

†Rough stocks .. .. .	per 1,000	—
†Third stocks .. .. .	per 1,000	—
†Mild stocks .. .. .	per 1,000	—
Sand limes .. .. .	per 1,000	—
†Phorpres pressed Flettons .. .. .	per 1,000	59/9
†Phorpres keyed Flettons .. .. .	per 1,000	61/9
Blue Staffordshire wirecuts .. .. .	per 1,000	257/9
†Lingfield engineering wirecuts .. .. .	per 1,000	83/-
Firebricks, best Stourbridge 2½" .. .. .	per 1,000	365/6
Firebricks, best Stourbridge 3" .. .. .	per 1,000	465/6

##### Facing and Engineering Bricks

Sand Limes, No. 1 .. .. .	per 1,000	—
Sand Limes, No. 2 .. .. .	per 1,000	—
†Phorpres rustic Flettons .. .. .	per 1,000	79/9

† At King's Cross. For delivery in W.C. district add 6/6 per 1,000.  
† Price ex works, delivery extra.

**BRICKLAYER—(continued)***Facing and Engineering Bricks—continued*

Midhurst Whites ... ..	per 1,000	121/-
†Hard stocks, firsts ... ..	per 1,000	—
†Hard stocks, seconds ... ..	per 1,000	—
Sand-faced, hand-made reds ... ..	per 1,000 from	153/-
Sand-faced, machine-made reds ... ..	per 1,000 from	—
Red rubbers (9½-in.) ... ..	per 1,000	—
Uxbridge Flints (white) ... ..	per 1,000	78/-
Uxbridge Flints (creams, light greys, etc.)	per 1,000	—
per 1,000 ... ..	from	113/-
Dunbriks (concrete), standard greys, ex works ... ..	per 1,000	63/-
Dunbriks (concrete), in various colours, ex works ... ..	per 1,000	98/-
†Southwater engineering No. 1 (first quality red pressed) ... ..	per 1,000	128/-
†Southwater engineering No. 2 (second quality red pressed) ... ..	per 1,000	108/-
Blue pressed ... ..	per 1,000	303/-

† Price ex works, delivery extra.

*Limes and Sand*

	1-ton lots	6-ton lots
Lime, greystone ... ..	per ton	61/-
Lime, chalk ... ..	per ton	61/-
Lime, blue Lias (including paper bags) ... ..	per ton	—
Lime, hydrated (including paper bags) ... ..	per ton	70/6
Washed pit sand ... ..	per yard cube	13/-

(For cements, see "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left charged at 1/9.

*Sundries*

Wall ties, self coloured ... ..	per cwt.	—
Wall ties, galvanized ... ..	per cwt.	—
D.P.C. slates, size 18" x 9" ... ..	per 100	38/-
D.P.C. slates, size 14" x 9" ... ..	per 100	34/3
D.P.C. slates, size 14" x 4½" ... ..	per 100	15/-
†Lekore D.P.C. Grade A ... ..	per foot super	8½d.
†Lekore D.P.C. Grade B ... ..	per foot super	10½d.
†Lekore D.P.C. Grade C ... ..	per foot super	1/-

† Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

Earthenware airbricks: 9" x 3" 9" x 6" 9" x 9" 12" x 9" 14" x 9"					
Red, blue, vitrified and buff terra cotta ... each	1/-	2/1	4/7	—	12/7

Black cast iron, School Board pattern airbricks	9" x 3" 9" x 6" 9" x 9" 12" x 9" 12" x 9"				
per doz.	—	—	—	—	—
Galvanized ditto per doz.	—	—	—	—	—

Black hit and miss cast iron ventilators	per doz.	—	—	—	—
Galvanized ditto per doz.	—	—	—	—	—

Buff terra cotta chimney pots ... each	1' 0" 1' 6" 2' 0" 2' 6" 3' 6" 5' 0"				
per 3/8	4/4	6/4	8/4	19/-	32/5
Fireclay ... per ton	67/6				

Wall reinforcement supplied in standard rolls containing 25 yards lin.  
 \*2" wide black japanned ... per roll 2/5 } Greater widths pro rata  
 \*2" wide galvanized ... per roll — } 2½" price carriage paid  
 \*2½" wide black japanned ... per roll 3/- } on orders of £5. Dis-  
 \*2½" wide galvanized ... per roll — } counts for quantities

*Partitions*

	2"	2½"	3"	4"
Breeze ... per yard super	2/3	2/8	3/2	4/2
Clay tiles ... per yard super	2/8	2/11	3/6	4/-
Pumice ... per yard super	3/6	4/6	5/3	5/9
Plaster ... per yard super	3/8	4/9	5/9	6/6

*Gas Flue Blocks*

	Single Flues	Double Flues
Straight blocks ... ..	each 1/3	2/3
Building in set ... ..	per set of 3 3/1	5/6
Cover blocks ... ..	each 1/7	3/4
Raking blocks 45° ... ..	each 3/-	4/8
Raking blocks 60° ... ..	each 2/1	3/3
Offset blocks ... ..	each 3/8	5/3
Closer blocks ... ..	each 1/3	2/3
Closer flashing blocks ... ..	each 10d.	1/9
Straight flashing blocks ... ..	each 11d.	1/9
Terminal and cap ... ..	per set 7/-	12/-
Middle terminal and cap ... ..	per set 6/6	11/3
End terminal and cap ... ..	per set 6/9	11/9
Corbel block ... ..	each 5/2	10/5
Gathering block ... ..	each —	5/3

**DRAINLAYER***Agricultural Pipes*

	2"	3"	4"	6"
Pipes in 12" lengths ... ..	per 1,000 75/-	105/-	142/6	270/-

(Delivered in full loads Central London Area.)

*Salt Glazed Stoneware Pipes and Fittings*

	4"	6"	9"
Pipes (2' lengths) ... ..	each 1/8	2/6	4/6
Bends, ordinary ... ..	each 2/6	3/9	6/9
Single Junction, 2' long ... ..	each 3/4	5/-	9/-
Yard Gully, without grating ... ..	each 6/3	6/10½	11/3
Ordinary round or square Grating, painted ... ..	each -7½	1/3	2/6
Ordinary round or square Grating, galvanized ... ..	each 1/0½	2/1	4/4½
Extra for Inlets, horizontal ... ..	each 1/6	1/6	1/6
Extra for Inlets, vertical ... ..	each 2/3	2/3	2/3
Intercepting Trap with Stanford Stopper ... ..	each 17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6", 9" and 12" drains, with iron grating, painted ... ..	each 20/-		
Ditto, with iron grating galvanized ... ..	each 21/10½		

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over ... ..	Plus 15%	Plus 40%
Orders under 2 tons, 100 pieces upwards ... ..	Plus 32½%	Plus 57½%
Orders under 2 tons, less than 100 pieces ... ..	Plus 42½%	Plus 67½%

	Best	Seconds
Orders for 2 tons and over ... ..	Plus 7½%	Subject to 15% off the price of best quality for all sizes
Orders under 2 tons, 100 pieces upwards ... ..	Plus 25%	
Orders under 2 tons, less than 100 pieces ... ..	Plus 35%	

*Cast Iron Drain Pipes and Fittings**Socket and Spigot Pipes:—*

Weight (per 9 ft.)	Size	9 fts.	6 fts.	4 fts.	3 fts.
1. 1. 8	4" per yard	7/11	8/11	14/2	10/9
1. 1. 20	4" per yard	8/3	9/2	14/6	11/1
2. 0. 6	6" per yard	12/3	14/7	23/7	18/10
4. 0. 2	9" per yard	22/3	29/2	50/6	38/6
		2 fts.	18 ins.	12 ins.	9 ins.
1. 1. 8	4" each	8/11	7/6	6/10	6/1
1. 1. 20	4" each	9/-	—	—	—
2. 0. 6	6" each	14/1	—	—	—
4. 0. 2	9" each	—	—	—	—

*Tonnage Allowances:—*

Orders up to 2 tons nett.  
 Orders 2 to 4 tons less 2½%  
 Orders 4 tons or over less 5%

	4"	6"	9"
Bends ... ..	each 7/10	16/4	50/4
Single junctions ... ..	each 13/10	28/4	86/9
Intercepting traps ... ..	each 37/9	62/11	154/8
Gulleys ordinary trapped ... ..	each 18/3	—	—
Extra for inlet 4" ... ..	each 5/-	—	—
Grease Gully trap ... ..	each 145/3	—	—
H.M.O.W. large socket gully trap with 9" gully top and heavy grating and one back inlet	each 31/9	58/9	—

*Channels in Brown Glazed Ware*

	4"	6"	9"
Half round straight channels 24" long	each 1/3	1/10½	3/4½
Half round straight channels 30" long	each —	—	4/2½
Ditto, short lengths ... ..	each 1/3	1/10½	—
Half round ordinary channel bends	each 1/10½	2/9½	5/0½
Ditto, short ... ..	each 1/10½	2/9½	—
Ditto, long ... ..	each 3/9	5/7½	10/1½
Three-quarter round branch bends	each 5/-	7/6	—

	6" x 4"	9" x 6"
Half round taper channels 24" long ... ..	each 3/9	6/9
Half round taper channel bends ... ..	each 4/8½	8/5½

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

*Manhole Covers, etc.*

	Black	Galvanized
24" x 18" single seal for foot traffic. (Weight 0.0.3 in lots of 24) ... ..	each 15/9	31/6
24" x 18" single seal for light car traffic. (Weight 2 cwt. in lots of 24) ... ..	each 47/3	84/-
24" x 18" Wood Block pattern. For road traffic. (Weight 3 cwt.) ... ..	each Coated 75/6	—

**DRAINLAYER—(continued)***Manhole Covers, etc.—(continued)*

	Fine Cast	Galv.
Cast iron steps, 13½" long, 6" wide, 9" in wall, approximate weight 5½ lbs. each	per dozen 16/6	27/6
Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern)	4" 6" 7/3	29/6

**MASON***Yorkstone*

Building quality Robin Hood and Woodkirk Blue Stone.	
Blocks scrapped, random sizes...	per foot cube 6/1
Add for blocks to dimension sizes	per foot cube 8d. (each dimension)

Templates with sawn beds, edges rough (up to 4 ft. super and not over 2' 6" long)	per foot cube 6/9
Templates with sawn beds, sawn one edge, per foot cube	8/1½
Templates with sawn beds, sawn two edges, per foot cube	9/5½
Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.)	29/1

*Artificial Stone*

6" × 3" Copings and sills	per foot run 1/10
6" × 6" Copings and sills	per foot run 2/10
9" × 3" Copings and sills	per foot run 2/2½
9" × 6" Copings and sills	per foot run 4/0½
12" × 3" Copings and sills	per foot run 2/10
12" × 6" Copings and sills	per foot run 4/7
Cornices according to detail, per foot cube (from)	8/3

**SLATER, TILER AND ROOFER***Best Bangor Slates*

	£	s.	d.
24" × 12" ... per 1,000 actual	—	—	—
20" × 10" ... per 1,000 actual	—	—	—

Prices include for delivery to site in lots of 1,000 and upwards.

*Tiles*

	£	s.	d.
Hand-made sandfaced 10½" × 6½" red roofing tiles	per 1,000	—	—
Machine-made sandfaced 10½" × 6½" red roofing tiles	per 1,000	—	—
Berkshire rustic pantiles...	per 1,000	—	—

*Asbestos-cement*

†6" corrugated sheets, grey	...	...	per yard super	3/0½
†Standard 3" corrugated sheets, grey	...	...	per yard super	2/9½
Slates ( <i>Manufacture temporarily suspended</i> ) :—				
* 15½" × 7½" grey	...	...	per 1,000	£6 15 9
* 15½" × 15½" diagonal, grey	...	...	per 1,000	£13 11 6
* 15½" × 15½" diagonal, russet or brindled	...	...	per 1,000	£21 19 6

Pantiles (Manufacture temporarily suspended).

* Large russet brown	per 1,000	—	—
* Prices are for minimum two-ton loads, and are subject to 5% trade discount.			
† Do., but 3½% advance and 5% trade discount.			

**JOINER***Asbestos-cement and Asbestos Products*

†½" Semi-compressed flat building sheets, grey	per yard super 1/3½
†¾" Ditto	per yard super 1/4
†1" Ditto	per yard super 1/11
† Prices are for orders of two tons and over and are subject to 10% advance and 5% trade discount.	

1" Asbestos wallboard (in sheets 8' 0" × 4' 0"),

per foot super	-4½
¾" Ditto	-3½
* ¾" Asbestos wood (in sheets 8' 0" × 4' 0")	per yard super 2/2½
* Prices are for orders of 2 tons and over and are subject to 5% advance.	

The following asbestos prices are subject to 10 per cent. trade discount:—

Asbestos-cement stipple glazed sheets (in sheets 8' 0" × 4' 0" and 4' 0" × 4' 0")	per yard super 8/-
Marble glazed sheets (in sheets 8' 0" × 4' 0" and 4' 0" × 4' 0")	per yard super 8/-
½" Asbestos Insulating Board	per foot super —

	25-75 yards	150-300 yards	600 yards
¾" Fireproof plaster board	per yard super 2/5	2/1	1/9
½" Ditto	per yard super 2/3	1/11	1/7
Joint tape (approx. 250 feet run)	per roll —	—	1/6
Joint filler	per lb. —	—	-4

*Sundries*

Slaters or sarking felt	per yard run—	/9
Roofing felt (1-ply bitumen)	per yard sup	1/-
Bituminous hair felt	per roll	58/-

All rolls 25 yards long by 32" wide.

**JOINER—(continued)***Sundries—(continued)*

Building paper, 50" wide (B.I. 20)	per yard run	1/1
(K. 40)	per yard run	-5½
"Cabots" Quilt:—(Ex Works) Twenty roll lots delivered carr. free.		
Double ply	per roll —	per half-roll —
All rolls 28 yards long by 36" wide. Special terms for quantities.		
Cut steel clasp nails	1" per cwt. 40/3	4" per cwt. 31/3
" " floor brads 2"	30/9	3" " 29/6
Bright oval wire nails	1" " 43/4	4" " 31/3
Galvanized wire staples with slice		
cut points	1" × 12 gauge	per cwt. 52/-
Scotch glue	per cwt.	—

**STEEL AND IRONWORKER***Steelwork*

	£	s.	d.
Basis price for rolled steel joists sections 5" × 3" to 16" × 6", in 10 ft. to 50 ft. lengths	ex mills	per ton	15 10 6

**PLASTERER***Plaster and Cement*

	1-ton loads	per ton
Sirapite (coarse)	per ton	88/6
" (fine)	per ton	87/6
Victorite No. 1	per ton	110/-
" No. 2 or non-sweat	per ton	105/-
Thistle (browning)	per ton	88/6
Thistle (haired)	per ton	—
Pink plaster	per ton	84/-
White plaster	per ton	93/-
Keene's pink	per ton	138/-
Keene's white	per ton	—
Super Carbo	per ton	—
Carbo-setting	per ton	—
Snowcrete (Tyrolean Finish)	1 ton lots and upwards	per ton 149/-

*Sundries*

Sharp washed sand	per yard cube	13/10
Cow hair	per cwt.	64/-
Goat's hair	per cwt.	93/-
Expanded metal lathing, 9' 0" × 2' 0"		
¾" mesh × 26 gauge	per sheet	2/9
Wire Slate nails (galvanized) 1½" × 15 gauge	per cwt.	62/5
" " (bright wire)	per cwt.	—

	Less than 150 yds.	Less than 300 yds.	Over 300 yds.	Over 600 yds.
¾" Plaster board	per yard super 2/-	1/8	1/7	1/6
1½" Galvanized nails	per cwt.	56/7		
Scrim cloth in 100-yard rolls	per roll	3/10		

*Wall Tiles*

The following prices are subject to 75 per cent. addition: Commercial quality.

Ivory, white, etc., glazed 6" × 6" × ¾"	per yard super	10/1
Angle beads (1½" wide)	per yard run	1/2½
" (1" " )	per yard run	-10
Rounded edge tiles	per yard run	2/6½
Coloured enamelled bright glazed, 6" × 6" × ¾"	per yard super	14/3
Angle beads (1½" wide)	per yard run	1/4½
" (1" " )	per yard run	-11½
Rounded edge tiles	per yard run	2/7
Eggshell gloss enamelled, 6" × 6" × ¾"	per yard super	15/-
Angle beads (1½" wide)	per yard run	1/7½
" (1" " )	per yard run	1/0½
Rounded edge tiles	per yard run	2/8½
Special rates for quantities		

**PLUMBER***Lead*

3½ lbs. and upwards milled sheet lead in quantities of 5 cwt. and upwards	per cwt.	38/-
Add if cut to sizes	per cwt.	3/-
Lead ternary alloy, No. 2 quality extra over sheet lead	per cwt.	7/-
Allowance for old lead delivered to merchant	per cwt.	18/-

**PLUMBER**

Rainwater  
Soil goods

The fol  
40 per cen  
24 gauge

Galvanize  
Painted

Painted  
length

18 Gauge  
Galvanize  
gutter

Painted  
ters  
Painted  
short

The fol  
per cent.  
Orders

Rainwater  
Prices  
diameters  
From 2' 0"  
as 2 yard

Round pi

2" ...  
2½" ...  
3" ...  
3½" ...  
4" ...  
4½" ...  
5" ...  
6" ...

Gutters.

Short l  
to 4' 0"

Half round

Ogee gut

**INTER**

Lead pip  
Lead soil  
Add if r  
Lead ter

Plumber  
Tinman's  
Drawn le

S. trap  
P. trap  
Extra for

Screwe

Tubes.  
Tubes 2

Pieces 1

Bends  
Fitting

Elbows,  
Elbows,  
Tees ...

Crosses  
Sockets,  
Sockets,

Flanges  
Caps

Plugs

## PLUMBER—(continued)

## Cast Iron Goods

Percentage Adjustment  
on List No. 3100 A.B.,  
1/2/40

Rainwater Goods (painted or unpainted) ...	Plus 12½%
Soil goods (coated or uncoated) ...	Plus 12½%

## Mild Steel Rainwater Goods

The following prices are subject to 2½ per cent. trade discount and 40 per cent. advance.

24 gauge rainwater slip jointed pipes.						
	2"	2½"	3"	3½"	4"	
Galvanized round pipes with ears ... per 6' 0"	2/7½	3/1½	3/9	4/3	4/9	
Painted round pipes with ears ... per 6' 0"	2/4½	2/9	3/1½	3/7½	4/-	
Painted or galvanized short lengths with ears, extra each	-/6	-/6	-/6	-/6	-/6	
18 Gauge gutters.						
	3"	3½"	4"	4½"	5"	6"
Galvanized half round gutters ... per 6' 0"	2/-	2/3	2/4½	2/9	3/-	3/7½
Painted half round gutters ... per 6' 0"	1/6	1/9	2/-	2/3	2/6	3/-
Painted or galvanized short lengths extra each	-/3	-/3	-/3	-/3	-/3	-/3

## Asbestos-Cement Rainwater Goods

The following prices are subject to 15 per cent. advance and 12½ per cent. trade discount.

Orders over £30 are subject to 17½ per cent. trade discount.

## Rainwater pipes.

Prices are for 6' 0" lengths, and 10' 0" lengths in 2", 2½" and 3" diameters. Short lengths up to 2' 0" are charged as one yard. From 2' 0" to 4' 0" charged as 1½ yards. From 4' 0" to 6' 0" charged as 2 yards. Over 6' 0" charged as 10' 0".

## Round pipes.

2"	...	per yard run	1/10
2½"	...	per yard run	2/0½
3"	...	per yard run	2/5½
3½"	...	per yard run	2/11½
4"	...	per yard run	3/4½
4½"	...	per yard run	4/10½
5"	...	per yard run	5/9½
6"	...	per yard run	7/1½

## Gutters.

Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as 1½ yards, and over 4' 0" as 2 yards.

Half round gutters	3"	4"	4½"	5"	6"	8"	
per yard run	1/3½	1/6½	1/7½	1/11	2/8	3/3½	
Ogee gutters	per yard run	—	1/11	2/0½	2/5½	3/0½	3/11½

## INTERNAL PLUMBER

Lead pipe in coils, 5 cwt. and upwards	...	per cwt.	38/6
Lead soil pipe	...	per cwt.	42/6
Add if ribbon marked	...	per cwt.	-/6
Lead ternary alloy, No. 2 quality extra over lead pipe	...	per cwt.	7/-
Plumber's solder	...	per cwt.	145/-
Tinman's solder	...	per cwt.	200/-
Drawn lead traps with brass screw eye, 6 lbs.			
	1"	1½"	1½"
S. trap	each	2/9	3/2
P. trap	each	2/5	2/7
Extra for 3" deep seal	each	-/8	-/8
			3/11
			5/8
			4/7
			-/8

## Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.

Tubes.						
Tubes 2 ft. long and over	1"	1½"	1½"	1½"	2"	
per ft.	-/5½	-/6½	-/9½	1/1	1/4½	1/10
Pieces 12" to 23½" long						
each	1/1	1/5	1/11	2/8	3/4	4/9
Bends ... each	-/11	1/2	1/7½	2/7½	3/2	5/2
Fittings.						
Elbows, square ... each	1/1	1/3	1/6	2/2	2/7	4/3
Elbows, round ... each	1/2	1/5	1/8	2/4	2/10	4/8
Tees ... each	1/3	1/7	1/10	2/6	3/1	5/1
Crosses ... each	2/9	3/3	4/1	5/6	6/7	10/6
Sockets, plain ... each	-/4	-/5	-/6	-/8	-/10½	1/3
Sockets, diminished ... each	-/6	-/7	-/9	1/-	1/4	2/-
Flanges ... each	1/-	1/2	1/4	1/9	2/-	2/9
Caps ... each	-/5	-/6	-/8	1/-	1/3	2/-
Plugs ... each	-/4	-/5	-/6	-/8	-/10	1/3

## INTERNAL PLUMBER—(continued)

## Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. (continued)

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

	Tubes	Fittings	Flanges
"Light Weight" ...	51½%	47½%	28%
"Heavy Weight" ...	44%	39½%	15½%

## COPPERSMITH AND ZINC WORKER

## Copper

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge ...	per lb.	1/0½
Light gauge copper tube, solid drawn ...	per lb.	1/3½
Copper tube, solid drawn screwing sizes ...	per lb.	1/2½
Copper wire, 10 and 12 gauge ...	per lb.	1/2
Copper nails, 1" and up ...	per lb.	—

## GLAZIER

## Sheet Glass cut to size (ordinary glazing quality)

18 oz. clear sheet ...	per foot super	3½d.
24 oz. ditto or "R" quality ...	" "	4½d.
26 oz. ditto ...	" "	5½d.
32 oz. ditto ...	" "	7½d.
½" figured rolled and cathedral glass (white) ...	" "	6½d.
½" ditto, approved tints ...	" "	9½d.

## British Polished Plate Glass cut to size

Ordinary ½" Substance	Glazing for Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding			
2 ft. super ...	per foot super	2/2	2/10
3 " ...	per foot super	2/9	3/9
5 " ...	per foot super	3/-	4/3
*45 " ...	per foot super	3/6	5/5
*100 " ...	per foot super	4/6	7/2
*Plates exceeding 100 ft. super or 160 in. long or 100 in. wide at higher prices.			
Special quotations should be obtained for other qualities and thicker substances.			

## Wired Glass Cut to Sizes

½" Wired rolled or wired cast ...	per ft. super	9½d.
¾" Georgian wired cast ...	per ft. super	10d.
¾" Polished Georgian wired plate ...	per ft. super	3/2
† For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.		

## PAINTER

Snowcem paint ...	per cwt.	56/-
White ceiling distemper ...	per cwt.	22/-
Washable distemper ...	per cwt. from 44/- to 66/-	
Ready mixed white lead paint (best), 5 cwt. lots, 14 lb. tins ...	per cwt.	96/6
Aluminium paint ...	per gallon	—
White enamel ...	per gallon	—
White enamel paint ...	per gallon	30/-
Stiff white lead (genuine English process, 1 ton lots, 1 cwt. kegs) ...	per cwt.	68/3
Liquid driers ...	per gallon	23/-
Linseed oil raw (5 gallon drums) ...	per gallon	6/6
" " boiled (5-gallon drums) ...	per gallon	6/9
French polish ...	per gallon	15/-
Knotting ...	per gallon	24/-
Oil stain (scumble) ...	per lb.	3/-
" " red oxide ...	per cwt.	84/-
" " middle Brunswick green ...	per cwt.	93/4
" " dark umber ...	per cwt.	112/-
" " golden ochre ...	per cwt.	93/4
Varnish (outside quality) oak ...	per gallon	22/-
" " " copal ...	per gallon	22/-
" " " flattening ...	per gallon	26/-
Turpentine, genuine American 5 gallon lots	per gallon	—
" substitute ...	per gallon	4/-
Cresosote, 1 gallon lots ...	per gallon	1/6
Putty ...	per cwt.	22/9
Size ...	Per ½ cwt.	30/-
Best quality English gold leaf, 23 carat ...	per book	3/6
Extra thick, ditto ...	per book	4/6

# 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

1257

### Hospitals

PLANNING OF POST-WAR HOSPITALS. *Isadore Rosenfield (Architectural Record, May, 1943).* Series of plans and articles on Hospital Planning in the USA.

(1) Five general hospital beds per thousand of population have been frequently spoken of as a proper standard of hospitalization. Recently the Federal government, presumably for the purposes of the Lanham Act, reduced this to 4.5.

(2) The average occupancy of a bed by an "acute" patient is 12 days, while that of a chronic is three months.

(3) It is assumed that 4.5 per thousand is correct for those unable to pay. This may prove excessive for communities having home care, out-patient clinics, chronic and convalescent institutions, and not enough for communities not having these facilities.

(4) The USA now has about 3.7 general hospital beds per thousand.

(5) The principal parts in a hospital should be the out-patient department (D) which is, so to speak, the "first line of defence" against illness. Here the doctor and patient meet for the purposes of education, prevention and minor medication, all of which are intended to arrest the illness, if possible, and to save the patient from becoming hospitalized. The ward sections (A and C) are, broadly

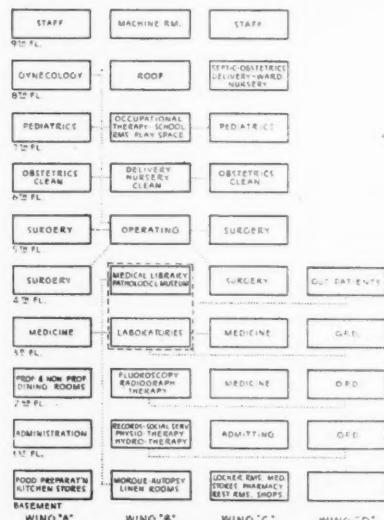


Diagram floor by floor of section of proposed hospital layout. Each major working section is placed adjacent to the wards for the patients it particularly serves, in wings A and C. This eliminates confusion and lift travel, and is easier for both staff and patients. Wing B serves as a connecting wing between the out-patients department and the hospital proper and serves them both. See item 1257.

speaking, the evidence of failure in the preventive department, as here the bedside care takes place. Between the out-patient department and the ward sections stands the unit (B) which serves both, as the link between the two major elements. This implies economy in construction as otherwise separate diagnostic and therapeutic facilities would be necessary for each element.

## ACOUSTICS and Sound Insulation

1258

### Factory Sound System

SOUND REPRODUCTION IN FACTORIES. *Anon. (Elect. Rev., May 14, 1943, p. 637).* Description of sound reproduction system installed in large factory.

It seems that music in the factory has come to stay, and this description of an elaborate system of sound reproduction in a very large works is therefore worth noting, as a very advanced installation. Provision was made for a normal transmitting microphone, gramophone and radio reception, plus a warning system. An interesting part of the description is devoted to the choice of loudspeaker types, of which there are five, to cope with different factory noise conditions.

1259

### Radio Studios

ACOUSTICS OF RADIO STUDIOS. *W. Furrer. (Swiss Archives for Applied Science and Technique, 8, 77-85, 99-109, 143-152 [1942]).* Discussion of modern knowledge of acoustics applied to the design of broadcasting studios.

The paper presents a very full discussion of the available data and techniques of acoustics particularly in respect to their accuracy and suitability for radio studio design, though their bearing on general problems is also discussed. It is clearly one of the best papers on architectural acoustics in recent years, and makes one feel the need of a translation service which would ensure that all who could use it could read it conveniently. Fortunately there is quite a good summary in English to be found in the Journal of the Acoustical Society of America for April, 1943 (p. 239).

The first part of the paper is a brief discussion of the general sizes of studio needed for radio work.

The second section is devoted to optimum reverberation times, which the author says are affected more by the audience than by the room, which he thinks accounts for the fact that values found by numerous people in different places agree well. The influence of this point on studios and transmission is discussed.

Regarding the reverberation time at different frequencies, Furrer mentions the fact that it is now generally felt necessary to have it longer at low frequencies than at middle pitch, and records his finding that this applies to studios as to normal concert halls. Again, he thinks the audience will be the main factor in producing this characteristic.

The third part is an exhaustive study of the

theory and investigation of reverberation, in which flutter echoes are also considered.

On sound absorption materials, Furrer is in agreement with Bagenal and other European workers who have stressed the value of panels. The Americans favour the special acoustical absorbers, which are best at high frequencies; opinion on this side feels that a loss of high frequencies kills brilliance and intelligibility and is tending to support the use of panels because they absorb at middle pitch and reflect the higher frequencies.

At the close of the work is a list of practical conclusions concerning the shape of rooms and distribution of absorbers. The reverberation curves of 15 studios are shown.

1260

### Modern Sound Systems

SOUND SYSTEMS. (*Architectural Forum, July, 1943, p. 6.*) Description of modern practice in sound systems for buildings.

This article gives a brief description of modern American practice in the design and installation of sound reproduction systems in buildings.

The first part of the article deals with installation, the type of equipment to be used, the requirements of wiring, and so on. Emphasis is laid on the proper mounting of the loudspeaker for good reproduction. A cabinet will generally be less satisfactory than a flat baffle, because of box resonances. The best baffle is the wall of a room, but it is preferable to mount the speaker in an opening through the wall, so that it is unconfined at the rear.

The most significant section of the article is on the uses of sound reproduction in industry. In this aspect England led the way during the early part of the war, and it was quickly found that music of certain types accelerated production. The Americans confirm this with observations of production increases of 5 to 10 per cent. And, as usual, they attach far more value to the use of sound absorbers than do designers on this side of the water. They note, very sensibly, that by using absorbers to reduce the loudness of industrial noise, they can improve the quality of sound reproduction, and also reduce the loudness requirements and consequently the cost of installation. They also remark that there is another way of dealing with the competition of factory noise. Apparently this is concentrated in a relatively narrow frequency band, and it is possible to design a system using other frequencies for reproduction so that overall loudnesses need not be much increased.

## SANITATION and Plumbing

1261

### Water Services

MINIMUM SPECIFICATION FOR INSTALLATION OF COLD AND HOT WATER SERVICES. (*Institute of Plumbers, January, 1943. 5s. post free.*) Minimum sound practice for cold and hot water services.

This is an addition to a series which already includes specifications for installation of soil, waste and ventilating pipes, for drainage work and for fixing of cold water services. The present publication includes cold water services and thereby renders one of the earlier publications out of date.

It does not deal with matters covered by provisions in the general law or ordinarily in the byelaws of local authorities. Tables from a British Standard Specification for pipe weights are reproduced. There are general notes on pipe runs and positions of stop-taps, methods of fixing pipes and jointing methods. Size and quality of cisterns and hot water cylinders, both direct and indirect, are dealt with. There are some notes on boilers which will assist in specifying fixing. There is

informa  
correct  
This s  
tion of  
good  
further  
efficient  
possibl  
there is  
reducti  
problem  
to some  
of ap  
caution

1262

PLAST  
1943)  
public  
descri  
Acco  
Feder  
manuf  
tubing  
program  
service  
ently i  
appro  
water  
It is  
in.,  
like t  
Suppe  
Freez  
expan  
tures  
water  
ment  
witho  
drink  
which  
pipes.

QU

T  
of  
the  
charg  
mem  
direct  
prepa  
no c  
discl  
be se  
45,

1263

Q  
small  
Can  
of th  
the s  
2.  
grow  
down  
prev  
Wou  
some  
pleas  
obtai

A  
old-  
water  
It  
Stat  
out  
writ  
2.  
men

information to enable pipe sizes to be correctly specified.

This should be as useful as the earlier publication of the series. It seems a pity that the good work could not be carried a stage further—to give more information about the efficiency of different pieces of apparatus and possible defects. It is also noticeable that there is no section dealing generally with noise reduction although this can be a serious problem in some types of building and can to some extent be overcome by care in choice of apparatus, design of layout and precautionary measures in fixing.

## 1262 Plastic Plumbing Tubing

PLASTIC TUBING. (*Architectural Record*, 1943). Plumbing tubing to be used in publicly financed war housing. Tests described.

According to this anonymous article the Federal Public Housing Authority has approved manufacture of a vinylidene chloride plastic tubing for 15,000 dwellings as a preliminary programme. The tubing is to be used for cold services and some of the hot service. Apparently it is somewhat expensive and is therefore approved only for use where the nature of the water would otherwise require copper piping. It is semi-translucent, and in three sizes,  $\frac{1}{2}$  in.,  $\frac{3}{4}$  in. and 1 in. Joining method is much like that for copper and it is easily bent. Supports are required at 3 ft. 0 in. intervals. Freezing tests are said to show that the tubing expands but returns to normal when temperatures rise again. While containing frozen water the tube is somewhat brittle. Department of Agriculture tests have shown it to be without any toxic or injurious results on drinking water and it can withstand waters which would corrode steel or other metal pipes.

## 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.

## 1263 Bricks and Tree Stump

Q 1. Red wire-cut bricks have had to be used as external facings in the erection of a small building to house a pumping plant. Can you recommend a permanent treatment of the brickwork to tone it down to blend with the surrounding trees and meadow land.

2. Do you know of a method for stopping the growth of a chestnut tree which has been cut down to ground level, the position of which prevents excavation of the stump and roots. Would boring into the heart and pouring in some liquid have the desired result? If so, please state material to be used and from whom obtainable.

A 1. A solution of Sulphate of Iron has been used for toning down brickwork. Two old-fashioned treatments are soot mixed with water or a solution of cow dung.

It is possible that the Building Research Station, Garston, Watford, Herts, has carried out experiments, and we suggest that you write to them direct.

2. We have consulted the Timber Development Association about your second question

and they advise stripping off the bark to about 9 in. below ground level. Alternatively, they suggest pouring Nitric or Sulphuric Acid around the outside of the roots (not into the heart of the stump).

## 1264 Books on Orientation

Q Can you please recommend a list of books on the subject of Orientation?

A The Librarian of the Royal Institute of British Architects has recommended the following two books on the subject of Orientation:—

The Report of the RIBA Joint Committee on the Orientation of Buildings called *The Orientation of Buildings*, published 1933 for the RIBA by Batsford.

*The Orientation of Buildings*, by Wm. Atkinson, published 1912 by Chapman and Hall at 8s. 6d., but now out of print—is in the RIBA Library.



*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.*

## ICE

## W. S. Morrison

October 5, address by the Rt. Hon. W. S. Morrison, Minister of Town and Country Planning, at the opening of a PRACTICAL PLANNING EXHIBITION at the Institution of Civil Engineers, Great George Street, S.W.1.

W. S. Morrison: I much appreciated, when it reached me, your invitation that I should open this exhibition—this planned exhibition organized jointly by the Institution of Civil Engineers and the Institution of Municipal and County Engineers. Two doughty bodies—and each of a considerable lineage. The Municipal and County Engineers have lately enjoyed their seventieth birthday. The candles have scarcely been snuffed upon the cake with which they

celebrated it. They showed that day, in a famous gathering, that, though "the days of our age are three-score years and ten," corporate bodies like theirs recognize no age limits. I take this opportunity of congratulating them upon that notable birthday, and wish them many happy returns. They are a generous-minded body, and will not grudge it if to-day I address my opening greetings more particularly to the Institution of Civil Engineers.

Your Charter of 1828 described the profession of a civil engineer as "the art of directing the Great Sources of Power in Nature for the use and convenience of Man." This exhibition—and, indeed, this audience—is a reminder of the wide variety of subjects and the increasing specialization into which the modern practice of that art has led you since Telford's day. Traffic by road and rail, by water and air—bridge building—water, gas and electricity supply—sewerage—land drainage and many branches of agricultural engineering—the construction of the foundation and the frames of buildings and the provision of the engineering services which they demand—the distribution and the conservation of heat—the insulation of sound—the continual exploration of alternative materials. That, as no member of this institution needs telling, is not a complete catalogue of your modern activities. But perhaps it may serve to remind the laymen among this audience, among whom I am numbered, how wide are the ramifications and how highly specialized the branches of your great profession to-day.

Many of the services, for which you are responsible, can only be illustrated by an exhibition such as this because they are concerned with the bones and arteries of the living community rather than with its flesh and its complexion. An exhibition can, like an X-ray, disclose these hidden features to a community but little aware of their courses and their structure. It can, and I am sure that your exhibition will, do more than that. It can demonstrate the amount of hard thinking and calculation, of solid, accurate work, that the proper planning of a community exacts at every stage from those to whom it is entrusted. It can thus make the public realize that planning is not just a matter of bright thoughts and pretty pictures—of slipping in an imposing building here and opening out a pleasant vista there. It is on the contrary from first to last a laborious, organic and, what is more, a continuous process. Much of that work—particularly perhaps its engineering element—has to be done if not below the surface, at any rate behind the scenes. I find it a singularly happy thing that you should have overcome that difficulty and prepared, from material not obviously lending itself to publicity, a businesslike, practical and yet thoroughly effective exhibition.

Mr. Hilaire Belloc, I seem to remember, once remarked that he would be prepared at the shortest notice to write convincingly as a critic on any of the arts save only the domestic and quickly tested art of cookery. I am tempted to say that I should be willing to discuss with passable readiness many of the elements which go to the planning of the land, but not—at any rate in this company—the work of the civil engineer. I venture, however—and not without some honest knowledge of the subject—to dwell for a moment on the essential relationships between your profession and that of other members of the planning team, as that team must be conceived in 1943.

Your work is both fundamental and complex. It is meant to be enduring: it usually represents a large capital investment. There is a high seriousness about it. A mistake made by an engineer might dislocate the daily life of a community. A mistake made by those whose work follows upon yours may readily lead to the disturbance—the extremely expensive disturbance—of services which it has taken years to plan and complete.

When lately I was privileged to speak to the Council of the Royal Institute of British Architects, I emphasized the need for the architects to work in team with the engineers

and the surveyors. Speaking to-day to civil engineers, I will emphasise the converse need for engineers to work in team both with those whose work should precede, and with those whose work must follow, their own. It is important that you should be in touch with the growing company of research workers, and that you should collaborate with the town planners, who rely upon the groundwork of knowledge which the research workers provide. It is not less important that you should work in with the town planners, the architects and men of other professions, whose work will follow and be influenced by your own.

So I appeal to the engineers to go into active partnership at an early stage of their work with the planners and the architects and the landscape specialists and the rest of the team whose work has to fit in with theirs. Run no risk of their ever being forced to demand the displacement of services which, with better knowledge, would never have been laid out as they are. Engineering works can add their own contribution of beauty.

## NHTPC

# Conference

October 7-8; National Housing and Town Planning Conference held at the Central Hall, Westminster. Addresses were given by Mr. W. S. Morrison, Minister of Town and Country Planning, on **PLANNING FOR POST-WAR RECONSTRUCTION IN ENGLAND AND WALES**, and Mr. Ernest Brown, Minister of Health, on **BRITAIN'S GIGANTIC HOUSING PROBLEM: THE CAMPAIGN FOR BETTER HOMES.**

**W. S. Morrison:** Let me go first straight to a subject which I know to be prominent in your minds. Why have the Government not yet announced a final decision on the problems dealt with in the Uthwatt Report? There are some who speak and write as though that report was a panacea of all planning difficulties; as though all that the Government had to do was to say "Aye," and all the difficult and intricate problems of the planning of England and Wales would then automatically sort themselves out like a completed jigsaw puzzle. I doubt if anyone in this experienced audience shares that delusion, and I will not spend time in combating it.

The fact is that we are here dealing with living material, whose roots run not only deep into an age-old tradition of land tenure, but wide into the personal life of every family in the country. The Uthwatt Report is an admirable document, and the country as well as the Government are indebted to Mr. Justice Uthwatt and his colleagues for the ability and the concentrated work which they brought to bear upon their study of the problem.

But it does not pretend to solve all the problems which hedge about this subject, nor to provide a blueprint of all the administrative machinery which their solution would demand. Its authors were not asked to do that. The Government take the view that the solution of the compensation and betterment problem is a necessary precedent to successful planning. They have been working hard and continuously, to see how they can get over certain difficulties in the report and to determine what legislation and what administrative machinery would be required to carry out the complicated operations which any satisfactory scheme must involve.

There are some problems of Government in which speed of decision is the great thing—in which it is essential that some decision, even though it be not the ideal decision, should be taken quickly. There are other problems in which the vital thing is to secure that the right decision is given. When you come to decide into which of these a particular problem falls, you do well to ask yourself two questions. First, is the damage that would be done by

some delay in reaching a decision more serious than the damage that a wrong decision would entail? Second, is the material that is the subject of your deliberation such that a decision found to be defective in practice can readily be amended.

Applying those questions to the present problem or rather group of problems, which are dealt with in the Uthwatt Report, or cluster about its recommendations, the Government unhesitatingly answer—first, that some delay is less serious than a wrong decision; and second, that the material is so complicated and any treatment of it is bound to be so far-reaching, that a wrong decision once taken could not be corrected without producing damage far more serious and persistent than the passage of the waiting time can cause.

Therefore, while they have given and are still giving unremitting attention to the subject, they have been determined not to be hustled into premature conclusions. Their findings include their proposals for giving effect to the two pledges already given—that they accept the principle of the public acquisition of all land in reconstruction areas, and the principle that, in order to prevent post-war reconstruction from being prejudiced by speculation, the compensation payable for the public acquisition or control of land should not exceed the standard of values at March 31, 1939. As everyone in this audience will recognize, the proper place for the presentation of those findings will be Parliament.

Meantime I recognize that those who are charged with the planning of their own districts are bound to feel a certain impatience at anything which seems to stand between their desire to get on with the job and the doing of the job itself. I understand, and I respect their natural eagerness. But the pledges given by the Government, which I mentioned a moment ago—about the public acquisition of land in reconstruction areas and the compensation that will be payable for land to be publicly controlled or acquired—mean that local authorities can go ahead with the making of plans, secure in the knowledge that they will have possession of the land in these areas. And this, I suggest, provides adequate release for their energies, at all events for the time being.

Of course I recognize that other causes of delay are still with us. The war itself, after all, is not yet ended; and, even when it is well and truly won, there will not immediately be available either the men or the material that physical reconstruction, running with its engine at full throttle, will require. There is bound to be some delay on that account before this great new planning machine of ours leaves the ground and becomes airborne.

But I see no reason to suppose that such further waiting-time as is inevitable before the Government announce and Parliament has endorsed in legislation its proposals for dealing with the Uthwatt Report will really delay the start of reconstruction. Moreover I observe, and have been much encouraged to observe, that many local authorities are going ahead with good heart in their preparation of plans. There are few local authorities with up-to-date plans so fully matured that they could start their work of reconstruction to-morrow, even if the war were ended and labour and materials were plentiful.

I have been greatly impressed in my recent visits to some of the most hardly pressed areas in the country, by the active spirit in which their local authorities are addressing themselves to this work. They are not wringing their hands over the Uthwatt Report and pleading that they can do nothing because they cannot do all. They are hard at work, and those for whom they are planning will surely some day recall with gratitude their energy and their foresight.

Now let me turn to another question. The Town and Country Planning Interim Development Act, which Parliament passed this summer, included a provision which secured that all land in England and Wales should in this month at latest become subject to planning. The need for making that provision

real is impressed with growing force upon my mind; but I am far from overlooking the difficulties which some local authorities are bound to experience in giving effect to it. Let us consider both that need and those difficulties.

It is necessary that the planning authority of every district should now review its resources and its needs in the stark light of 1943 and make a plan to balance them. This necessity rests upon a number of considerations. Let me say a word about two of them.

In the first place, the working out of a plan is the only efficient and economical way in which to bring forethought to bear upon the future of any district. We shall need every possible economy after the war—economy in the narrow sense of physical resources and economy in the wider sense of good and, where necessary, bold management. One of the truths most commonly overlooked is the fact that good planning pays. When a comprehensive plan has been drawn up for the future of any district, it is possible to make some estimate of its cost.

Your plan will look ahead over a period of years, and the total cost of that long programme will at first sight seem formidable. But it is not possible to make a comparable estimate of the cost of leaving that district to be developed without a plan—the cost not merely in terms of haphazard building, road construction and road widening, but the cost also in terms of time lost by those who have to travel further than they need to their work, to their shops or to their recreation; in terms of the damaged health of those whose homes, for example, are crowded among factories or cut off from open spaces.

I venture to say, after a fairly concentrated study of the subject over the last few months, that the bill for unplanned development will always prove to be heavier than the cost of a plan based on research, worked out with forethought and adopted after careful scrutiny. The bill for unplanned development, if it could be worked out would, I am convinced, always come to a much more formidable total than the bill for planned progress—so much more formidable as to translate that bill from a bill of costs into a bill of indictment against those who had neglected to prepare a proper plan.

But, financial cost apart, every district needs, as an instrument of businesslike management, a plan towards which it can work as opportunities offer, against which it can test the worth of new propositions. Even if that plan be inadequate by reason of factors unascertainable at the time it has to be made, nevertheless it is worth making. Survey work, if rightly conceived, is never wasted. If well and truly done, that work will serve for a revised plan; and the mere doing of it will have been valuable. At the least it will have made the district and those responsible for its future lay-out conscious of its problems.

Clearly, when the war ends, the need for priorities both of labour and of material will continue, if for different purposes than the priorities of wartime. There will be claims for priority as between different fields of the national reconstruction programme and, within the field for which I am responsible and which is the subject of our discussion this morning, as between different areas and different local authorities. If I am to be equipped to make out the best possible case for the claims arising from our field, then I must be able to show that those claims are based on well-founded and well-devised plans.

If the claims of different districts are to be assessed on their intrinsic merits, then it is essential that every local authority, whether it be concerned with a blitzed city, an out-of-date town needing to be remodelled, the building of a new community, or the treatment of an agricultural countryside, should be able to show that it has studied its own needs and its own future. There is therefore an urgent need for research and investigation in every district. At least the preliminary survey, on which every sound new plan must be based, should be completed.

So much for the need of a plan in every district. I turn to the difficulties. I am very

IN  
flood  
Crus  
Defoe  
name  
Crus  
must

K  
AN

The w



L. E. Walker, Photo

## ST. NICHOLAS' CHURCH, KING'S LYNN

IN the nave, just beyond this South Porch, is a floorstone marking the resting place of Robinson Crusoe "Upholder," who died in 1794. Daniel Defoe visited Lynn several times, but whether he named his famous character after a member of the Crusoe family, or if it was the other way round, must remain a matter for conjecture. There is,

however, nothing conjectural about the effect of 'PUDLO' Brand waterproofer, for when it is included in Portland cement renderings and concrete, constituted in accordance with the rules of good workmanship, these materials are made completely and permanently impervious to water even against substantial pressures.

# 'PUDLO'

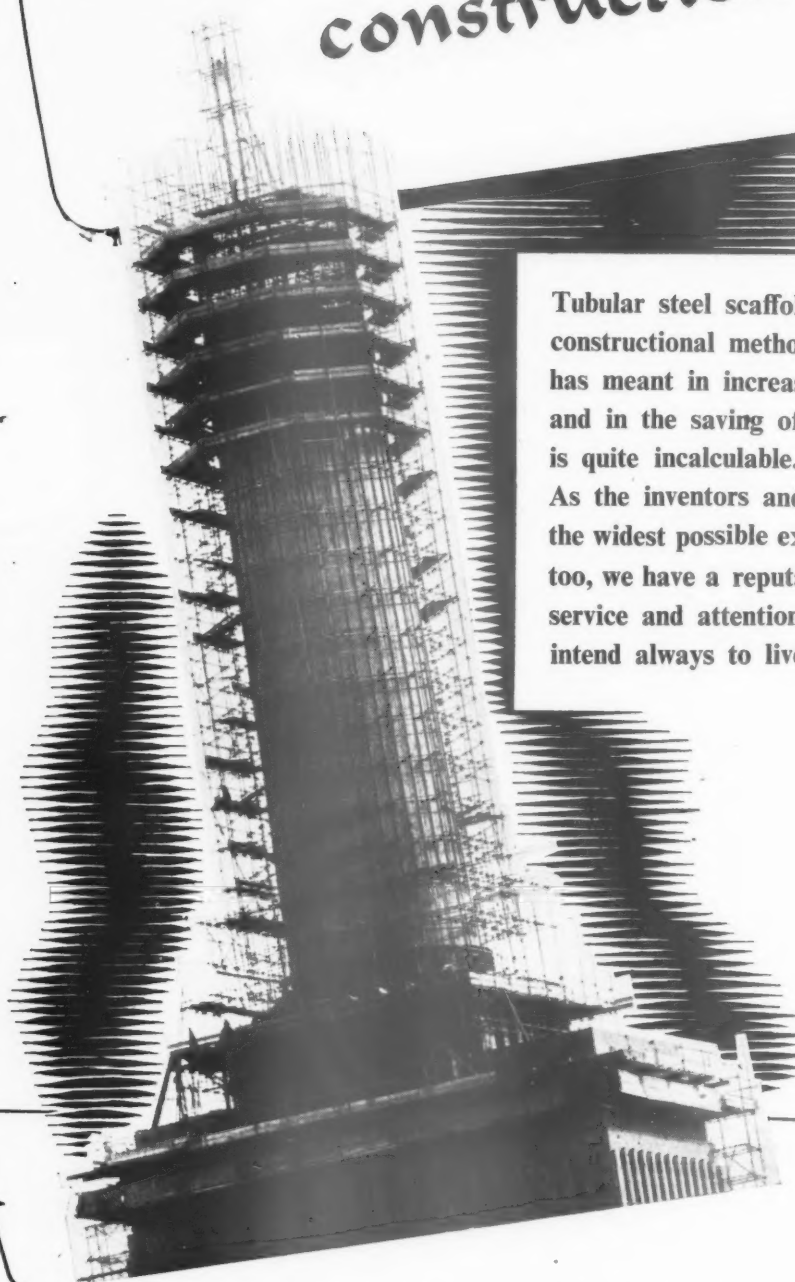
BRAND  
CEMENT WATERPROOFER

KERNER-GREENWOOD & COMPANY, LIMITED  
ANN'S PLACE, KING'S LYNN

Sole Proprietors and Manufacturers

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

# HIGH ALTITUDE construction



Tubular steel scaffolding revolutionised constructional method . . . . . what it has meant in increased 'safety factor' and in the saving of time and labour is quite incalculable.

As the inventors and pioneers we have the widest possible experience . . . . and, too, we have a reputation for efficiency, service and attention to detail that we intend always to live up to.

**SCAFFOLDING (GREAT BRITAIN) LTD**

SAUNDERTON, PRINCES RISBOROUGH, BUCKS.

PLOUGH LANE · LONDON · S.W.17.

AND IN ALL PRINCIPAL CITIES

consci  
local a  
of sta  
purpos  
qualifi  
release  
of diff  
planni  
officer  
of his  
consci  
in my  
with l  
The p  
should  
expert  
officer  
whole  
is resp  
one p  
an off  
registe  
by the  
oursel  
appoi  
meet  
he or  
take t  
the an  
In so  
be ab  
servic  
neigh  
with  
get th  
officer  
exper  
neede  
Fai  
possib  
by ar  
drawn  
conce  
Regio  
has u  
aiding  
of th  
I ha  
anxie  
sugge  
ning  
they  
bound  
be ex  
a go  
ment  
Com  
did n  
on a  
of lo  
The  
accou  
fit in  
patter  
They  
tion.  
satisf  
these  
physi  
is pr  
only  
comm  
of s  
show  
harm  
auth  
durin  
to co  
No  
office  
bound  
ning  
have  
cons  
ment  
that  
plan  
of al  
tion  
comm  
or hi  
will  
diver

conscious of the great handicaps under which local authorities are labouring through shortage of staff and, particularly, for our present purpose, of staff with planning experience or qualifications. Some authorities have had to release their planning officers for war service of different types. Other authorities, new to planning, have never yet employed a planning officer. In a few areas, happily, the planning officer remains and is spending at least part of his time on planning work. We have been considering this problem with some anxiety in my Ministry, and are about to communicate with local authorities about it.

The growth in the number of joint committees should make for economy in the use of an expert planning staff. A single planning officer should often be able to supervise the whole of the area for which a joint committee is responsible, but in any such area at least one planning officer is needed. Where such an officer is not already available, the special register of qualified planners, recently prepared by the Ministry of Labour in consultation with ourselves, should be helpful. Elsewhere the appointment of a planning consultant will meet the immediate need, provided that either he or one of his qualified associates can undertake to spend the greater part of his time in the area.

In some places, I hope, local authorities may be able temporarily to lend the part-time services of a planning officer to a less fortunate neighbouring authority. I have been able, with the help of the Minister of Labour, to get the military service of a number of planning officers deferred, with the idea that their experience should be used wherever it is most needed.

Failing such expedients as these, it may be possible to tide over the difficulty temporarily by arranging for a group of technical officers, drawn from the staffs of the local authorities concerned, to meet and confer with the Regional Planning Officer; and my Ministry has under immediate consideration plans for aiding these officers to give suitable assistance of that kind to local authorities.

I have lately seen references to another anxiety in the minds of local authorities and a suggestion that it is handicapping their planning preparations. It has been said that, until they know what their future duties and boundaries are going to be, authorities cannot be expected to plan either efficiently or with a good heart. The Prime Minister's statement of September 22 in the House of Commons made it clear that the Government did not intend to embark at the present time on a comprehensive enquiry into the machinery of local government.

The factors, which have to be taken into account in the planning of our land, seldom fit into, and can seldom be cut to fit into, the pattern of any single local authority's area. They range from geography to social organization, from industrial development to aesthetic satisfaction; and it is rare for any one of these factors to be confined within the same physical boundaries as another. My Ministry is proceeding on the assumption that, subject only to an extension of the system of joint committees, which the energy and goodwill of so many local authorities have already shown to provide a sound machinery for harmonious and effective planning, local authority areas will, for planning purposes, during the years which we have immediately to consider, continue as they are at present.

No local authority and no local government officer should allow any anxiety about future boundaries to take the edge off essential planning preparations. Those preparations may have to be adapted to meet national or regional considerations, but they must be based fundamentally upon local experience. In assembling that experience, planning committees and planning officers will have to call in the aid of almost every branch of the local administration—the help, for example, of those of their committees which deal with education or parks or highways. I hope that every local authority will arrange for the fullest pooling of its diverse experience for the benefit of those



The Practical Planning Exhibition at the Institution of Civil Engineers was opened last week by Mr. W. S. Morrison, Minister of Town and Country Planning. Mr. Morrison is here shown pointing to a model in the Engineer's Part in a Building section. His speech at the opening ceremony is printed in pages 279-280.

charged with its planning enterprise. I hope, too, that planning authorities will enlist to the full the knowledge which resides, outside the local government machine, in the organized bodies and the voluntary societies which are so remarkable a feature of our national life.

Finally let me touch briefly on another aspect which, I am convinced, is going to be of growing importance in our combined operations. I have more than once declared that there are three partners in the planning field—the Government, the local authorities and the public. If the public is to make its proper contribution to the solving of the planning problem, then it must be brought to understand more clearly than it does at present both the difficulties of planning and the rewards which successful planning can yield. My Ministry is preparing to take its share in the proper education of the public. But there is an equal need for local authorities to interpret the plans projected for their own districts to the men and women by whom they are elected, and the children, now in the schools, who will soon be electing those who must carry on the work.

**E. Brown:** Our subject for to-day is *Britain's Gigantic Housing Problem: The Campaign for Better Houses.* Perhaps some people have got the impression that up to now little or nothing has been done. *A lot has been done.* Let me briefly list some of the achievements which stand to the credit of the local authorities and the industry, because, as I have said, it is important that they should not be forgotten. (1) The fact that except in the early stages, first-aid repair of houses kept pace with the worst damage that the Luftwaffe could inflict was an important factor in the winning of the Battle of Britain. Out of the twelve million houses in England and Wales, more than 2,500,000 were given first aid repairs, and of these, over a million have had extended repairs. At the peak as many as 80,000 men were engaged on this work. (2) Millions of evacuees and war workers transferred as a result of the huge expansion and dispersal of industry have been found accommodation with only a negligible amount of new building. (3) Apart from billeting, more than 50,000 dwellings have been requisitioned by local authorities, acting as my agents, for bombed-out families, official evacuees and transferred war workers. Since the outbreak of war, the number of civilian movements from one area to another

has been *twenty-two-and-a-half millions.* (4) Because of the concentration of labour and materials on war work, local authorities have not been able to build any large number of new houses. Where the needs of the War Services themselves have made it necessary to build, the Government have had the fullest assistance from local authorities. You will expect me to make some reference to the scheme for the erection of 3,000 cottages for agricultural workers which was authorized by the Government at the beginning of the year in view of the special war-time needs of agriculture. No one knows better than I do that this small scheme cannot do more than touch the fringe of the agricultural need, but it has an experimental value for you and for me, and as the Manchester Guardian has pointed out, the experimental value should not be under-estimated. The scheme has taught us a very great deal about the present state of the building industry. We have learned, for instance, that the increase in the cost of building has greatly exceeded the general increase in the cost of living. My colleagues and I are in agreement that if our huge post-war programme is not to be jeopardized it is essential that this gap should be reduced. A most careful examination is being made of all factors contributing to the extra increase over and above what is accounted for in the rise in the cost of living, and we must consider how far these factors are likely to disappear with war conditions. The cottages which we are building in such difficult days are roomy and of good design. We have sacrificed nothing and we have made many improvements.

What else has been done? In the last few months local authorities have drawn up preliminary programmes to provide for the first instalment of new houses to be built as quickly as the resources of the building industry permit as soon as new building can be resumed. These already cover 150,000 houses and programmes are still flowing in. Nearly 9,000 acres of the land which will be needed are already owned by the local authorities, and the proposals so far received provide for the purchase of another 8,000 acres.

Since I spoke to your March Conference I have had the benefit of discussions on our present and short-term housing difficulties with a Conference of representatives of the Associations of Local Authorities and of the London County Council. As you know this Conference reported to me in July. It made

three main recommendations:—1. Priority of labour and materials for repairs and the prevention of further deterioration. 2. The provision of more accommodation by bringing into use houses at present unoccupied which are or can be made suitable for use by repair or adaptation. 3. An examination of existing legislation relating to rents for furnished and unfurnished accommodation.

On the first, the Government have accepted the principle that after the demands for building for war purposes have been met, housing should have the first call on immobile building labour. This is a decision of great importance. My colleagues—the Secretary of State for Scotland, the Minister of Labour and National Service and the Minister of Works—have now worked out with me a scheme about which I hope to send a circular to local authorities next week. The basis of the scheme is the concentration of the available labour and materials on essential housing work and the exercise of discretion by local authorities—whose task it will be to decide in the light of the housing conditions of their district what housing work should be done and which of it should be done first. The scheme is an experimental one and we shall review it periodically in the light of experience. The labour position is still such that the scheme must begin in a small way, but I hope we shall find that it lays the foundations on which we shall be able to build rapidly once the labour position improves.

I have dealt so far with work already done, being done, or to be done in the near future. The more we do between now and the end of the war, the more lessons shall we learn and the less there will be to do after the war. But whatever we do during the war, there will be so much to do that the problem is truly gigantic. There will be the completion of war damage repairs, the overtaking of the arrears of works of ordinary repair and maintenance, and the building within ten to twelve years of three to four million houses. As I have already mentioned, you are getting out your initial programmes and deciding on, and, if necessary, purchasing sites: you are, I hope, also carrying out the preliminary work of surveying the sites when they are in your ownership and preparing the general layout. What you now need is advice on house plans so that you can fill in the detail. That advice I hope to be able to give you before long because I expect to get, by about the end of the year, the report of that very hard-working sub-committee of my Central Housing Advisory Committee, the Sub-Committee on Design under Lord Dudley. The report will deal with the plans of dwellings not only for families but for aged persons and the one-person family.

Reports from the other sub-committees of the Advisory Committee, those on rural housing and on the part to be played by private enterprise and the machinery by which we shall ensure—as we must ensure—that every house is built to proper standards, are also expected before the end of the year, and will help all of us—local authorities both urban and rural and private enterprise—to make more detailed plans for the post-war period than are possible at the moment.

In planning for post-war building, it is important to consider whether we can get a larger number of satisfactory houses more quickly by supplementing ordinary brick and timber construction (that has proved itself over the past) with alternative methods, utilizing different degrees of prefabrication. I have an open mind on the subject, and await with interest the findings of the Inter-departmental Committee appointed last year to examine all practicable methods and systems. It seems clear, however, so far as the Committee have gone, that the help from alternative methods will be measured by the extent to which they avoid calls on ordinary building craftsmen, and promote speed of erection.

Two or three local authorities are already experimenting with new methods of construction. We would like to encourage further experiments, with the limited resources of labour and material available, provided they

relate to novel forms and are carried out, on the recommendation of the Inter-departmental Committee, in such ways as to give the most useful results. Our aim must be to be ready to go to tender immediately conditions permit, and I am hopeful that before very long it may be possible for labour, even if it cannot be made available for the actual building of houses, to be used for site works—levelling, road-making, and provision of services.

HC

## Julian Huxley

September 29, at the Housing Centre. Lecture by Dr. Julian Huxley on THE TENNESSEE VALLEY AUTHORITY.

*J. Huxley:* The Tennessee Valley scheme has now been operating for about ten years, and among other benefits the TVA has provided electricity, has introduced better farming, and has started new industries in the region. It is the only planning project on a great scale that has come to fruition in a democratic country, and has shown the technique to be adopted if planning is to be done in a democratic and not a totalitarian way. The area in which the Authority operates is about three-quarters the size of England and Wales. The Tennessee river is over eleven hundred miles long, and was over a mile wide before the dams were started. These when finished will convert the river into a series of lakes, many of which will be from three to three and a half miles wide. The total area of these lakes together with that of storage dams in the hills will be about eleven hundred square miles.

The TVA is an over-all planning authority for an area large enough to make it worth while to have an efficient staff and every facility for carrying out plans. Primarily the dams have been built to improve navigation, control floods and, as a by-product, to produce electricity. All necessary powers for this and also some other matters are united in the one authority, thus avoiding the multiplication of authorities that we have in this country, each doing one thing only and naturally coming up against the others in various ways.

Architecture and housing may be taken as an illustration of how the co-ordination works. Malaria was a scourge in the country, so the dams were sited, some of the later ones especially, with reference to its control. Secondly, in the actual building of the dams engineers worked in co-operation with site planners and architects. The dams have not been regarded as industrial structures made to look as good as possible, but all the aspects of the problem have been considered from the first. The dams are thus not only efficient as engineering structures but they are great works of art both in themselves and in relation to the landscape. At first the engineers regarded the architect as a man who makes himself a nuisance by introducing frills and fal-lals into the finished structure, but when they found he was interested in the relation of the different portions of the structure to each other and of the whole structure to the site, they settled down to co-operation. Attention has not been given only to the broad architecture of the dams; minor things such as traffic lights have been considered and the later gantries, in particular, show a great improvement in design over the earlier ones. They are more functional and more unified. The use of architects for the projects carried out by private firms, and in fact where

ever there is construction, is encouraged. Among other things local authorities who distribute the electricity produced at the dams have been persuaded to have showrooms which would set an example of good architecture.

The great area of inland waterways provides for boating and other forms of recreation, and from this point of view a deliberate study of the area has been made. Local authorities have been encouraged to develop their resources. Whereas before the work was begun there was only a very small trickle of tourists into the district, it is estimated that immediately before the war eleven million dollars a year were being spent there by visitors.

The Tennessee Valley Authority avoids imposing its own ideas on the region: it seeks rather to bring various interested groups together to produce their own scheme. It endeavours to help local authorities, universities and private groups of every kind to participate in as voluntary a way as possible. This is important. I am rather worried by the tendency of governing bodies here to try to centralize everything in their own hands. The central body should carry out research but should co-operate on a voluntary basis with the localities and the universities, otherwise we shall get a totalitarian régime. For the past four or five years the TVA has been aiming at a more decentralized administration, i.e. one where the maximum amount of decision is made on the spot and not at a centre. There is co-ordination again in the field, and there is the utmost participation by voluntary agencies and by the people themselves. The Tennessee Valley Authority has come to the idea that planning in a democratic country is only good if carried out with the full participation of the people of the region.

RIBA

## Henry Strauss

October 6, at the RIBA, 66, Portland Place, W.1. EXHIBITION OF DESIGNS SUBMITTED BY CANDIDATES IN THE 1943 EXAMINATION, to the Town Planning Joint Examination Board, opened by Henry Strauss, M.P., Parliamentary Secretary to MOTCP.

*H. Strauss:* There is no hope of avoiding past confusion in our towns, unless we develop a belief in the town as a good thing in itself. A good town is a compact thing. Concentration is not necessarily an evil. The suggestion of "opening up" our towns is an unhappy one. There is even something to be said for the capital city. I speak as a Londoner, and a lover of London.

To build roads leading to the centre of the town, as have many of the plans present, may be a perfectly idiotic thing to do. Some places should not have roads and traffic leading to them. They should be precincts. There must be some spots from which the "infernal" combustion engine, as Mr. Churchill once called it, should be barred. Such a place is the University City of Oxford.

What are the attributes of an ideal city? (1) It should not be too large yet should be in a certain sense a capital—a port on the sea or on a river with access to the sea. (2) It should have a fine cathedral. (3) It should have certain industries peculiar to itself. (4) It should be surrounded by fine countryside having a flourishing agriculture. (5) It should be beautiful and possess eternal youth.

Scale is all important in a town and is the easiest thing to destroy. Much of the charm of Norwich, my own constituency, is due to a proper uniformity of scale.

The test of a good civilization is—do the people you pass look worried and unhappy, or happy and serene? The test of a good town is—is it pleasant to walk about in? I welcome one or two processional ways like the Mall, but no one wants to walk along

1. O  
s  
s  
d  
s  
n,  
y  
s  
e-  
n  
s  
y  
r

S  
it  
s  
t  
-  
o  
e.  
e  
o  
s.  
t  
e  
e  
t  
g  
e  
s  
e  
e  
y  
e  
y  
l

1  
8  
5  
g  
f  
f

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
84



GRANOLITHIC  
PAVING

REINFORCED  
CONCRETE

In Situ & Pre-cast  
FLOORS

**STUART'S**

**GRANOLITHIC Co. Ltd**

**1840 — 1943**

LONDON: EMERGENCY ADDRESS: 26 West End Avenue, Pinner, Mddx. *Telephone: Pinner 5159/6223*

EDINBURGH: 46 DUFF STREET. *Telephone: Edinburgh 61506*

BIRMINGHAM: Northcote Road, Stechford. *Telephone: Stechford 2366*

MANCHESTER: Ayres Road, Old Trafford. *Telephone: Trafford Park 1725*

it. But it is delightful to walk about in the metropolitan village of Chelsea. Strand-on-the-Green, Chiswick, and the best parts of Hammersmith.

If the City of London is to remain the great commercial centre of the world, nothing will help it to regain its prestige so much as a plan of creative imagination and of nobility—and by that I do not mean megalomania.

A country that can produce the Spitfire, the 8th Army, the RAF, that can discover radio-location, has no need to repeat the Kingston By-pass or the ruination of St. James's Square.

## IRA

### Luncheon

October 6, at Connaught Rooms, Great Queen Street, W.C.2. LUNCHEON given by the Institute of Registered Architects in celebration of the Tenth Anniversary of the foundation of the Institute.

About 180 members and guests were present. The speakers were: Sir Malcolm Trustram Eve, Chairman of the War Damage Commission; Mr. Sydney Tatchell, Chairman of the Architects' Registration Council; Sir Robert Gower, M.P., President of the Property Owners' Protection Association; Mr. Vincent Burr, Chairman of the Admission Committee of the Architects' Registration Council; Lord Chesham, President of the National Federation of Property Owners; Sir Herbert Williams, M.P.; Captain Montague Evans.

Sir Malcolm Trustram Eve said that we must not rebuild for external effect only but internally to provide homes fit for heroes. Mr. Tatchell said that there were now some 14,000 practitioners under the register. Sir Robert Gower said he did not like municipal

buildings to look like factories. We wanted private enterprise rather than control by municipalities and the State. Mr. Burr said that the IRA represented some 5,000 unattached architects though actual membership was less. Over 900 architects had joined the Institute since the war began. The IRA fulfilled a need following the Architects' Registration Act. It was not in opposition to any other institution, and was out to foster the spirit of unity. Lord Chesham also wanted private enterprise. Sir Herbert Williams said that, owing to the Interim Development Act, all land was now frozen and we must agitate for immediate settlement of what was to happen in planning or, when the war ended, builders and architects would not know where to build. This was a very urgent matter.

## RIBA

### New Members

The following members have been elected:  
*As Fellows* (11): Aldred, Douglas Winston, P.A.S.I. (London); Alexander, Andrew Gordon (London); Anderson, Alexander Robert Fordyce (London); Ashburner, Edward Heathcott, B.A.R.C.H. (Lancaster); Bramwell, James Stone-man (Nottingham); Holland, Harry (Watford); Jones, Charles Frederick (Cardiff); McMorran, Donald Hanks (London); Sims, Herbert George, M.T.P.I. (Dublin); Thompson, James Osbert (Leicester). *Overseas*: Jadhav, Mahadeo Krishnaji (Baroda State, India).

*As Associates* (9): Barry-Walsh, Brendan (University College, Dublin) (Belfast); Campbell, Rupert Chambre (North Harrow); Darlow, Henry Arthur Jack (London); Halbritter, Sidney Constantin (Architectural Association) (Ebbw Vale, Monmouthshire); Hanly, David Patrick, B.A.R.C.H. (N.U.I.) (University College, Dublin) (Dublin); O'Dea, Lieut. John Baptist, B.A.R.C.H. (University

College, Dublin) (Kilkenny); Scally, Patrick Joseph, B.A.R.C.H. (N.U.I.) (University College, Dublin) (Dublin). *Overseas*: Bowman, Alexander William (Christchurch, New Zealand); Dobson, Miss Josephine Dorothy Ann, B.A.R.C.H. (Rand) (Johannesburg).

*As Licentiate* (35): Alger, Henry William (Hythe, Kent); Anderson, James (Tunbridge Wells); Boothman, Frank (Aylesbury, Bucks); Bowker, Richard Enoch (Warwick); Cake, Ronald Henry (Shotley Gate, Suffolk); Clarke, John (Stoke-on-Trent); Clayton, Harry (Cradley, nr. Malvern, Worcs.); Collins, Arthur Reginald George (Maidenhead, Berks); Crowther, Joseph Hawkyard (Brighouse, Yorks); Dunham, Hedley Theodore (Norwich); Edwards, Henry Norman (Cardiff); Ellis, Leonard Ernest (Exmouth, Devon); Funnell, William Arthur (London); Gilbert, Henry Bryan (London); Hilditch, Joseph (Prescot, Lancs.); Holder, Herbert William (Bristol); Holt, Robert Charles (Cheshire); Hutchinson, Howard Bruce (London); Kain, Wilfrid Charles (London); Kinnear, Alexander Stewart (Edinburgh); Leed, John Eric Riddle (Oxford); Lloyd, Ffrangcon (Mold, Flintshire); Marsh, Charles Eric Wilson (Douglas, Isle of Man); May, Percy John (Cardiff, Glam.); Medhurst, Henry Thomas (Orpington, Kent); Multon, Leonard James (Dudley, Worcs.); Newton-Smith, James (London); Osborne, Harry Archibald (Hemsworth, nr. Pontefract, Yorks); Radford, Frederick James (London); Rodger, Stanley Evelyn (Watford); Rowe, Frederick Walter (Worcester); Schofield, Harry (Nottingham); Smith, William Farquharson (Kinghorn); Stringer, George James William (Gerrards Cross, Bucks); Tate, John White (Wigan).

## CHANGE OF ADDRESS

Mass Observation has moved to new offices at 21, Bloomsbury Street, W.C.1. Telephone No.: Museum 6811.

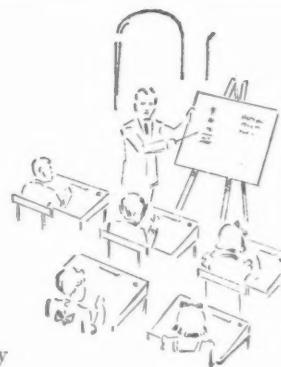
Away with

# Dangerous Damp!



Wet apparel must be thoroughly dried—not merely surface dried. But are these drying conditions always carried out? In the cloak-rooms damp clothing may mean ultimate chills for the scholars, perhaps to epidemic extent. The most modern schools are installing Vectair Heating, which circulates fresh warm drying air, capable of drying and airing damp clothes at the same time. The welfare of children is a precious responsibility. Don't treat it lightly. Rely on Vectairs to safeguard the health of the rising generation of maybe future Ministers, Matrons and Magnates.

## Vectair CONVECTION HEATING



If you think that our collaboration would be of help to you—don't hesitate to invite it.

BRITISH TRANE Co., Ltd., Vectair House, 52, Clerkenwell Close, London, E.C.1. Telephone Clerkenwell 6864 & 3826. Agencies at: Birmingham, Cardiff, Glasgow, Liverpool, Manchester, Newcastle, Nottingham, Sheffield and Torquay.

## TOUGH & ENDURABLE — in difficult circumstances



Copper plays a vital part in the defence of Britain, and in those offensive operations which are the prelude to brighter times of reconstruction and new beginnings in which copper is also destined to play an important part. Its many fine qualities make it a pre-eminently suitable material for building and plumbing purposes. Architects, Builders and Plumbers who, in the course of planning for the future, would like to have advice on the suitability of copper for any specific purpose are invited to avail themselves of the free advisory services of the Copper Development Association.

# COPPER

## IDEAL FOR BUILDING AND PLUMBING

The following publications will be sent in response to a request from those giving evidence of their genuine interest

Sheet Copper Work for Building  
Copper Alloy Sections  
The Use of Copper for Domestic Water Services

Copper Data  
Copper Pipe-Line Services in Building  
The Resistance of Copper to Soil Corrosion

## COPPER DEVELOPMENT ASSOCIATION

A non-trading organization maintained by the British Copper Industry to supply information and advice, free, to all users of copper.



GRAND BUILDINGS, TRAFALGAR SQ., LONDON, W.C.2  
and 9 Bilton Road, Rugby  
Telephone: only Rugby 2369

C16

## For Roofs

**TRUSCON**  
PRECAST  
FLOORS

- SAVE SITE LABOUR
- SAVE TIMBER
- PROVIDE WORKING PLATFORM FOR FOLLOWING TRADES
- SAVE COST
- SAVE WEIGHT

TRUSCON FLOORS

6 COLLINGHAM GARDENS, EARLS COURT, S.W.5 'PHONE: FRO 8141

## For Floors

An advertisement of The Trussed Concrete Steel Co. Ltd.



**PLASTILUME**

*High Wycombe Bucks*

There is a close affinity between Space-time and Plastics. Both will play an ever-growing part in post-war reconstruction. May we assist with your problems when peace is proclaimed.

**PLASTILUME PRODUCTS LTD.** • Station Works,  
High Wycombe, Bucks.



By Appointment  
to H.M. the  
King George V.

## THE EN-TOUT-CAS CO., LTD.



By Appointment  
to H.M. the  
King of Sweden.

were for many years previous to the war, the  
**LARGEST MAKERS**  
of  
**HARD TENNIS COURTS**  
in  
**GREAT BRITAIN**

THEY WILL HAVE EXPERTS  
AND MATERIAL READY FOR  
FURTHER WORK THE  
MOMENT THE V DAY ARRIVES

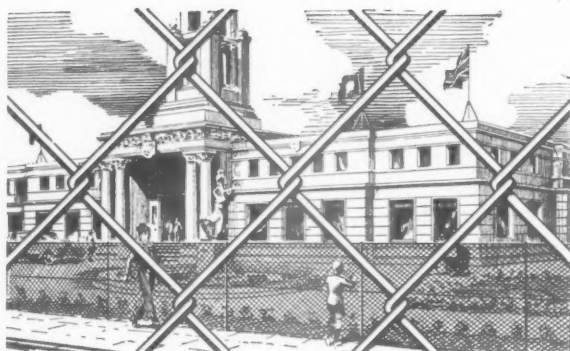
Acting on the suggestion of some of the leading Tennis Clubs, they have started a Rotation List for Post-War Orders for NEW and repairs to existing Courts. Would you like them to put your name down for early post-war attention? This puts you under no obligation. E.T.C. Red and Green Top Dressings are still available.

**THE EN-TOUT-CAS CO. LTD.**

SYSTON, LEICESTER

Telegrams :  
EN-TOUT-CAS  
SYSTON

Telephones :  
86177 (3 lines)  
SYSTON



### MULTI-PURPOSE PROTECTION.

Wherever Fencing Protection is required there you will find Penfold playing its quiet, constant, thorough part in the scheme. Strong, resolute, longlasting, reliable, economic, full of honest British fitness. No wonder Penfold has become synonymous with Protection.

Penfold Products include, Chain Link Diamond Mesh (cross slatted for close fence work), Hinged Joint, Strained Wire, Barbed Wire, Vertical Iron Railing, Continuous Flat Bar. Machinery Guards and every description of wrought iron work. Concrete Posts and Structural Members.



Let us advise you about fencing for estates, gardens, lawns, yards, playgrounds, etc. Priority orders only, but free guidance for all.

**PENFOLD FENCING LTD.**  
IMPERIAL WORKS, WATFORD

Telephone 2241



**BROCKHOUSE  
SELFSTOKE**  
*Automatic Gravity Feed Boilers*

THE ROYAL ARSENAL CO-OPERATIVE  
SOCIETY, WOOLWICH. MAIN STORES.

Architect :  
F. W. Ackroyd, Esq., F.R.I.B.A., London.

## CENTRAL HEATING by Hot Water or Low Pressure Steam

Brockhouse "Selfstoke" Gravity Feed Boilers supply this modern store with Warmth and Hot water Services with Efficiency and Economy.

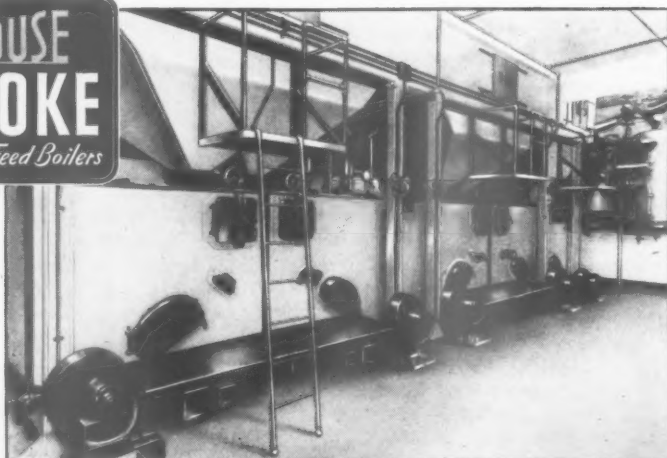
Clean and Quiet Running, Gravity Feed from overhead Storage Hopper never fails, and Thermostatic Control combined with the highest degree of Thermal Efficiency gives a fuel saving of 40% average over hand-fired plants of equal rating.

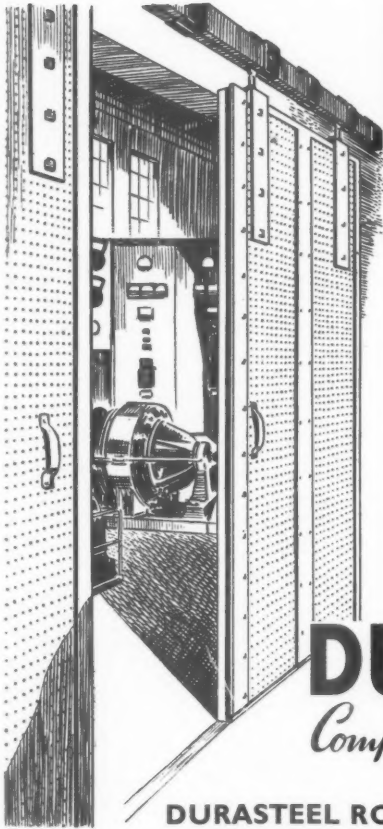
Full Technical and Boiler Advisory Service details on request to:—

**BROCKHOUSE HEATER CO. LTD.**

Victoria Works, West Bromwich, Staffs.

London Office: Morley Hall, 25-26, St. George Street, Hanover Square, W.1.





# IN-BUILT FIRE PROTECTION

## WAR TIME EXPERIENCE APPLIED TO POST-WAR PLANNING

Over 150 Municipal Authorities, Electrical Undertakings and Government Departments use DURASTEEL 3 DF2 Sheets in their Fire Protection schemes. DURASTEEL 3 DF2 SHEETING has been fully tested for Heat and Fire resistance. (Official Rating BS/ARP 27 and BS/ARP 47). Durasteel Doors incorporating Durasteel Sheeting have passed official tests by the Fire Offices Committee, and are built to approved Specification.

### TO-DAY ORDERS CAN BE TAKEN

for DURASTEEL Fire Protection Doors. Inquire now about immediate needs and Post War Planning. Send too for technical data.

**DURASTEEL DOORS**  
*Composite Steel & Asbestos*  
*Keep Fire at Bay*  
**THE DURASTEEL WAY**



**DURASTEEL ROOFS LTD., OLDFIELD LANE, GREENFORD, MIDDLESEX**

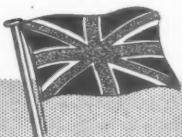
Telephone: WAXLOW 1051/2 (Pte. Br. Exch.)

ENDURAFIRE, PHONE, LONDON



## SEASONED CAMPAIGNERS

Since Pimco first introduced the fibre panelling board over 45 years ago their leadership in the Industry has remained unchallenged. In use during the South African War, the Great War and now in this war, Pimco Building Boards may well claim to be seasoned campaigners. To-day, SUNDEALA and INSULWOOD are two scientifically waterproofed boards accorded first choice for many important priority contracts for Service and Industrial needs.



WATERPROOF BOARD  
**SUNDEALA**  
MADE IN ENGLAND

INSULATION BOARD  
**INSULWOOD**  
MADE IN ENGLAND

★ To-day supplies are limited. But if your work is of essential priority, licence application can be made to the Paper Controller. Full details on request.

**BRITAIN'S BEST BUILDING BOARDS for EXTERIOR & INTERIOR USE**

P.I.M. BOARD CO LTD. SUNBURY-ON-THAMES. Established 1898. Te: Sunbury-on-Thames 341/3.

## 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 991

## 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.

**ARCHITECTURAL & SURVEYING ASSISTANT** required at once. Apply, giving full particulars, to W. H. Saunders and Son, 11, Portland Street, Southampton. 183

**FIRM OF ARCHITECTS** in Midlands require competent surveyor to prepare Schedules of Conditions for a large number of buildings. Two years' work and probable permanency for suitable man. Please state qualifications, experience and salary required. Box 185.

## Architectural Appointments Wanted

**BREWERY ARCHITECT** (registered) **QUANTITY SURVEYOR**, Member of the Birmingham and Five Counties Architectural Association, desires responsible position with Brewery Co., experienced designing Licensed Houses and Hotels for Midland Breweries, one-eighth scale working drawings, details, bills of quantities, estimates, surveying, post-war planning, etc. Salary £500 per annum. Box 142.

**YOUNG REGISTERED ARCHITECT AND SURVEYOR** desires position or part time work for own office. Box 150

**STUDENT R.I.B.A.**, six years' practical experience, requires good progressive position with London Architect. Experience in many types of building, including War Emergency standards. Field surveys, site supervision, preparation of all drawings. Excellent testimonials available. Box 147

**ARCHITECTURAL ASSISTANT**: 4 years experience with two firms. Good draughtsman, etc. Excellent references. (Prot.) Write N. D. N., Achill, Marlboro' Road, Glenageary, Co. Dublin. Box 152

**REGISTERED ARCHITECT AND SURVEYOR**, A.I.A.A., age 29, desires post travelling distance of York; exempt military service; experience all branches of profession; own car available; moderate salary for work of National importance. Box 155.

**REGISTERED ARCHITECT** seeks free lance or part-time work. Experienced W.D. Estimating and Repairs, Precast Concrete, Hutments, Cinemas, Domestic Housing, Perspectives, etc. Age 33 years. Allied National exempt M.S. Two years Local Government Experience. Box 161.

**REGISTERED ARCHITECT**. Total exemption from all services, requires senior position with commercial company. Experience includes Brewery and Public House work, Hotels, Chain Stores, Domestic Maintenance, etc. Used to organising and Office Staff control. Final Accounts, Specifications, etc., and all Supervision of Works. Salary by arrangement. Box 163.

**SENIOR ASSISTANT** requires responsible position in London architect's office. Considerable experience in most types of work. Expert draughtsman. Exempt from military service. Box 164.

**LONDON AREA**, Senior Assistant, A.R.I.B.A., aged 38, offers part-time services. Wide experience in most branches of the profession. Own office accommodation. Box 165.

**ARCHITECT** requires position with architects or firm. Experienced in controlling and carrying through works complete. Please state prospects and approximate remuneration. Box 166.

**ARCHITECT** (special qualifications for post-war planning and design) desires post shortly. Experienced, having sole charge contracts from initial interview to completion, including drawings, specifications, estimates, etc. London only. Box 167.

**UNIT OF FIVE** requires post in London, comprising: 2 R.C. and steel engineers, 2 architects, 1 heating and general engineer; average age 29; total salary required £2,400 p.a.; 4 exempt military service; 1 exempt on work of national importance. Capable of taking over department or branch office. Box 168.

**STUDENT R.I.B.A.** requires appointment: 5 years general office experience on Drill Halls, Hostels of various kinds, canteens and domestic work; competent on layout, design, detail and specification. Excellent testimonials available. Box 169.

Classified Advertisements continued on page xxxiv.

## It's the least you can do—

GIVE ONE PENNY EACH  
WEEK TO HELP THE  
RED CROSS CARE  
FOR THE WOUNDED

● Start a 'Penny-a-week' scheme where you work. Send a post-card to the Lord Mayor of London, Mansion House, E.C.4, for full details



Hospitals and Nursing homes have greater responsibilities to bear now.

This also applies to the Kitchens, and the Staff must be able to rely completely on its cooking equipment. That is why ESSE Heat Storage Cookers are so much in demand.

Failure of power supply does not effect the ESSE, which consumes anthracite or coke and shows amazing economy.

Always ready for instant action, day and night, hygienic, labour saving and heavily insulated, these famous cookers can meet all cooking demands.

### ESSE STEAM EQUIPMENT

A valuable adjunct to ESSE Cookers where steam is available, is this equipment comprising Jacketed Boiling Pans, Wet Steam Ovens, Hot Closets, Water Boilers, etc. Clean design, safety locking devices.



HEAD OFFICE & WORKS

BONNYBRIDGE • SCOTLAND  
LONDON SHOWROOMS

63 Conduit St., W.1 & 11 Ludgate Circus, E.C.4

LIVERPOOL - - - - 20, Canning Place  
EDINBURGH - - - - 17, Greenside Place  
GLASGOW - - - - 11, Dixon Street, C.1

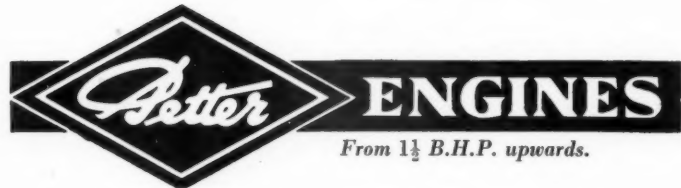
# Unrivalled EXPERIENCE



**PETTER** Engines are the product of nearly half a century of unrivalled experience in the manufacture of internal combustion engines.

Sound design, high standard of materials and craftsmanship, and rigid inspection at every stage of manufacture ensure the reliability for which Petter Engines are world-renowned.

They have been adopted as the standard power unit by many manufacturers of machinery used in the building industries.



From 1½ B.H.P. upwards.

PETTERS LTD · LOUGHBOROUGH · ENGLAND

6.74

## TELEGRAPHIC ADDRESS

Telephones:  
Edinburgh 66641-2

## INSTALLATIONS

Buckingham Palace  
London University  
Earls Court Exhibition  
Balmoral Castle  
St. Andrew's House,  
Edinburgh, etc.

# SOLDERLESS

PAT. The "Securex" Joint REGD.

## NEW MODEL

1935

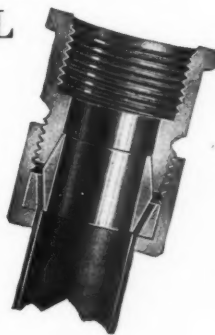
Patent No. 395536

Use SECUREX

The Engineering Job



THE  
SOLDERLESS  
JOINT



THE  
SOLDERLESS  
JOINT

NO TINKERING

The New Ingenious Method of fitting the Rotatable Sleeve allows for a Reduction in Bulk and gives a much neater job, while at the same time the joint retains all its efficiency and strength.

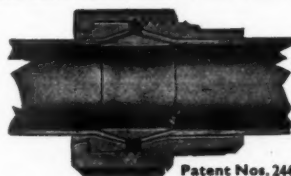
Patent **LAMONT'S** Regd.

**"SECUREX"**

IMPROVED FITTINGS  
FOR COPPER TUBES

Patented in all British Dominions

Sole  
Manufacturers



Patent Nos. 244253, 395536

**JAMES H. LAMONT & CO., LTD.**

Regd. Office - GYLEMUIR WORKS, CORSTORPHINE, EDINBURGH, 12

London Office—Norfolk House, Laurence Pountney Hill, E.C. 4 (Closed temporarily. All communications to Regd. Office).

CONTRACTORS TO THE ADMIRALTY, WAR OFFICE, MINISTRY OF WORKS, CROWN AGENTS FOR THE COLONIES, Etc.

## EDINBURGH

Telegrams:  
London,  
Gylemuir Cannon

## IMPORTANT

Tested by the  
NATIONAL  
PHYSICAL  
LABORATORY,  
Engineering Dept., to  
withstand a pressure  
of

**3-1 Tons**  
per sq. inch

Awarded Royal Sanitary  
Institute Medal

Edinburgh - July 1925

Glasgow - July 1931

**IN USE ALL OVER THE WORLD**

Patented in all British Dominions

**DRAUGHTSMAN**, age 25, six years' drawing office experience, exempt from military service owing to deafness. Completed Diploma course in Quantity Surveying and studying for L.O.B. exam. Seeks post in South or West London. C. Robbins, The Dingle, Bath Road, Huntercombe, Slough. 171

**JUNIOR DRAUGHTSMAN**, 17½, requires post in London architect's office. Matriculated, taking building course; 18 months' drawing office experience. Apply A. Roe, 45, Bendmore Avenue, Abbey Wood, S.E.2. 172

**CHARTERED SURVEYOR**, experienced quantity surveyor, qualified town planner, experienced in research and publicity is anxious to hear of opportunities where his services can be utilised, in own office. Henry J. Crone, P.A.S.I., 103, West Regent Street, Glasgow, C.2 173

**SURVEYOR'S ASSISTANT** (36), recently engaged on schedule of condition and war damage surveys. Experienced in land surveying and levelling, including theodolite. Registered architect. Seeks engagement on work of national importance. Apply Box 174.

**YOUNG ARCHITECT**, registered, competent, requires responsible position. Work in connection with wartime building or preparation of post-war schemes. Box 176.

**ARCHITECTURAL ASSISTANT** (Chartered Architect) requires senior position. London district. Wide experience of housing and planning. State salary offered. Box 177.

**SOUTH-WEST ENGLAND. ARCHITECT AND SURVEYOR** with own office in Bristol seeks free lance or part-time work. Experienced in all branches of the profession, especially in hospital, factory, brewery and war damage work. Speedy and accurate draughtsman with high capabilities in design and construction. Telephone Bristol 43746. Box 178.

**ASSISTANT**, Diploma with distinction, Liverpool University; 2 years' office experience; age 25 years; seeks position London, Home Counties or Liverpool. Box 179.

**ASSISTANT ARCHITECT**, exempt, requires position in London. Viennese, English training and qualification. War service permit. Box 180.

**CHARTERED ARCHITECT AND SURVEYOR** with own London office, offers assistance to other practitioners in the preparation of post-war schemes, surveys, war damage, etc. Terms by arrangement. Box 181.

**A.R.I.B.A.** (31), invalided from H.M. Services, requires responsible post in London or Home Counties. First class London experience. Box 182.

**SURVEYOR, ARCHITECT** (qualified) and **Property Manager** desires position, long experience, over 30 years, theoretical and practical, expert knowledge of profession, and all trades; not liable for military service, rendered War Service 1914-18. Supervision all classes of Buildings and Public Works to £230,000, including War Damaged Properties; excellent testimonials, etc. Please apply Box 186.

### 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.

### 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 2805.

**ARCHITECT** wishes to acquire Information Sheets Nos. 66, 96, 213, 200, 360, 454, 455, 456, 466, 468, 476, 688, 790, 797, 818, 835 and 854. Box 175.

**WANTED**—A Plan Cabinet. Please state size, number of drawers, depth of drawers and price. Box 184.

### Partnership

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

**PRIVATE INDIVIDUAL** of proved organising ability and extensive business and Government contacts in building and allied industries, would assist manufacturer with finance and active participation to consolidate his business for immediate and post-war development. Particulars, in confidence, to Fyleman, 29, Howitt Close, N.W.3. 153

### 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

### 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

**ELLISON**  
*Electric*  
**SWITCHGEAR**

See Information Sheet Nos. 411, 414 & 415. Copies may be obtained from **GEORGE ELLISON Ltd.** PERRY BARR, BIRMINGHAM, 22B.

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

HOME GROWN { **HARDWOODS**  
**SOFTWOODS**

Quota Merchants for  
**NATIONAL STOCK**

**STEELWORK BY**  
**SHARMAN**  
& SONS  
**SWAN WORKS, HANWORTH, MIDD.X.**

\*Phones: Feltham 3007. Sunbury 2367 \*Grams: "Sharman, Feltham."

**NOV. 11**

Will you give even more generously this year? The need is greater now. Sell poppies, too, if you've time, or send a gift by post. On your sympathy depends the British Legion's work for ex-Service men and women of ALL ranks, ALL Services, and ALL WARS, their families, and the widows and children of the fallen.

**POPPY DAY**

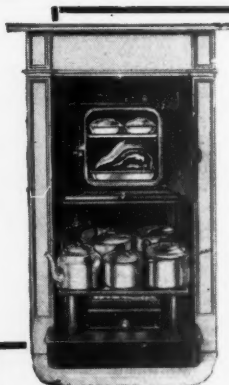
Please send offers of help, or gifts, to the local Committee or HAIG'S FUND, Richmond, Surrey.

### CHANGE of ADDRESS

The wonderful saving of coal achieved by our **UTILITY** stoves, "SELFIX-INTEROVENS" which work perfectly with wood, peat or coal, has brought us so many enquiries that we feel we must apologise for our present limited wartime output.

Essential replacements of all pre-war **INTEROVEN** Stoves can be supplied. New Lists sent on application enclosing stamp (Govt. Order) to our new and larger show-rooms:—

**THE INTEROVEN STOVE CO. LTD.**  
**67 BAKER STREET, W. 1**



Sole Makers of the only **GENUINE "INTEROVEN" Stoves**,  
Pascall's Patents.

## THE MODERN HOUSE

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

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 and enlarged edition includes an additional number of English examples. Price 21s. Postage 8d.

**THE ARCHITECTURAL PRESS**

War Address:  
45 THE AVENUE, CHEAM, SURREY

NS

son  
art  
e's  
231



K.

,."

S

TELEPH

New Warehouse  
SAINSBURY'S BLACKFRIARS  
BRITAIN'S BEST  
KETTON CEMENT  
KETCO  
SHEFFIELD



for  
replacement  
where  
ordinary  
paving  
fails

Available without licence from

**E.J. ELGOOD LTD.**  
INDUSTRIAL FLOORING SPECIALISTS - INSULCRETE WORKS, LONDON, S.E.8  
TELEPHONE: BERMONDSEY 1144

PAINTS  
...and complaints

Trial and error has never, and never will, play a part in the manufacture of Smith & Rodger paints. That is why painters in every part of the country use them exclusively. Below you will find examples of the products manufactured by Smith & Rodger, and should you desire to know more about these, a post card will bring newly published catalogue post free by return.

"SOLVIT." A new and effective paint, varnish and polish remover  
VITAMEL FINE WHITE ENAMEL. Good lasting gloss. You cannot get a better enamel.

"WALDURA" WASHABLE DISTEMPER. The best obtainable.

**SMITH & RODGER LTD**  
Paint and Enamel Manufacturers  
ELLIOT STREET, GLASGOW

TELEPHONE: CITY 6341-2 TELEGRAMS: SMITH-RODGER, GLASGOW

"damaged by enemy action"

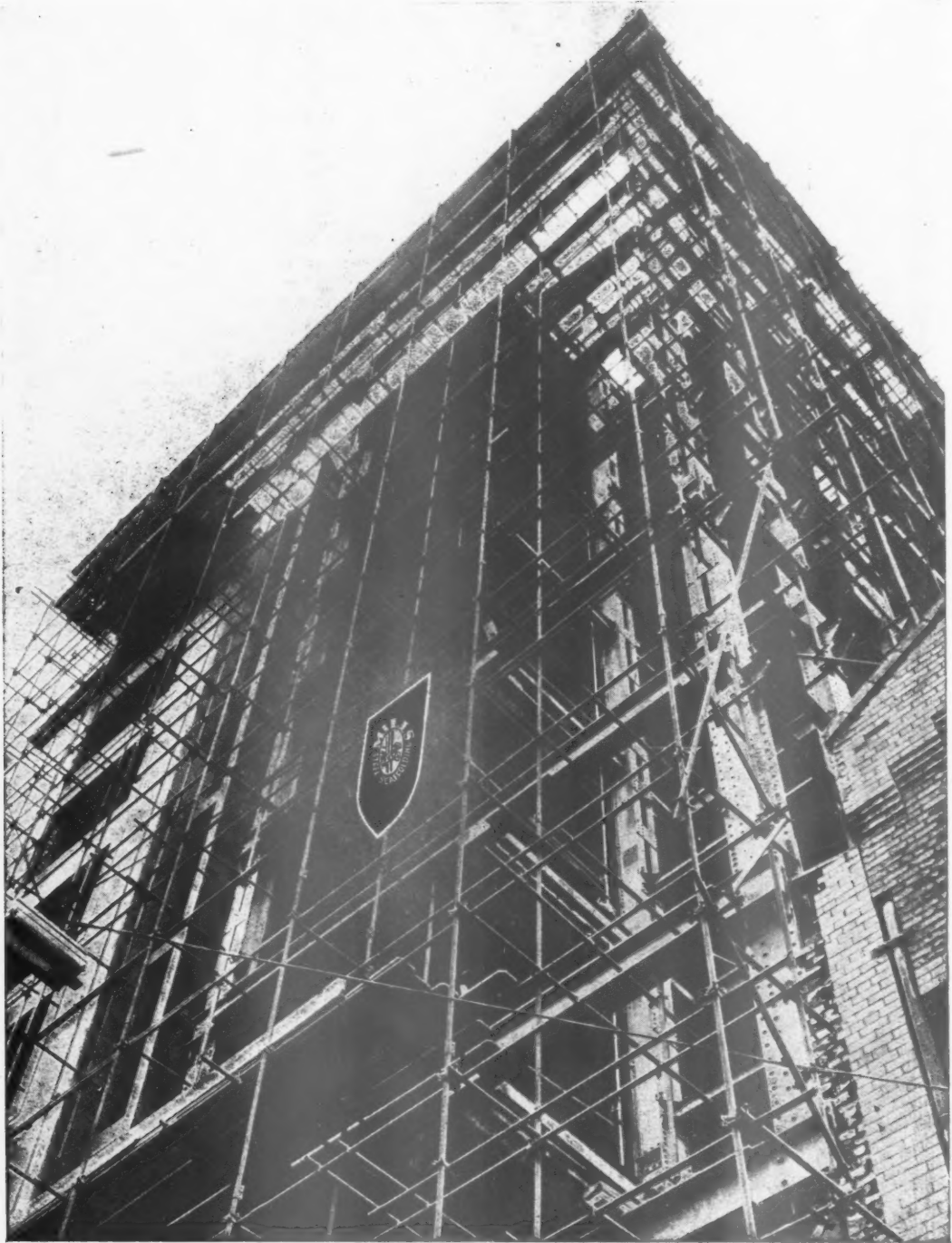


-repairs and  
replacements  
by  
**HELLIWELL**

We offer expert advice and service, backed by 60 years' experience, in the repair and replacement of Roof Lights, Patent Glazing and Metal Windows needing urgent attention.

We are also manufacturers of Weather-proof Obscuration Shutters as approved by H.M. Office of Works and the Ministry of Supply.

**HELLIWELL & CO. LTD.**  
BRIGHOUSE, YORKSHIRE & 68, VICTORIA ST., LONDON, S.W.1



# 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**

