

# 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

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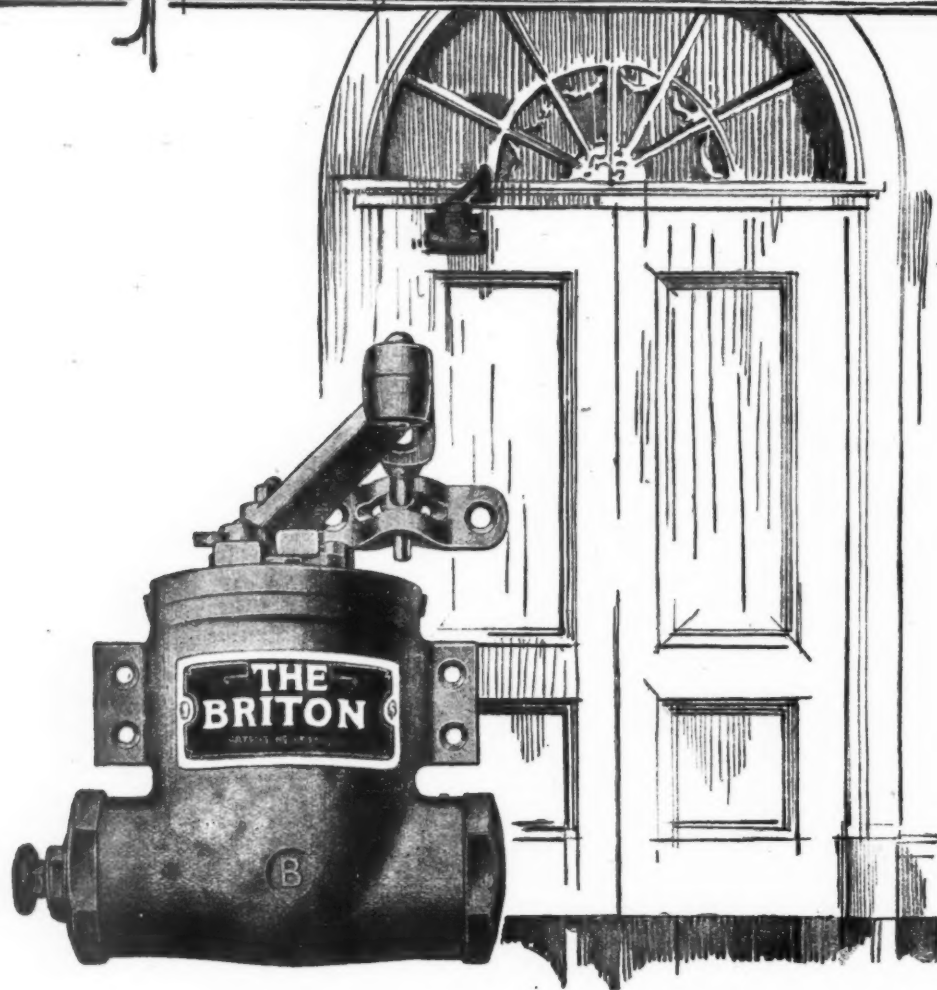
Price 9d.

Registered as a Newspaper

★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers, is given below. 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
ACGB	Arts Council of Great Britain. 9, Belgrave Square, S.W.1.	Sloane 0421
APRR	Association for Planning and Regional Reconstruction. 34, 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 5721
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 2128
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 25, Victoria Street, S.W.1.	Abbey 5422-3
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	British Steelwork Association. Egginton House, Buckingham Gate, S.W.1.	Victoria 7301-2-3
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
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
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. 9, Conduit Street, W.1.	Mayfair 0477
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 4, Hobart Place, S.W.1.	Sloane 2844
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
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767
MARS	MARS Group (English Branch of CIAM). 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 7070
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
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211/2
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
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
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SAC	Scientific Advisory Committee, Ministry of Works, Lambeth Bridge House, Albert Embankment, S.E.1.	Reliance 7611, Extension 1450
SIA	Society of Industrial Artists. 20, Wellfield Avenue, N.10.	Tudor 7027
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815

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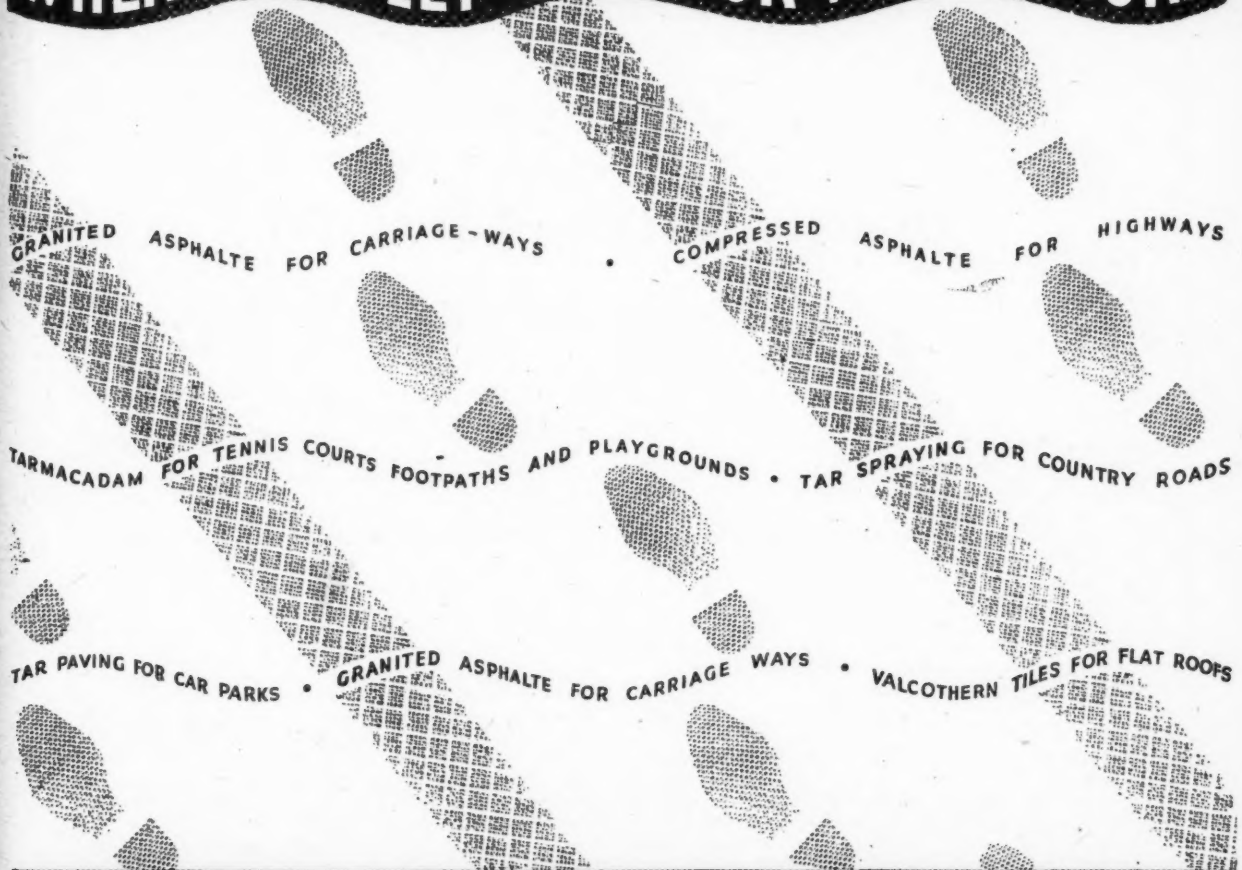
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# Meeting employers' demands for men of executive standard

**W**HEN millions of men came home after the first world war, there was no adequate machinery to help those of talent or experience to find jobs worthy of their ability—or to help employers to find them. The result was a vast amount of human waste and frustration, tragic for individuals and a serious loss to business and industry.

Once again the Forces and war industry are releasing thousands of men and women of superior ability—some with special qualifications, others with good executive experience. And there are also many high-grade younger men, called up before they were well started in business or industry, but now matured by war, and with the qualities of initiative and character that employers seek.

But this time a free appointments service, on a nation-wide scale, is helping to put employers in touch with the men and women they need for executive, managerial or administrative positions.

## FINDING THE RIGHT MEN

The work is decentralized, in thirteen Regional Appointments Offices, so that all candidates for responsible posts can be interviewed and their abilities classified. Those with no previous experience in their chosen field are assessed and "screened" by modern, tested methods to reveal special aptitudes.

In this way the employer is spared many fruitless interviews

—since only promising candidates are submitted for his selection. And to find a man with the right experience for a particular post, or the right talents to train, he can draw on the whole country if need be.

It is NOT the task of the Appointments Offices to find jobs for all applicants, regardless of ability: the aim is to see that capability and experience are not wasted, and that employers have a choice of the best candidates available for responsible posts. More than 30,000 such positions have been successfully filled since VE-day.

## GOVERNMENT-ASSISTED TRAINING

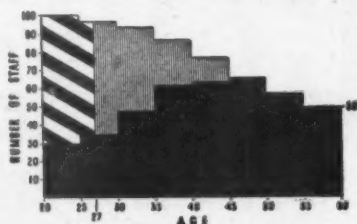
Whether you need a man who is already qualified and experienced, or are looking for a promising young man to train, it is highly probable that the man you are seeking is now on the Register of one of the Appointments Offices, or will be as soon as his release group is reached.

Or he may be among the men training under one or other of the Government's Training Schemes—the Further Education and Training Scheme, by which men are assisted to complete their professional or technical education—or the Business Training Scheme, which gives to selected men of potential management calibre a training in business management, including practical training within a firm, coupled with financial assistance where necessary while training.

In any event, if you will give your Regional Appointments Office an indication of your needs, every effort will be made to find the man you want.

Write, telephone or call. The Regional Appointments Offices are in the following towns:—

LONDON: 1-6 Tavistock Square, W.C.1  
CAMBRIDGE: 5 Salisbury Villas, Station Road  
READING: 23 Valpy Street  
BRISTOL: Lyndale Hotel, Berkeley Square  
BIRMINGHAM: 239 Broad Street  
NOTTINGHAM: Commerce Chambers, Upper Parliament Street  
LEEDS: Greek Street Chambers, Greek Street  
MANCHESTER: Commercial Chambers, 47 Corporation Street  
LIVERPOOL: Cotton Exchange, Bixteth Street  
NEWCASTLE-ON-TYNE: 153 Barras Bridge  
EDINBURGH: 5 Rothesay Terrace  
GLASGOW: 450 Sauchiehall Street  
CARDIFF: 8 Cathedral Road



**THE SEVEN-YEAR GAP.** Employers trying to make up for the lost years, when they could not recruit promising young men to train for executive jobs, are finding the Appointments Offices a valuable source of "material."

The above chart represents the staff structure of a typical engineering firm. In grey: men called away. In black: the war-time staff, reserved or unfit. In stripes: the 20-27 age gap now left, even after reinstatement of pre-war employees.

Unfilled, this gap will mean a dangerous staff shortage, in ten years' time, of the 30-37's; in twenty years' time, of the 40-47's. It can be filled only by men between 20 and 27 returning to civil life. Most of those of executive calibre are applying, on release, to the Appointments Offices. That is where employers are finding the talent they want.

## A Manufacturer's Thanks

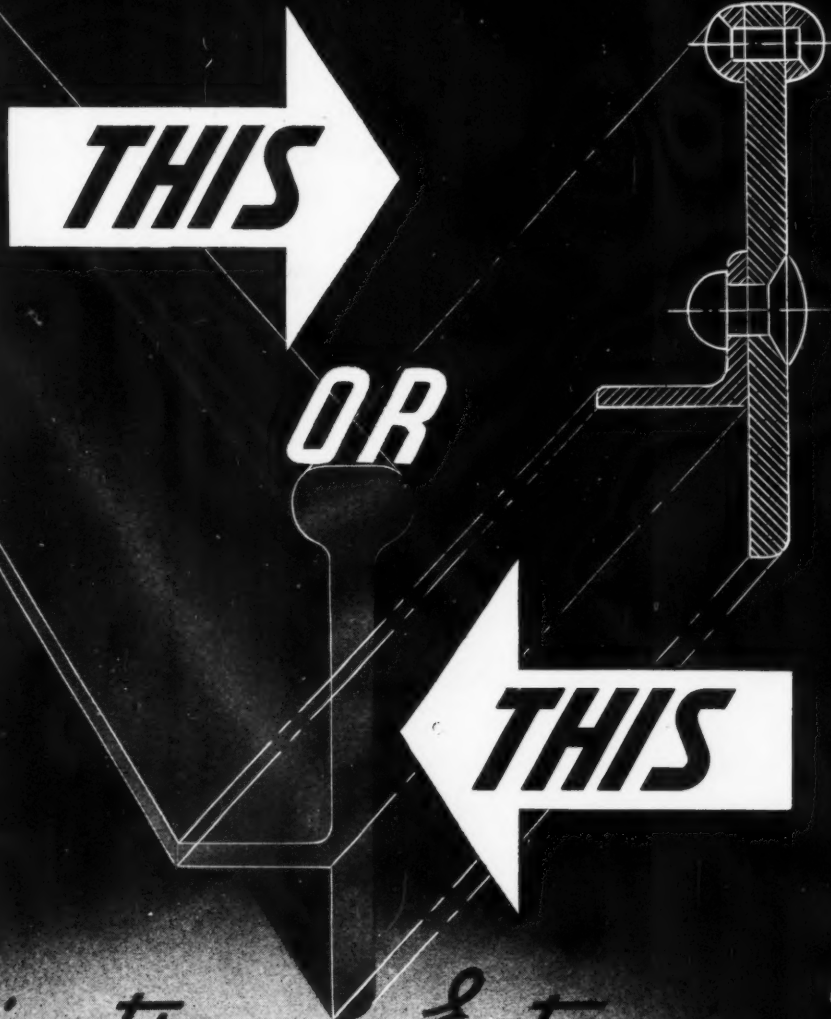
Employers have been quick to appreciate the work of the Appointments Offices. The following, from a firm of manufacturing chemists, is representative of many such letters received:—

"I would like to express my sincere thanks to your Department for the excellent service which you have afforded me. It is my considered opinion that the selection of applicants by you shows excellent judgment and a considerable amount of skilful work."









## *Fabrication or Extrusion?*

Eliminated! Two rows of rivets . . . one unwanted flange and two half-round rolled sections! Another example—among so many—taking advantage of the extrudability of light alloys. It is plain that here is a case where the designer can utilise the metal to suit his precise purpose. That is, to obtain a simple, clean-cut, strong, light and economical job. Extrusion dies can be made in reasonably quick time. They are relatively inexpensive and they last a long while. The possible saving by using extrusions is quite considerable. These are points worthy of your attention. We will provide any further information that you may require. Just a note to Birmetals Ltd.—that's all that is necessary.

**B I R M E T A L S   L I M I T E D**  
**Q U I N T O N , B I R M I N G H A M , 3 2**

It is with extreme reluctance  
that we are compelled – by  
force of circumstance – to  
announce a 10% increase  
on the price of the  
**CORNER GAS COOKER**  
as from July 1<sup>st</sup> 1946



G. CORNER & CO. LIMITED  
ADAIR STREET WORKS, MANCHESTER, 1

# CRITTALL WINDOWS

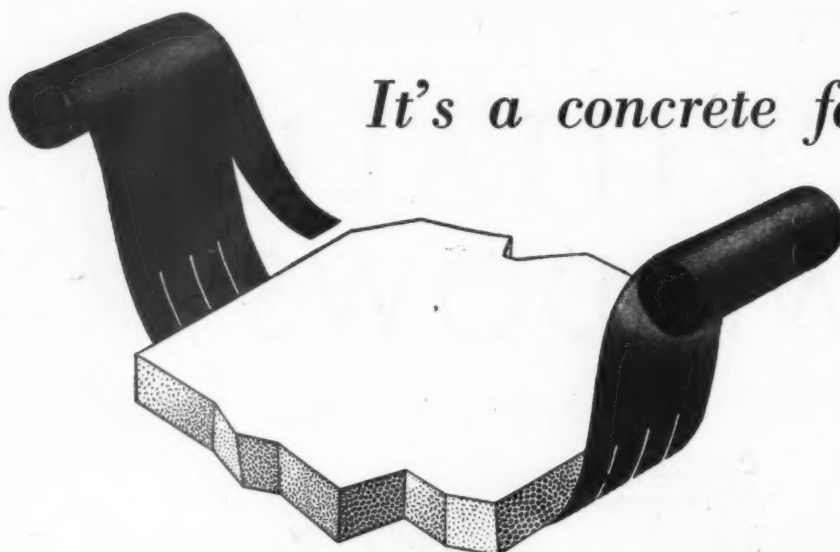


## FOR THE NEW HOUSES

By specifying STANDARD metal windows—  
from British Standard 990 : 1945—you help to  
reduce the present unavoidable delay in delivery,  
and at the same time you ensure highest  
quality and lowest cost.

Ask for leaflet 115 B.

THE CRITTALL MANUFACTURING CO. LTD.  
BRAINTREE, ENGLAND



## *It's a concrete fact . . .*

People say that to indicate something positive and incontrovertible. Well, it's a concrete fact that concrete itself can only set and harden properly while water remains in the mix. If the mixing water escapes from the underside of a slab, that underside may never harden properly and will remain a hidden weakness. Moreover, if the bottom concrete is weak, there is a risk that subsoil moisture may later penetrate to any steel reinforcement present and destroy it. IBECO waterproof concreting paper is the practical, scientific safeguard against such unwanted drainage. No moisture can get past IBECO ; it's waterproof throughout its texture. The proofing bitumen is part of the paper itself—cannot harden or crack in extremes of temperature, will not deteriorate in store. If you want to lay concrete that will carry your reputation safely, better put down IBECO first ! Full technical details from C. Davidson & Sons Ltd. (Dept. K.51), Mugie Moss, Aberdeen.

**IBECO** WATERPROOF KRAFT PAPER









*Ranalah*

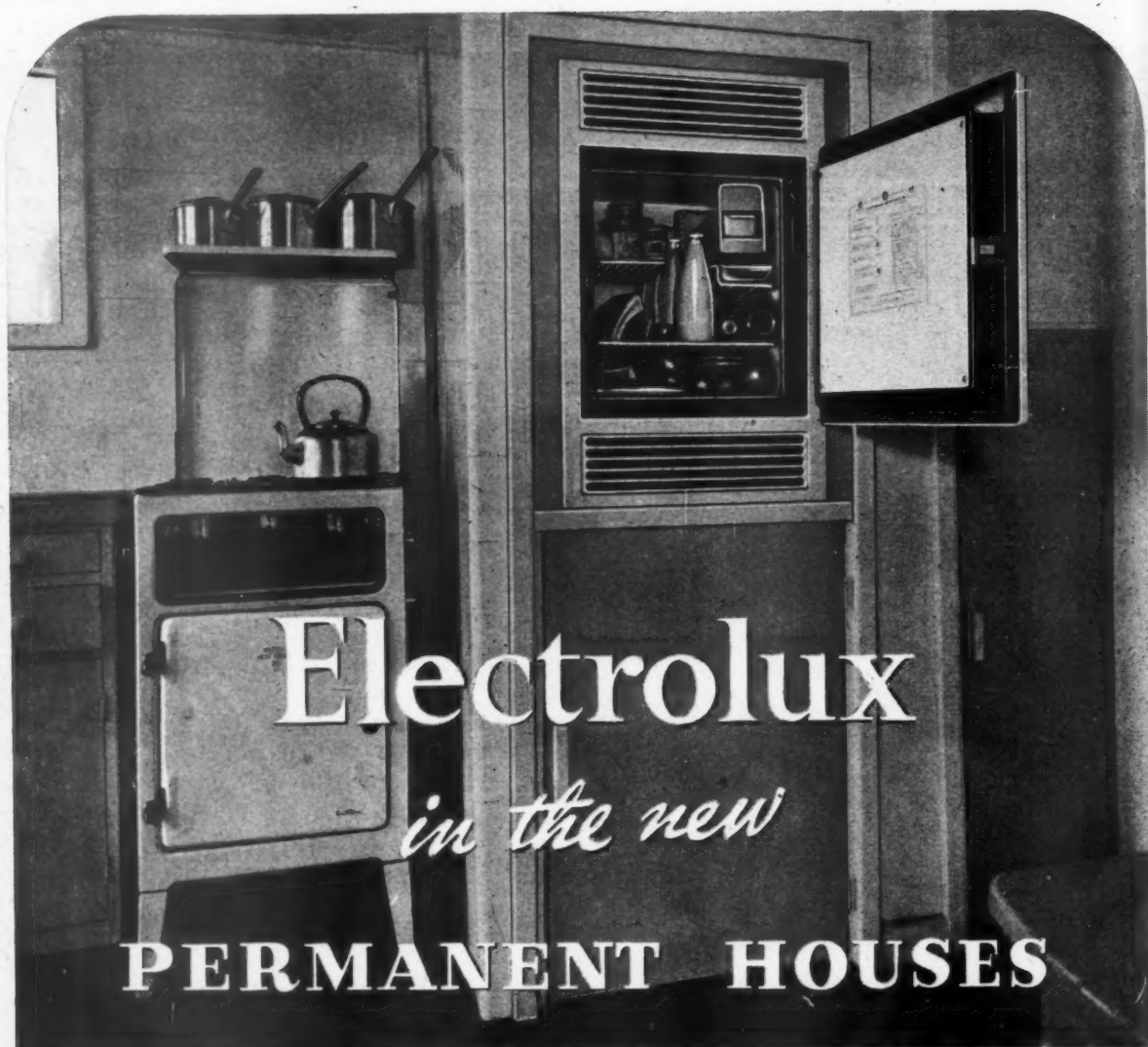
INSTANTANEOUS  
GAS WATER HEATERS



*Sales Office:*

RANALAH LTD. 5 QUEEN ANNE'S GATE, LONDON, S.W.1.

Phone: WHITEHALL 8369



You've seen a lot in your technical press about Temporary Houses and their Electrolux *Silent* Refrigerators. So here—for a change—is something about Electrolux in two prizewinning Permanent Houses from a National Competition organised by the Housebuilding Industries' Standing Committee.

These model houses were recently shown to the public at Cranford Park Estate, Hayes, Middx. (built by Taylor Woodrow Construction Ltd.; designed by Messrs. T. P. Bennett & Son, F.R.I.B.A.); and also at Eastcote, Middx. (built by George Wimpey & Co., Ltd.; designed by Eric Collins, A.R.I.B.A.).

The illustration shows a corner of the kitchen at Cranford Park with the Regulo Cooker (made by Radiation Ltd.)—and the Electrolux Refrigerator, built into the kitchen furniture at convenient shoulder height. Under the Electrolux Refrigerator is ample storage space for non-perishable food. Like all 'built in' Electrolux Refrigerators (irrespective of whether they are operated by Gas or Electricity) it has no machinery, no moving parts. This means dependability, freedom from vibration, low maintenance cost, and, above all, *Silent Refrigeration at all times.*

NOW IN PRODUCTION...

# Electrolux

## *Silent*

### REFRIGERATION



By Appointment  
Refrigerator  
Makers

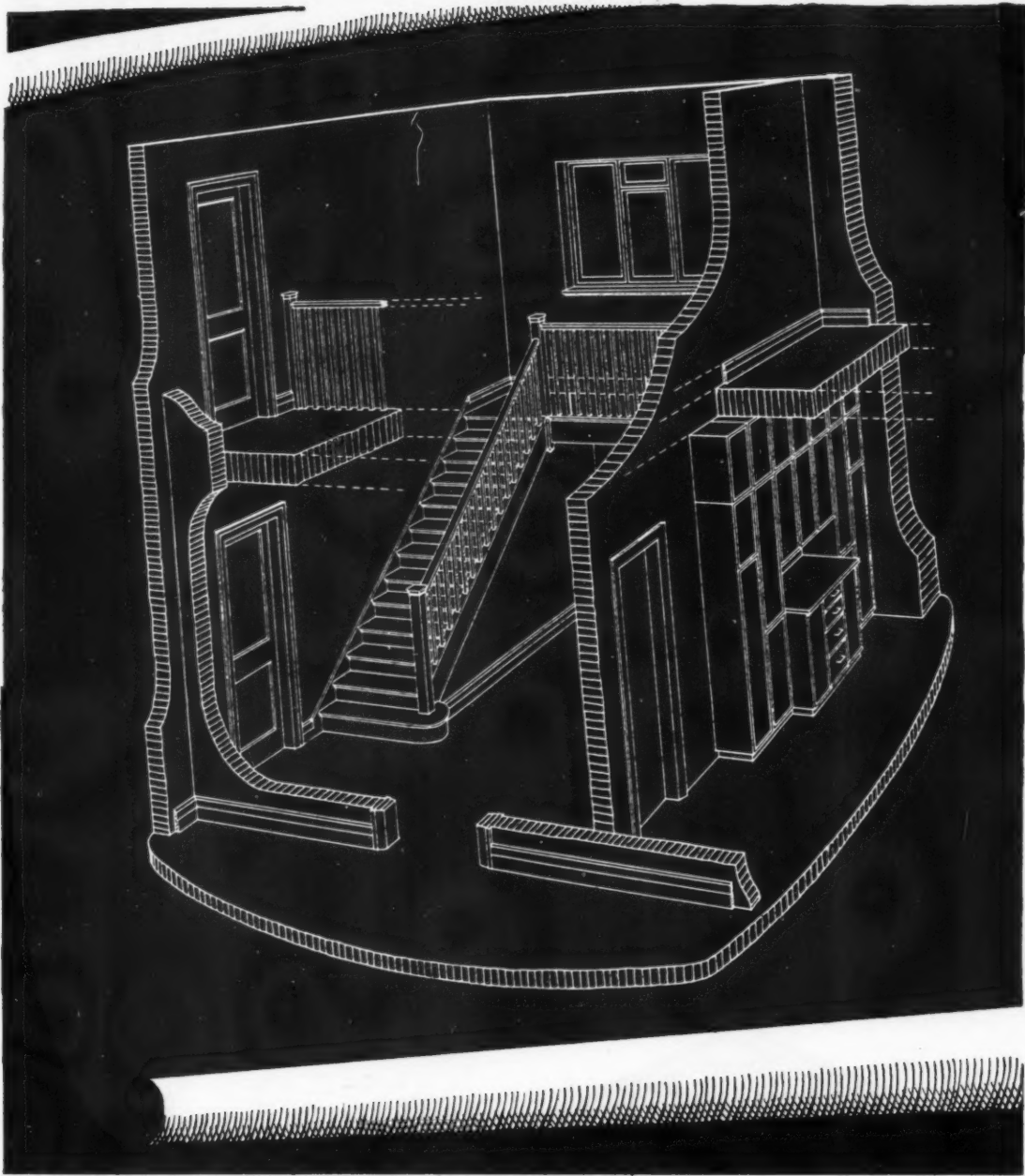


By Appointment  
Suction Cleaner  
and Refrigerator  
Manufacturers

ELECTROLUX LTD. LUTON, BEDS. HEAD OFFICE: 153/5 REGENT STREET, LONDON, W.1.

Also Manufacturers of the famous Electrolux Suction Cleaner





Selected and seasoned timber, machined to the fine limits which modern cutters make possible, and carefully assembled by craftsmen with a tradition of good work, will, even in production on the largest scale, give joinery worthy of the reputation of a firm like Sadds.

## **JOHN SADD & SONS, LTD.**

**specialists in joinery**

**MALDON**

Telephone: Maldon 131 (6 lines)

**ESSEX**

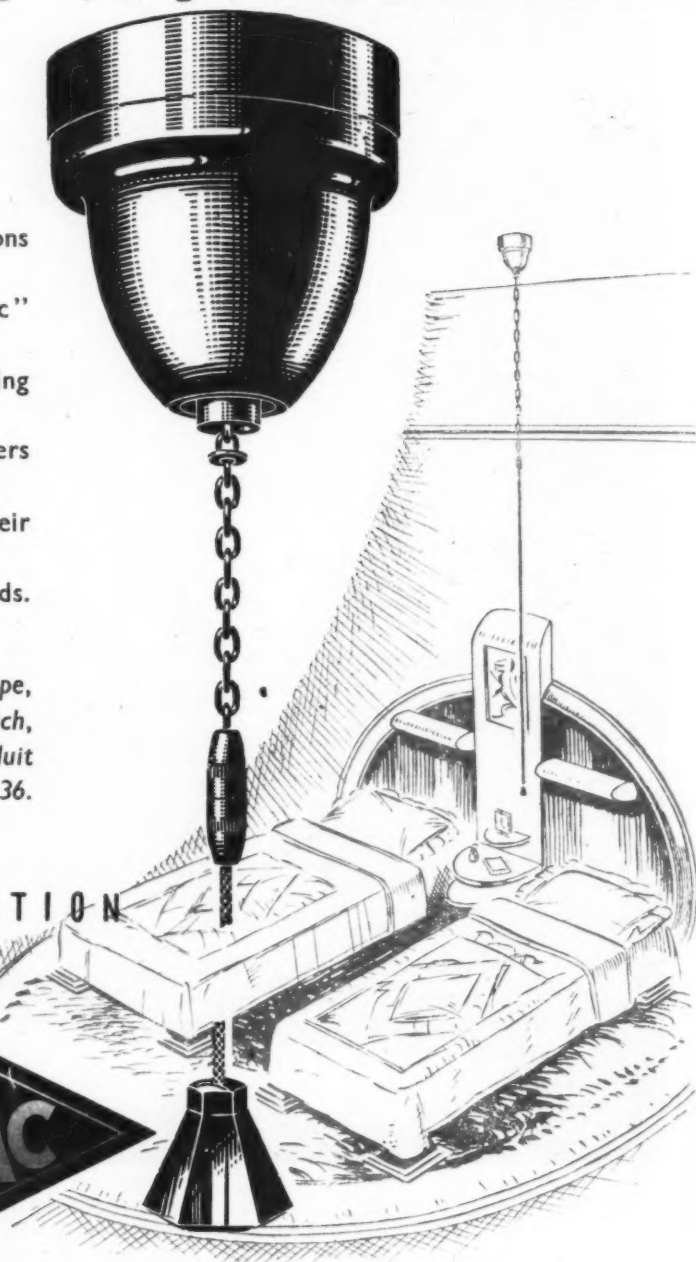
London Office: ALDWYCH House, W.C.2. Telephone: Holborn 7225.

# ECONOMICAL INSTALLATIONS

In spite of continued restrictions all available supplies of "Britmac" Electrical Accessories are reaching the recognised Electrical Wholesalers who, we know, are doing their utmost to meet your demands.

*Illustrated is the Surface Type, "Universal" pattern Ceiling Switch, for mounting direct to B.S. Conduit Boxes. Catalogue No. P2736.*

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ELECTRICAL ACCESSORIES FOR ALL INSTALLATIONS  
**BRITMAC ELECTRICAL CO. LTD.**

SALES ORGANISATION OF C. H. PARSONS LTD

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Telegrams: BRITMAC, BIRMINGHAM

Glasgow Office: GRESHAM CHAMBERS, 45 WEST NILE STREET, GLASGOW, C.I.

Telephone: Central 9106

**TO LOCAL AUTHORITIES AND CONTRACTORS—**

*You can  
Save 25%*

**ON THE COST OF**

**CONCRETE ROADS**

**FOUNDATIONS**

**SLABS FOR HOUSES**

*by using*

**CHEECOL**

**PATENTED GROUTING PROCESS**

*Regd. Trade Mark*

**—SAVE TIME—AND LABOUR TOO!**

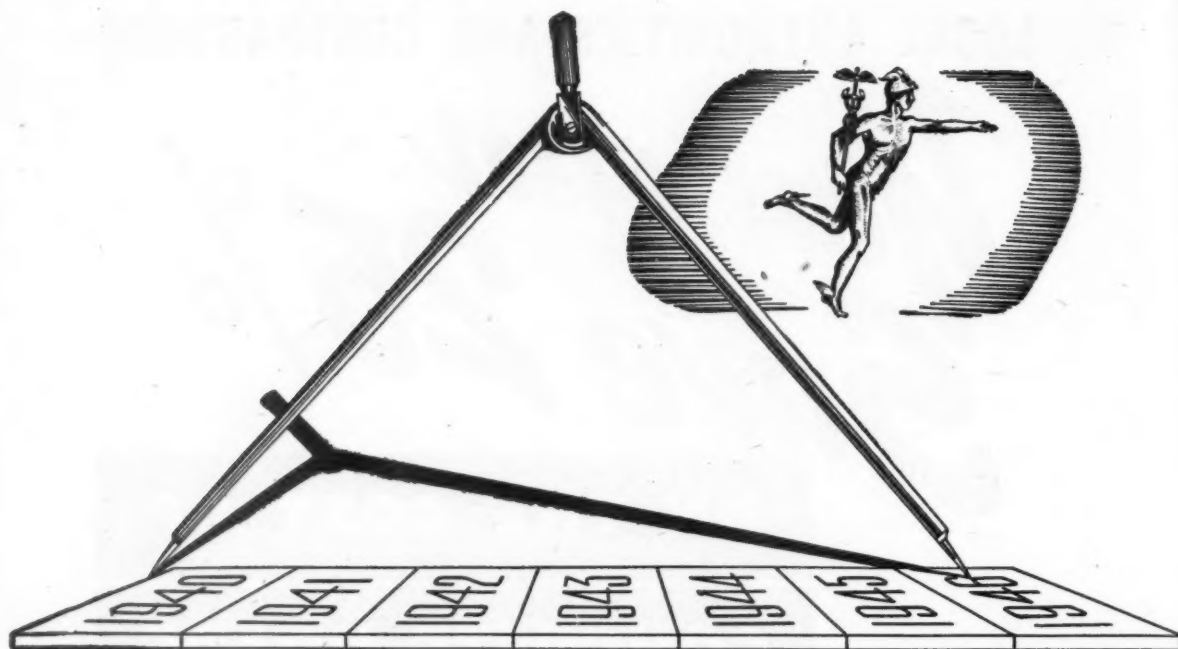
*(The Cheecol Patented grouting system has been  
extensively tested and approved by the Authorities.)*

*Write for full particulars, to:—*

**CHEECOL PROCESSES LIMITED**

40, Broadway, Westminster, London, S.W.1. Telephone: WHItEhall 4109-4100

Agents for Scotland: J. & W. HENDERSON, LTD., 14, Albyn Terrace, Aberdeen.



## SIX YEARS FORWARD

War is a time of scarcity of commodities, but not of enterprise. Six years of apparent standstill have, in fact, been a period when the over-riding urgency of wartime needs have stimulated a new approach to many problems.

Now that the nation's energy is increasingly valuable for peacetime purposes, this spirit of enterprise is bringing great advances in many fields of endeavour including domestic heating. As might be expected from a firm with their record of achievement, Bratt Colbran Limited have taken a leading position in those technical advances which, as will be seen in the forthcoming post-war models, have been developed with customary taste and distinction in design.

**BRATT COLBRAN LIMITED**

10 MORTIMER STREET, LONDON, W.1

"PORTCULLIS" GAS FIRES • "HEAPED" COAL FIRES • "SOLECTRA" ELECTRIC RADIATORS



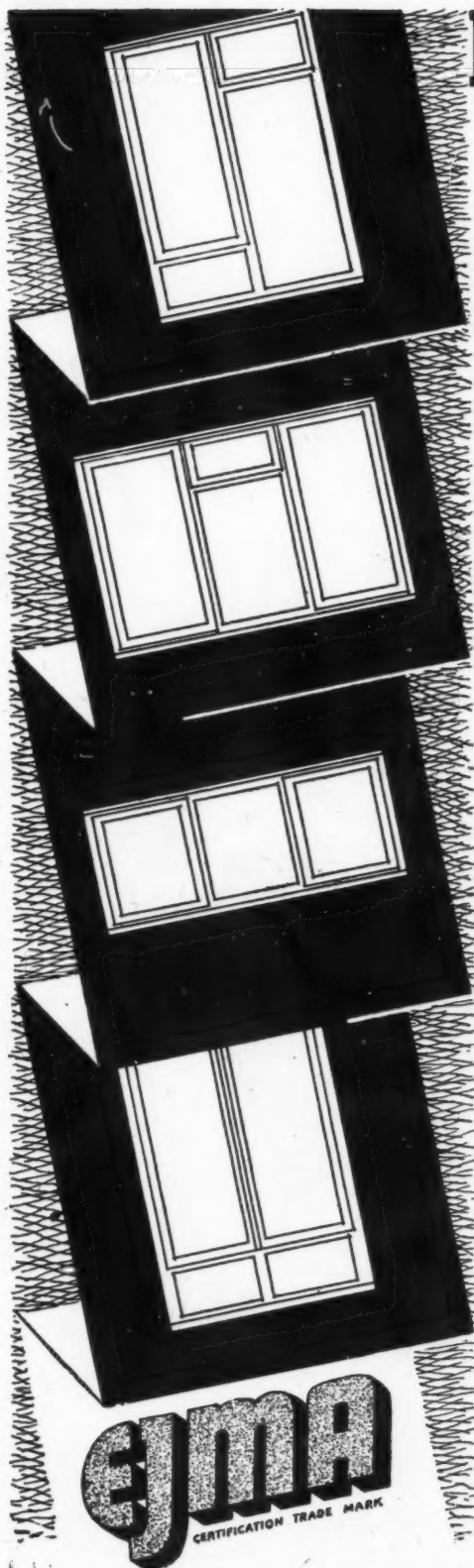
# DESIGN FOR STRENGTH

## *Without Weight*

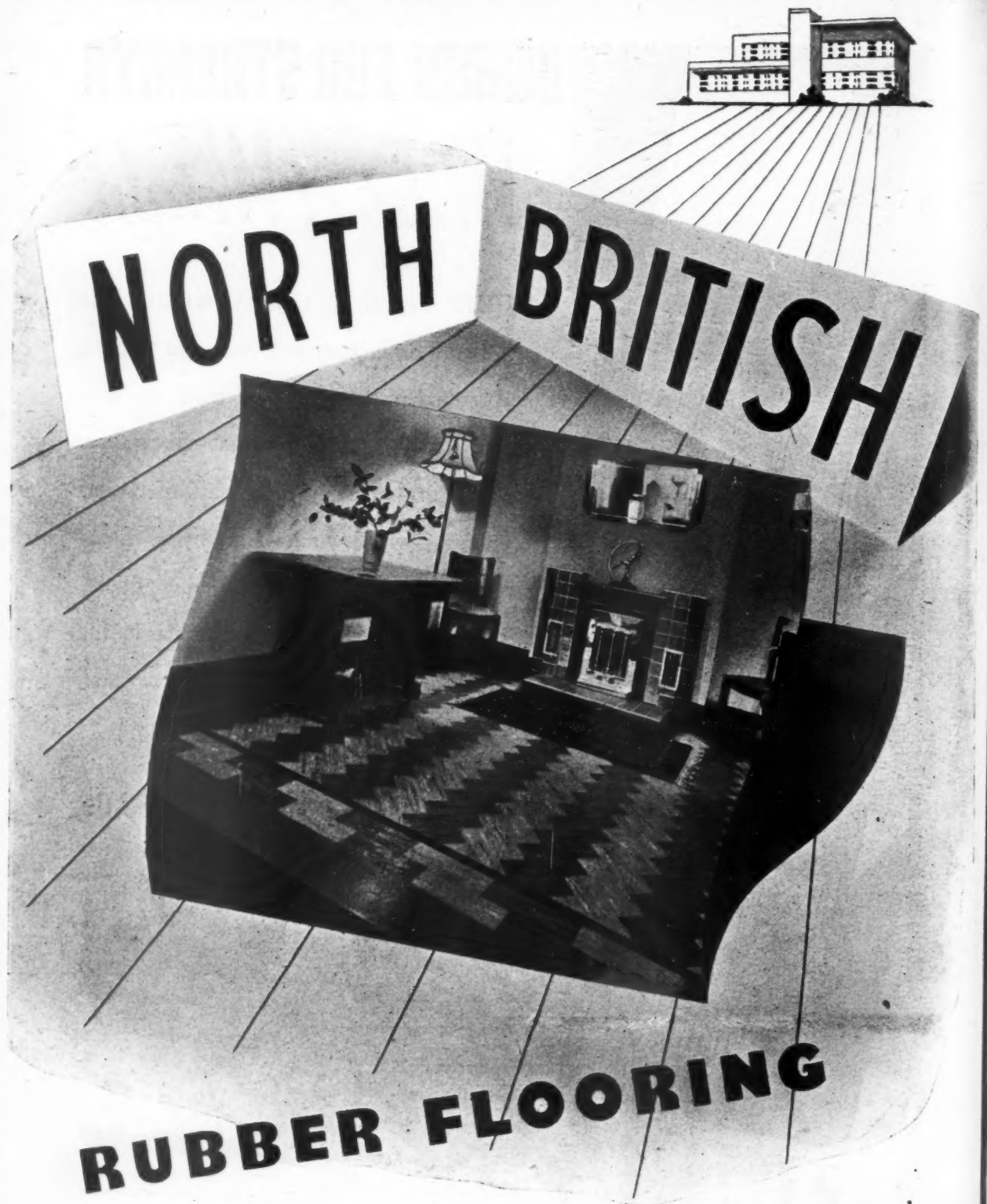
THE design of EJMA windows is based on engineering facts and figures, and sufficient material is used to give ample strength and a pleasant appearance. As a result — even in these days of timber economy — wood windows are being extensively used. In a 1,000-ft. super house, with timber restricted to two standards, the windows will account for no more than 1/15th of the total allowance.

### SAVES 45% SHIPPING SPACE IN TIMBER

Because of modern design and economies in manufacture, an EJMA window uses little more than half the timber compared with a pre-war standard window of almost the same size, and admits more daylight. All EJMA windows conform to brick dimensions for ease of erection.



**THE ENGLISH JOINERY MANUFACTURERS ASSOCIATION**  
 SACKVILLE HOUSE, 40 PICCADILLY, W.1 REGENT 4448 (INCORPORATED)



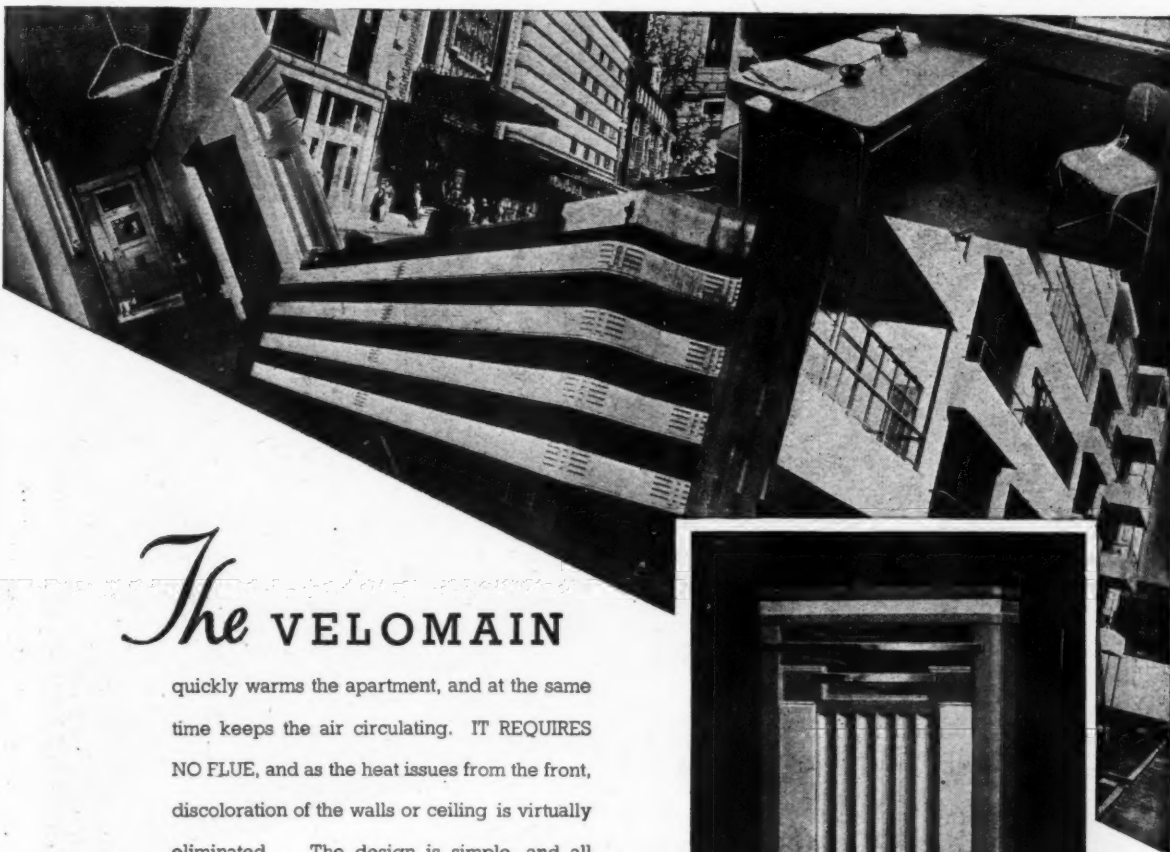
The advertisement features a central illustration of a room with a checkered rubber floor. The room contains a table with a vase of flowers, a lamp, and a fireplace. The text "NORTH BRITISH" is written in large, bold, sans-serif letters across the top, and "RUBBER FLOORING" is written in large, bold, sans-serif letters across the bottom. A small illustration of a building is in the top right corner, with lines radiating from it towards the central room.

When architects can exercise again full freedom of selection in flooring materials, North British Rubber Flooring will be the obvious choice where clients desire silence, and long wearing qualities, combined with infinite variation of pattern and colour schemes.

THE NORTH BRITISH RUBBER COMPANY LIMITED · EDINBURGH & LONDON



FOR ENTRANCE HALLS • LOUNGES • LIVING ROOMS • DINING ROOMS  
OFFICES • SCHOOLS • THEATRES • CINEMAS • HOSPITAL WARDS  
FLATS • CORRIDORS • WORKSHOPS • PUBLIC BUILDINGS • ETC • ETC

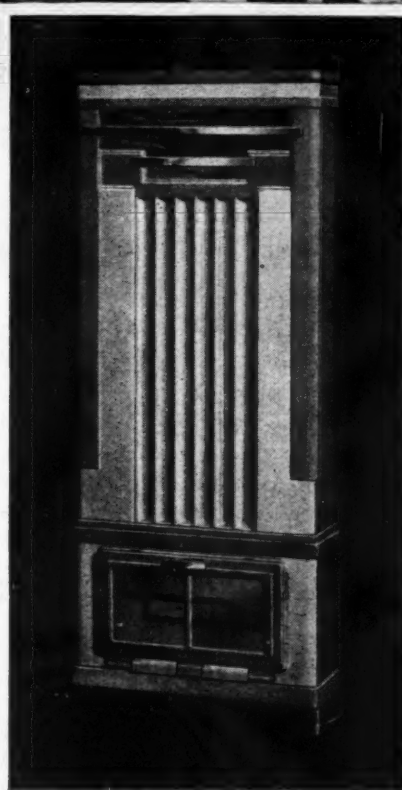


## *The* VELOMAIN

quickly warms the apartment, and at the same time keeps the air circulating. IT REQUIRES NO FLUE, and as the heat issues from the front, discoloration of the walls or ceiling is virtually eliminated... The design is simple, and all parts are accessible for any little cleaning required. The body is made from sheet steel for long service, with cast-iron parts where additional rigidity and strength are necessary.



## VELOMAIN SPACE HEATER



R. & A. MAIN LIMITED, LONDON AND FALKIRK  
Head Office and Showrooms : 48 Grosvenor Gardens, London, S.W.1





*use it here*

This building will be part of the new London—if we ever get a licence—and I want to make a first-class job of it. Use Isteg in those founds; it is definitely safer than mild steel. Use it wherever you can above ground, too; we don't want cracks all over the facade. Besides, the saving in cost over the old estimate for rounds, can be used for improving the finish.

*for Concrete Reinforcement*

Manufactured by GUEST, KEEN & NETTLEFOLDS, LTD. CARDIFF

McCALL & CO. (SHEFFIELD) LTD. TEMPLEBOROUGH • THE UNITED STEEL COMPANIES LTD. SHEFFIELD

AND ISTEG STEEL PRODUCTS LTD. (SALES), 7 PRINCES STREET, LONDON, S.W.1 PHONE: WHItchall 3757

**ISTEG**



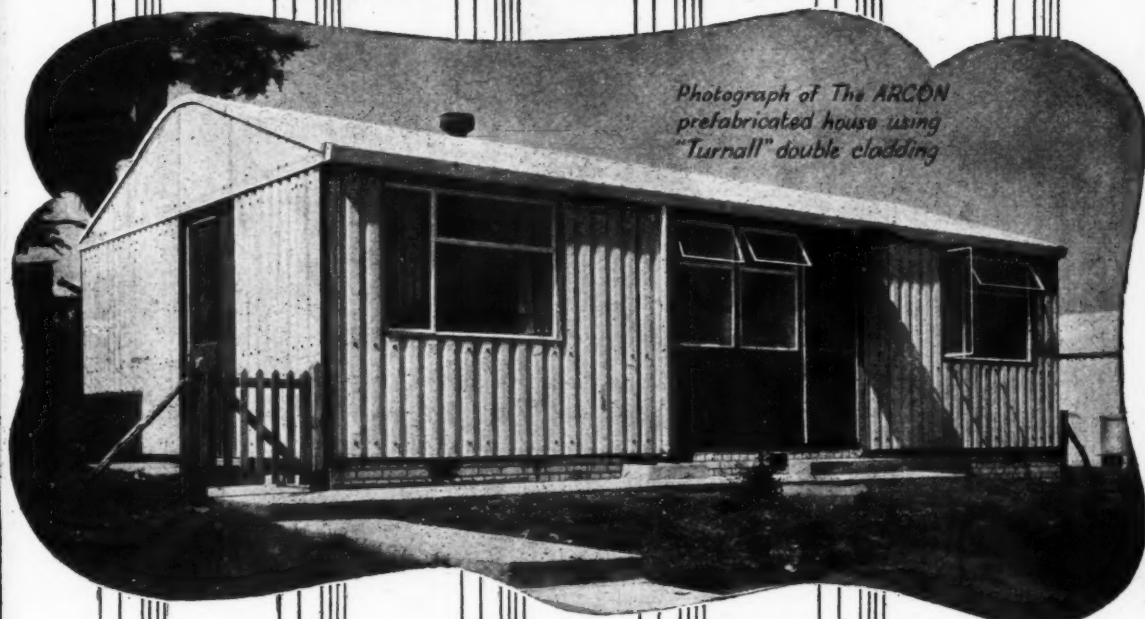
**STEEL**



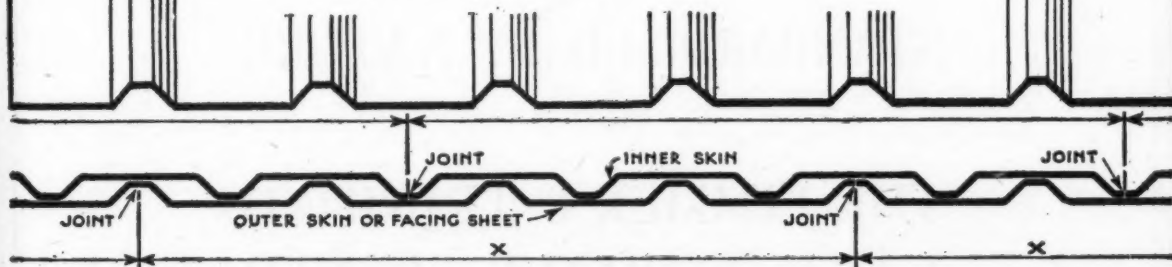
# 'TURNALL' DOUBLE CLADDING

## THE MODERN SYSTEM

*Photograph of The ARCON  
prefabricated house using  
"Turnall" double cladding*



Using Asbestos-cement in the most efficient way and with the greatest overall economy. The system consists of placing two sheets of the same section back to back, each with their joints butted, utilising the full width of the sheet without loss on lap, and achieving considerable increased strength, first-class weather-resistance, added insulation and ease of dealing with windows, doors, etc.



SECTIONAL PLAN SHOWING POSITION OF JOINTS

*Write now for descriptive booklet 5/A1 'Turnall' Double Cladding*



**TURNERS ASBESTOS CEMENT CO. LTD.**  
TRAFFORD PARK • MANCHESTER 17



D.C.I



There is  
NO KNOWN METHOD WHEREBY  
TRINIDAD LAKE ASPHALT  
CAN BE ARTIFICIALLY PRODUCED  
it is  
STANDARDISED BY NATURE

THE LIMMER & TRINIDAD  
LAKE ASPHALT CO. LTD.

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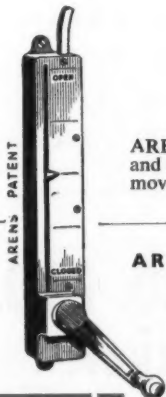
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Covered by Patent

When there's an unusual job to be done, it pays to call in the specialist. For our part, we couldn't blow a note on a pipe that would attract a rat ten feet away and we are content to leave such problems of remote control to the colourful gentleman from the Street of the Pied Piper. But control of distant windows and ventilators is up another street—our street, in fact, and while there is no magic in the way we do it, there is a lot of sound experience that will appeal to the man who realises the wisdom of calling in the specialist.

ARENS COMPACT GEAR BOX requires only one third of the space of a standard Worm Gear operator. Worm and sliding members are totally enclosed. Has a pleasant streamlined appearance. Four turns provide one inch of movement on the control. An Indicator which can be engraved to suit customer is incorporated.



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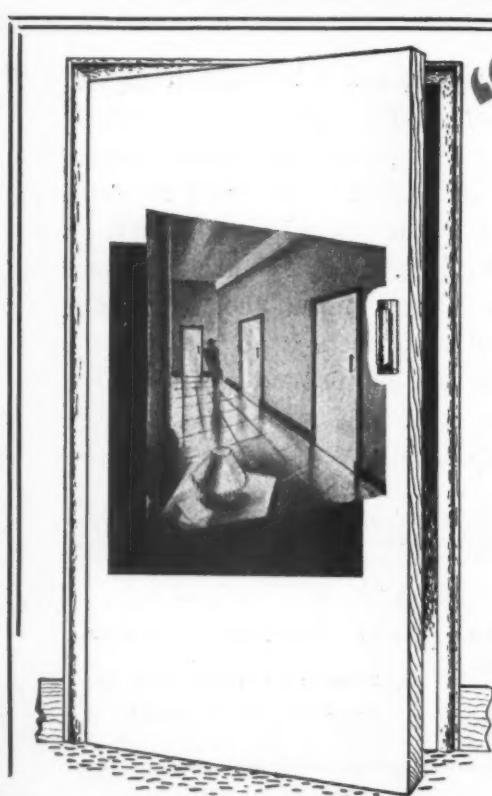
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### FLUSH DOORS

OUR PRE-WAR REPUTATION  
FOR QUALITY OF MATERIAL  
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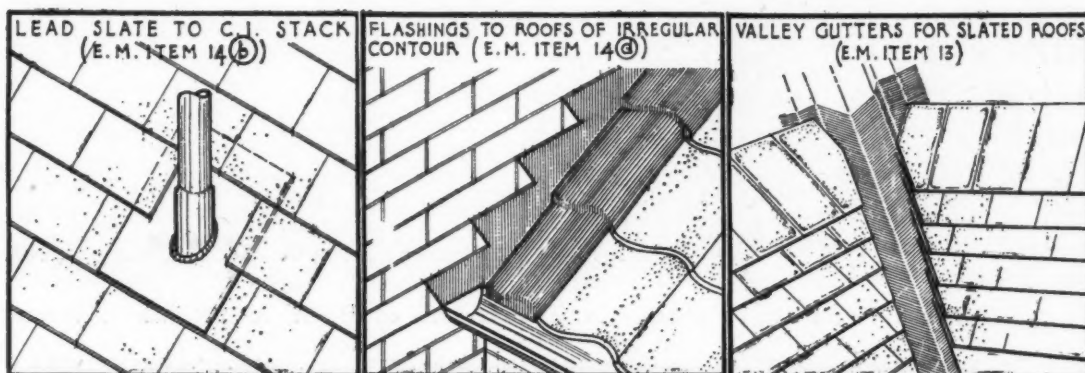
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# LEAD Sheet and Pipe

*may be used* for building purposes but, for the time being the available supplies will not be sufficient to allow its unrestricted use. An Economy Memorandum has accordingly been issued by the Ministry of Health, which is designed to make lead sheet and pipe available for some vital minimum uses in each house. These uses are summarised in a leaflet "Vital Minimum Uses of Lead Sheet and Pipe in House Building", copies of which may be obtained from L.I.D.C. The examples below are extracted from the leaflet.



## LEAD SLATES

The weathering apron with an upstand that fits over any pipe ventilator, cowl or ducting that penetrates a pitched roof is an item in house construction based primarily on the manner in which sheet lead can be manipulated to difficult shapes. Whilst the original method of forming lead slates by working up a flat sheet may be superseded by the method of forming by lead burning two prepared pieces, upstand and apron, the general properties of sheet lead remain to ensure that a sound weathering is obtained to a difficult roof intersection.

The substance of lead for this purpose should not exceed 4 lbs. (See Item<sup>s</sup> 14(b) and (c) of E.M.).

## SPECIAL FLASHINGS

The ease with which sheet lead can be worked to roof materials of irregular contour makes its use essential for flashings to pantiles, moulded tiles, corrugated asbestos cement and similar materials. The use of a substance of sheet lead not exceeding 4 lbs. per sq. ft. is permitted for this purpose. (See Item 14(d) of E.M.). For side and bottom flashings to patent glazing in

pitched roofs sheet lead is also of particular value. The use of sheet lead of substance not exceeding 3 lbs. per sq. ft. is permitted. (See Item 14(e) of E.M.)

## VALLEY GUTTERS

Whilst the available supplies of lead sheet are not sufficient to permit its use for valley gutters generally, it may be used for sloping valley gutters in slated or interlocking tile roofs or for horizontal gutters where alternatives are not practicable. (See Item 13 of E.M.)

**h**  
LEAD

The Technical Information Bureau of the Lead Industries Development Council, which exists to give assistance on problems relating to the use of lead sheet and pipe in building work, will be pleased to give advice on any questions relating to the present restricted uses of the materials.

**LEAD INDUSTRIES DEVELOPMENT COUNCIL, EAGLE HOUSE, JERMYN STREET, LONDON, S.W.1**  
**LEAD TECHNICAL INFORMATION BUREAU, 25 LOWER BELGRAVE STREET, S.W.1**



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AS you've guessed, it's piles we're talking about —Franki Piles to be exact. It is a feature of theirs to proclaim absolute refusal at an earlier stage in their downward career than usual. Why? Because the rugged Franki Piles possess tremendous overall skin friction and a huge, splayed "elephant's foot" base. These characteristics cause greater compression of the soil at an earlier stage than would occur in similar soil conditions with longer, slimmer, smoother piles. The result of this early practical refusal is . . . a quicker job, on shorter and heavier piles at a lower cost. Remember that when you're next thinking of foundations.

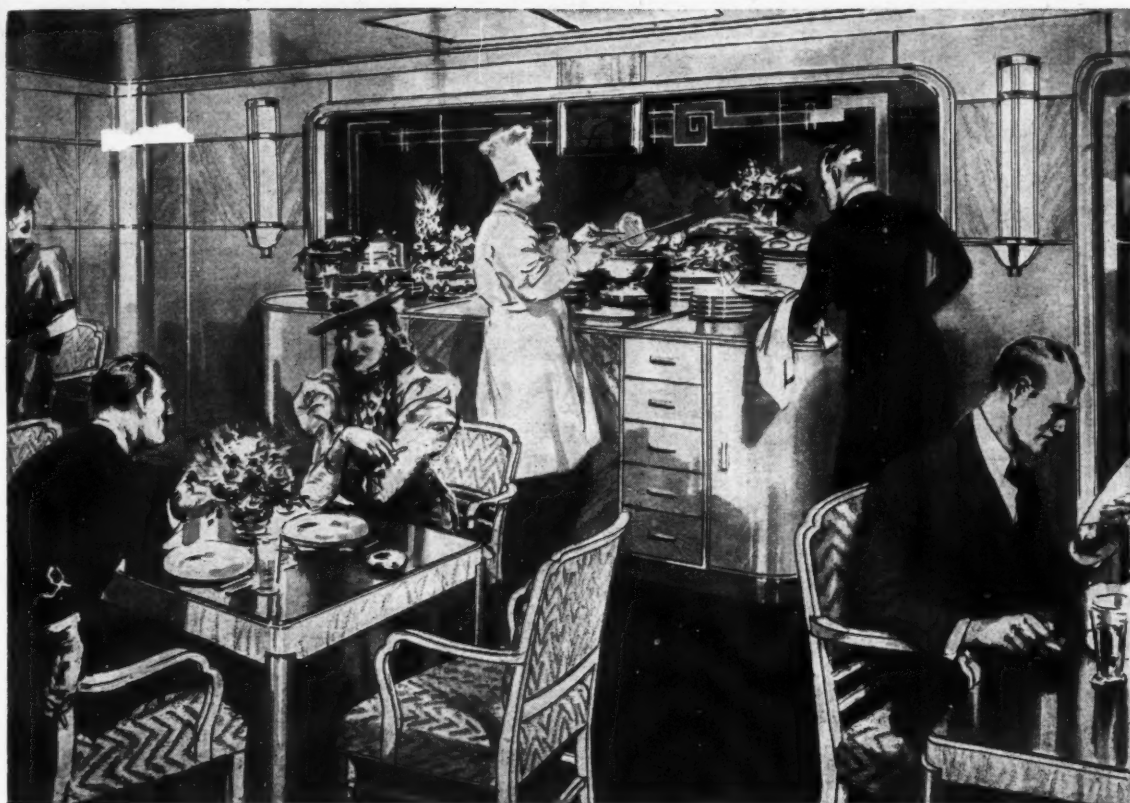
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*Storage capacity of approximately 4½ cubic feet, which will hold all the perishable foodstuffs for a family of four.*

*Larder space rendered unnecessary. Dry goods and non-perishable foodstuffs would be kept in kitchen cupboards.*

*Waist-high door, allowing access to interior without stooping. Height adaptable by varying position of supporting frames.*

*It can be built into kitchen fittings with cupboard space above and below it.*

*Design provides for adequate ventilation of mechanism without the necessity for special air-bricks or ducting.*

*Ice making and 'cold cooking' facilities.*

Most important too, is the fact that this Prestcold refrigerator provides the food storage temperatures necessary for the proper safeguarding of perishable foods—for instance 35°F for fresh fish and poultry; 40°F for milk—and even the lower temperatures needed to store the frozen foods which will be available later on. In addition, it will be most economical in current consumption, using only one unit a day.

**PRESTCOLD** *Refrigeration*



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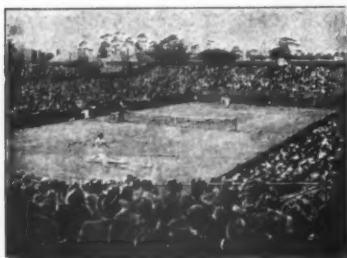
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STROWGER WORKS



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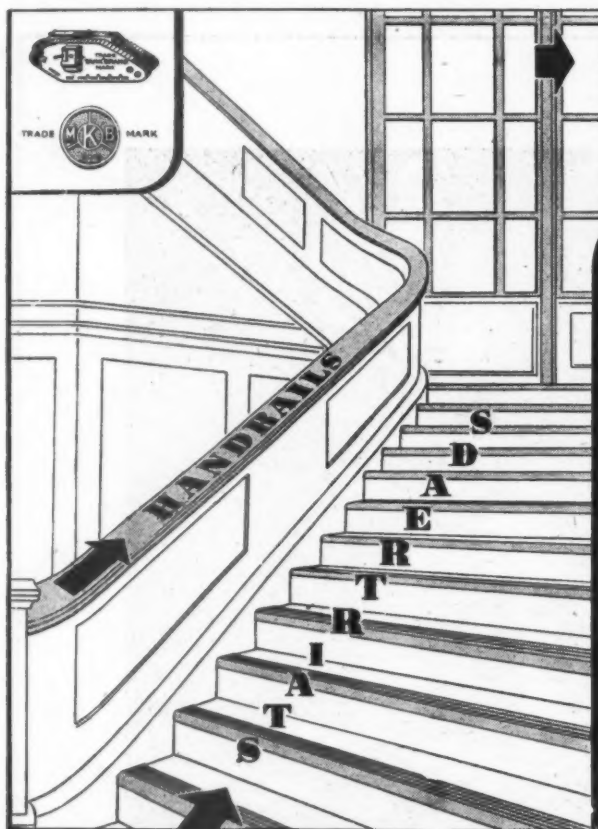
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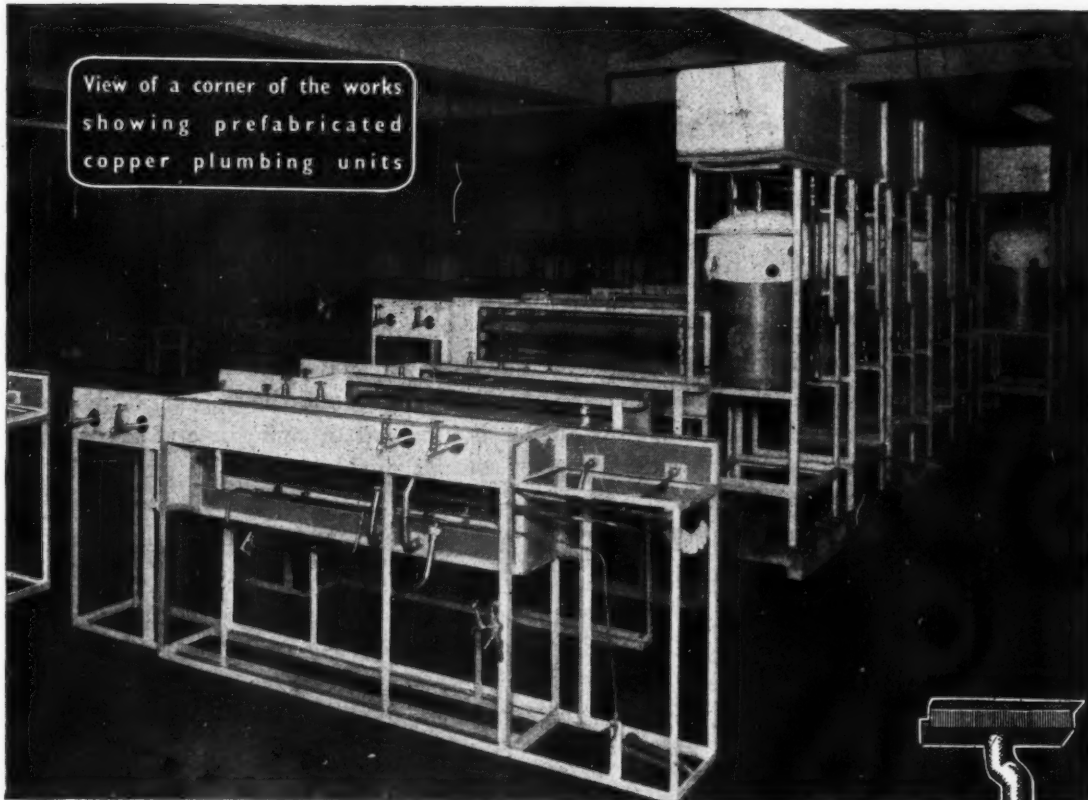
LONDON - 62, Brook Street, W.1. 'Phone: Mayfair 6182/3/4  
LEEDS - Prudential Buildings, Park Row. 'Phone: Leeds 23044  
MANCHESTER-509/513, Corn Exchange Buildings, 4. 'Phone: Blackfriars 5094  
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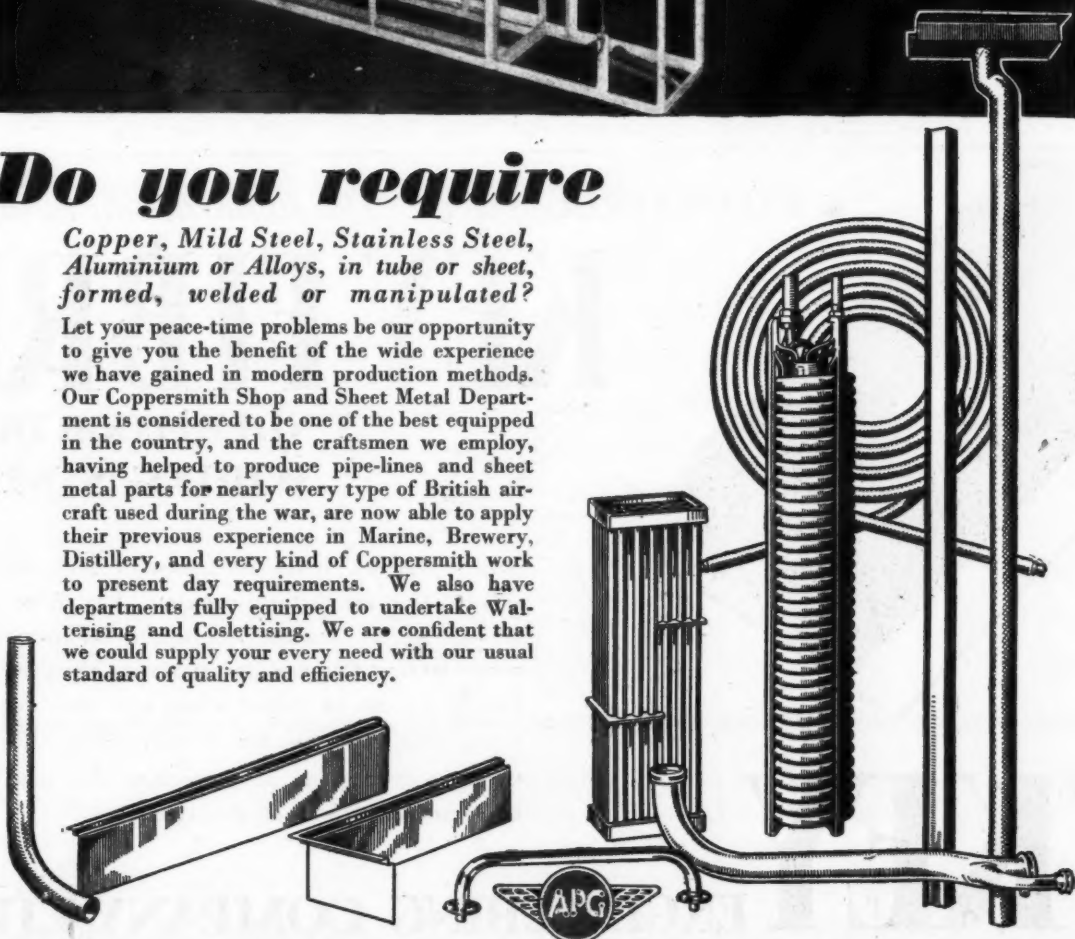




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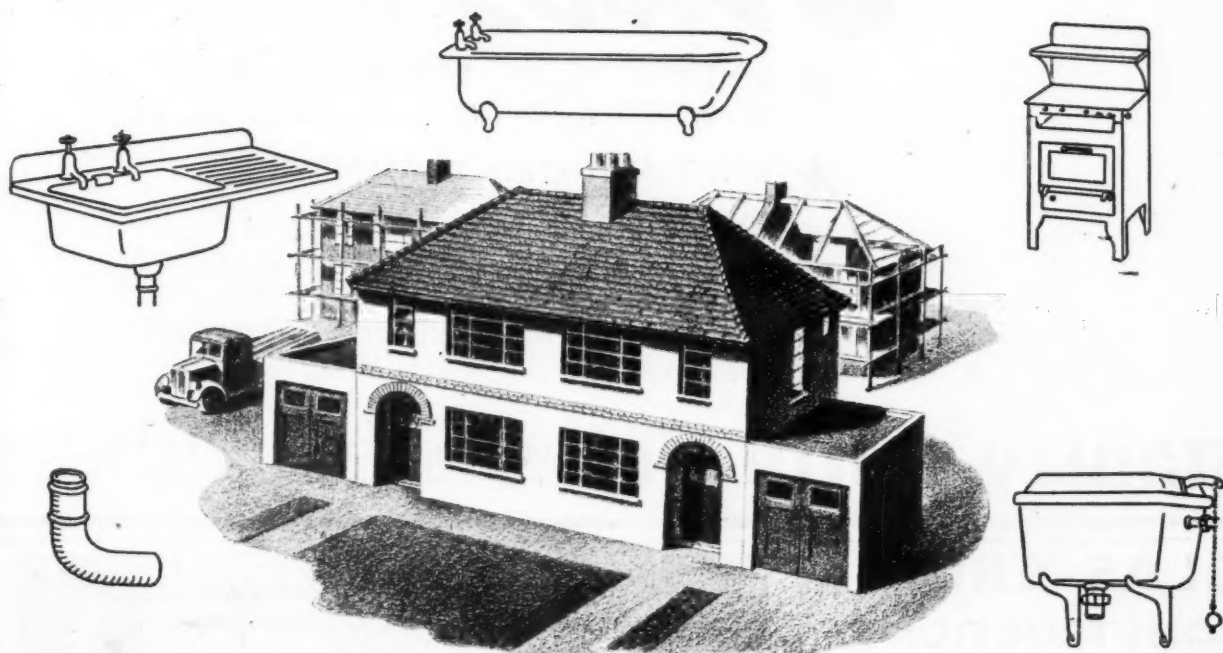
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The British Cast Iron Research Association has a Building Uses Department which is available for dealing with enquiries from architects and builders about cast iron.

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Enquiries should be addressed to THE BUILDING USES DEPARTMENT,  
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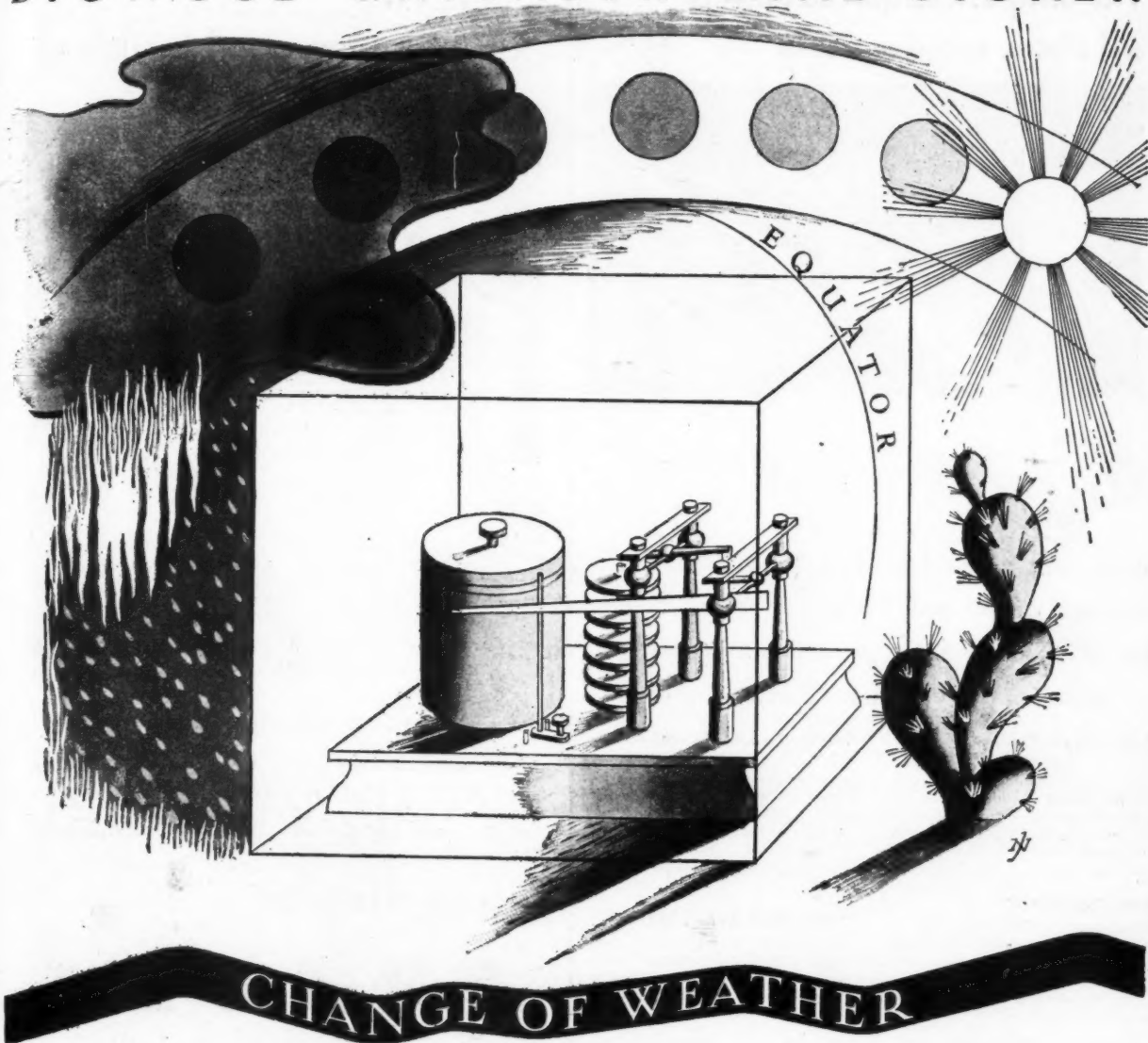


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The Bigwood "Unicalor" Coal Stoker meets all requirements—flexible, automatic, efficient, requiring only infrequent attendance and virtually without maintenance cost.

All considering heating equipment should bear the "Unicalor" Stoker in mind.

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The only L.T. cable that meets  
all these requirements



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Architects: Mewes & Davis, F./F.R.I.B.A., R.A.



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Frazzi Engineers have over 35 years experience in floor construction of every type—concrete slab, hollow block and self-centering. We shall be pleased to give every assistance in working out which system is the best for any specific job from the point of view of both construction and cost.

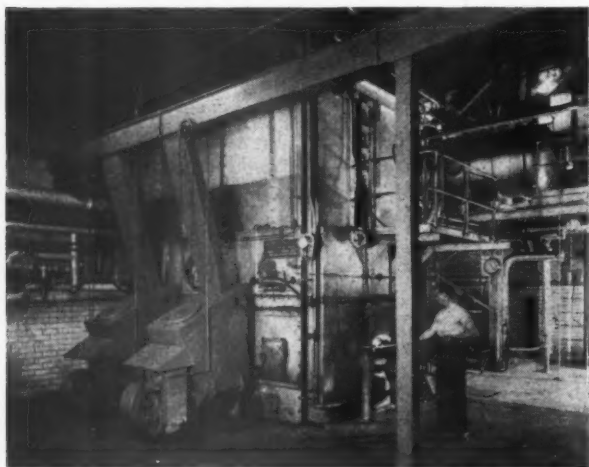
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The experience of this and of many similar Iron Fireman installations is at your disposal.

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- ④ Translucent trough reflector for the 4-foot lamp with rigid reflector of translucent Perspex, and with gear incorporated. Leaflet 121/25-1
- ⑤ Translucent trough reflector for two lamps, generally similar to No. 4. Leaflet 121/25-1
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FLUORESCENT  
TROUGH FITTINGS**

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# a page from the booklet 'Kynal' and 'Kynalcore' aluminium alloys

## ALUMINIUM and ALUMINIUM ALLOYS 'Kynal' and 'Kynalcore' Wrought Productions and their Classifications Mechanical Properties and Complementary Specifications

### SCHEDULE I

CLASSIFICATION (I.C.I.)	FORM	CONDITION	COMPLEMENTARY SPECIFICATIONS			MECHANICAL PROPERTIES (Minimum unless stated otherwise)					REMARKS
			D.T.D.	B.S.S.	S.T.A.M.	0-1% Proof Stress Tons/in. <sup>2</sup>	Ultimate Stress Tons/in. <sup>2</sup>	Elongation % on 2 in.	Brinell Hardness (See p. 10)	Other Tests (See p. 10)	
ALLOYS NOT HEAT-TREATED											
'KYNAL' PA19	SHEET AND STRIP	Soft ↓ Hard	653 213A	—	AW3C	7.5 —	6-7.5 7.5-9.5 11	20-25 5-12 5	28 35 47	Flat [4] IT [4] IT [4]	For low to medium strength applications where good ductility is required. Suitable for cold forming, welding (fusion or spot) anodises well, has good corrosion resistance.
	BARS AND SECTIONS	As extruded	—	—	AW3A	—	9	10	40	—	
	TUBES	↓ Hard	—	—	AW3B	—	8.5-10.5	—	—	—	
'KYNAL' M35/1	SHEET AND STRIP	Soft ↓ Hard	634 606	L46	AW4C	6 12	11 15	18 5	45 67	Flat [4] IT [4]	For medium strength applications where good ductility and very good corrosion resistance are required, particularly under marine conditions. Suitable for welding (fusion or spot), and anodising. Has moderate machining qualities.
	BARS AND SECTIONS	As extruded	—	L44	AW4A	—	11	18	—	—	
	TUBES	Soft ↓ Hard	310B 440	—	AW4B	11	9-11 [2] 15	—	45 67	[6]	
'KYNAL' M35/2	SHEET AND STRIP	Soft ↓ Hard	180B	—	AW5C	7 15	14 18	18 5	56 75	Flat [4] 2T [4]	For intermediate strength applications, where good ductility and very good corrosion resistance are required, particularly under marine conditions. Suitable for anodising.
	BARS AND SECTIONS	As extruded	—	—	AW5A	6	14	18	56	—	
	TUBES	Soft ↓ Hard	—	—	AW5B	8 12	14 16	18 5	56 75	[6]	
'KYNAL' M36	SHEET AND STRIP	Soft ↓ Hard	—	—	AW6C	8 17	17 20	18 5	45 80	Flat [4] 2T [4]	For higher strength applications, where good ductility and very good corrosion resistance are required, particularly under marine conditions. Suitable for anodising.
	BARS AND SECTION	As extruded	—	—	AW6A	8	16	18	50	—	
	TUBES	Soft ↓ Hard	—	—	AW6B	8 14	17 18	18 5	45 80	—	
'KYNAL' M37	WELDING ROD AND WIRE	Soft	303	—	AW6D	—	16-21	—	45	[5]	For medium strength applications where good ductility and very good corrosion resistance are required.
	SHEET AND STRIP	Soft	182A	—	AW7C	9	20-23	20	60	IT [4]	
	BARS AND SECTIONS FOR FORGING	Softened	297	—	AW7A	9	20	18	56	—	
	TUBES	Soft ↓ Hard	190 186A	—	AW7B	9 16 17-18 [7]	20-23 25 25-26 [7]	18 5 —	56 — 95	[12] — [12]	
	WIRE FOR RIVETS	Soft ↓ Hard	198A 304	—	—	—	20-23 27	—	56 80	[5] [5]	

NOTE The figures quoted in brackets refer to Notes on page 10 Proof Stress values marked with an asterisk are 0.2 %

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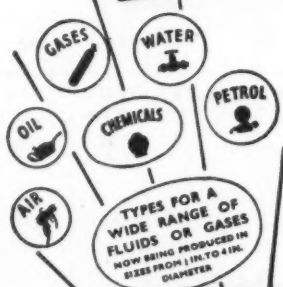
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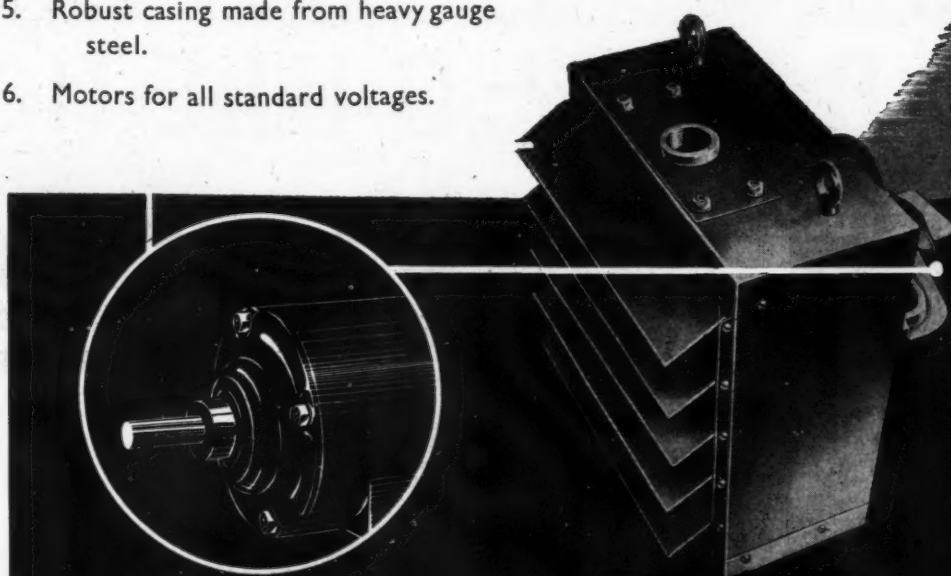


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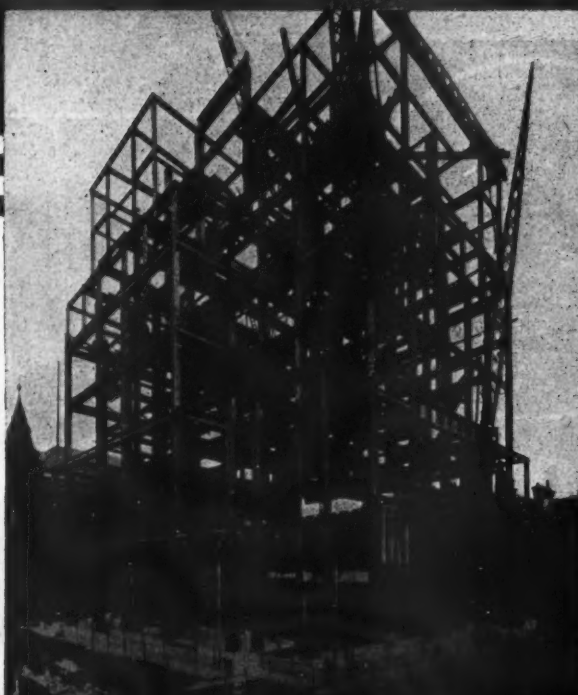
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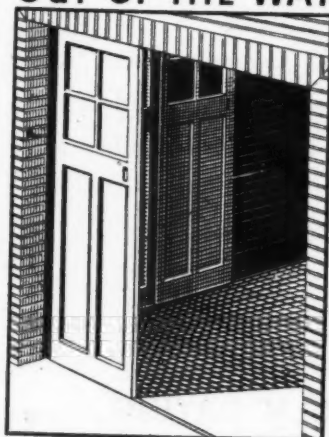
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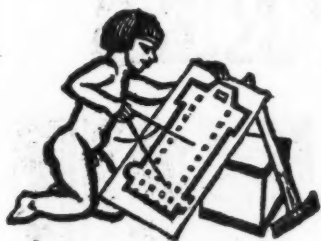


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In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order."

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## DIARY FOR AUGUST SEPTEMBER AND OCTOBER

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

**BOOTLE.** *Recording Britain. North and Midlands.* At the Art Gallery. (Sponsor, the Arts Council.) AUG. 8-31

**BOURNVILLE.** *"News Chronicle" Knutsford Exhibition.* At the Schools, Linden Road, Birmingham, 30. (Sponsor, Bournville Village Trust.) 10.30 a.m. till 7 p.m. AUG. 10—SEPT. 4

**BRIGHTON.** *Regency Exhibition.* At the Royal Pavilion. The exhibits include period furniture from Buckingham Palace, graciously lent by H.M. The King. (Sponsor, the Regency Festival.) AUG. 8-10

**EXETER.** *Summer Course on USSR.* At Hope Hall, Exeter University. To be opened by Mme. Gousev. Mme. Gamazina, Principal of the Soviet School in London, and other Soviet visitors will attend. Cost £5-10-0 for week. (Sponsor, SCR.) AUG. 17-24.

**FORFAR.** *Plans for an Art Centre.* Exhibition. At Meffan Institute. (Sponsor, the Arts Council.) AUG. 8-23

**HASTINGS.** *XVIII International Congress for Housing and Town Planning.* At the White Rock Pavilion. The Congress and exhibition will be opened by the Rt. Hon. Lewis Silkin, M.P., Minister of Town and Country Planning. Subjects to be discussed include *Replanning the Centres of New Cities—Some Examples of New Plans; Housing Technique; Replanning the Centres of Cities—Decentralization; Housing Economics; and Replanning the Centres of Cities—Implementing the Plans.* During the Conference local tours and visits will be arranged and after the Conference tours to the North of England, the West and the Midlands. (Sponsor, International Federation for Housing and Town Planning, 13, Suffolk Street, Haymarket, London, S.W.1.) OCT. 7-12

**LONDON.** *Summer Show of Sacred Art Subjects.* At the Church Artists' Agency, 25, Ebury Street, S.W.1. (Sponsor, CAA.) 9.30 a.m. to 5.30 p.m. Saturdays, 9.30 a.m. to 12.30 p.m. AUG.

*Summer Exhibition of French and English Paintings, Drawings, Prints.* At Redfern Gallery, 20, Cork Street, Burlington Gardens, W.1. AUG. 8-SEPT. 28

*Annual Exhibition of Work of the AA School of Architecture.* At 36, Bedford Square, W.C.1. (Sponsor, AA.) 10 a.m. to 6 p.m. AUG. 8-10

*AA Excursion to Sweden.* The party will spend one day in Copenhagen and approxi-

mately nine days in Sweden. (Sponsor, AA.) AUG. 9

Deana Levin. *Soviet Schools.* At the Masaryk Hall, University of London, Malet Street, W.C.1. (Sponsor, SCR.) 8 p.m. AUG. 20.

*New Homes for Old Exhibition.* At 22, Lower Regent Street, S.W.1. (Sponsor, HC.) SEPT. 11-NOV. 9

*Swiss Planning and Building Exhibition.* At the RIBA, 66, Portland Place, W.1. Organized with the co-operation of the foremost architects and associations in Switzerland. Building for work, building for recreation, housing, town and country planning, schools and hospitals are among the subjects to be covered. Other features will be the preservation of old and historic buildings and the countryside, and the replanning of winter sports resorts, for which an extensive programme has already been started. How Switzerland makes the most of her landscape will be shown in a series of photographs. SEPT. 19-OCT. 26

*Fuel and the Future.* Three-day Conference organised by the Ministry of Fuel and Power. At the Central Hall, Westminster, on October 8, at 10.30 a.m.; at the RIBA, 66, Portland Place, W.1, on October 8, at 2 p.m., and October 9 at 9.45 a.m. and 2 p.m.; and at the Central Hall, Westminster, on October 10, at 10 a.m. and 2.15 p.m. Two sections of the conference, *Modern Heating and the Architect*, and *The Home and Its Fuel Services*, will concern housing. Mr. Emanuel Shinwell, M.P., Minister of Fuel and Power, will open the conference, and Mr. Aneurin Bevan, M.P., Minister of Health, will speak on the *Fuel Requirements of the Housing Programme.* OCT. 8, 9 and 10

**MORLEY.** *Furnished Exhibition House.* At Winterbourne Estate, Victoria Road. (Sponsor, the Arts Council.) AUG. 8-21

**PARIS.** *International Technical Congress.* Among the delegates from Great Britain will be Sir Patrick Abercrombie, President, International Reunion of Architects, and Sir Percy Thomas. SEPT. 16-21

**WAKEFIELD.** *Furnished Exhibition House.* At Cyprus Mount, Newton Bar. (Sponsor, the Arts Council.) AUG. 8-26

## N E W S

THURSDAY,  
No. 2689

August 8, 1946  
Vol. 104

News .. .. .	91
Preview .. .. .	92
This Week's Leading Article ..	93
Astragal's Notes and Topics ..	94
Letters from Readers .. .. .	95
Greek Air School to be completed .. .. .	96
Physical Planning Supplement— Milan—Outline Proposals for Replanning and Reconstruction .. .. .	97
Flats in Copenhagen. Designed by V. Kaastrup .. .. .	101
Housing Project. Designed by F. R. S. Yorke, E. Rosenberg and C. S. Mardall .. .. .	104
Information Centre .. .. .	105
The Industry by Philip Scholberg	107
Societies and Institutions .. ..	108

*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.

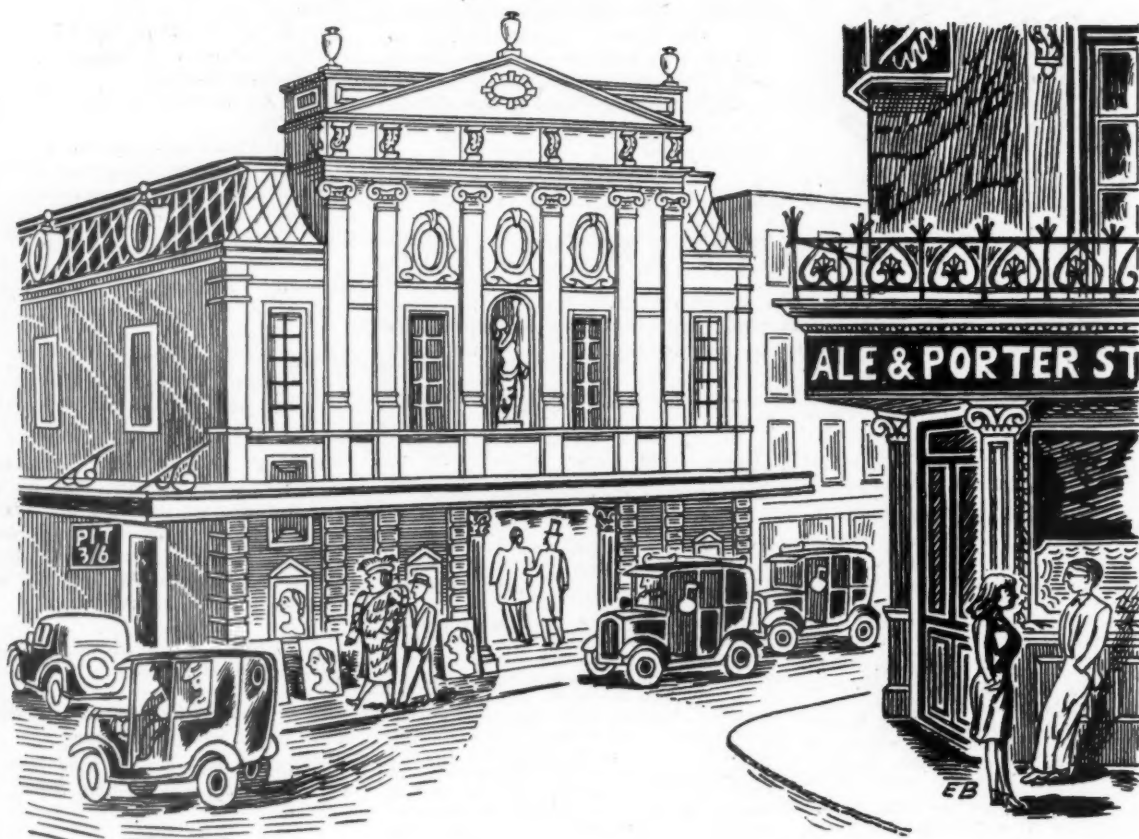
Any feature marked with more than two stars is very big building news indeed.

*In the House of Commons, Sir E. Graham-Little asked the Minister of Works the names of the PRE-FABRICATED HUT DESIGN COMMITTEE, who have been responsible for evolving the design of huts now being provided for the national schools.*

Mr. Tomlinson: The personnel of the Prefabricated Hut Design Committee naturally changed from time to time, but the following participated in its discussions over the period when the Standard hut was being developed: Sir Thomas B. Bennett, C.B.E., F.R.I.B.A., Ministry of Works (Chairman); H. Ryle, C.V.O., O.B.E., A.R.I.B.A., F.S.I., Ministry of Works; R. H. Hall, Ministry of Supply; G. Watt, Ministry of Supply; Colonel E. F. Brawn, War Office; Alwyne Tutton, A.R.I.B.A., Air Ministry; R. Fitzmaurice, B.Sc., M.INST.C.E., Department of Scientific and Industrial Research; A. Scott, M.B.E., F.R.I.B.A., M.I.STRUCT.E., Ministry of Health; Guthlac Wilson, B.Sc., M.I.STRUCT.E., M.INST.C.E., Ministry of Works; Major-General H. S. Gaskell, C.B., D.S.O., R.E., Ministry of Aircraft Production; J. M. Rowntwaite, Admiralty; Professor J. F. Baker, O.B.E., M.A., S.C.D., A.M.INST.C.E., M.I.STRUCT.E., Ministry of Home Security; F. Jackman, F.R.I.B.A., Ministry of Education.



# We need NEW THEATRES



In this country of Shakespeare and Shaw we breed playwrights—and prevent the greater part of the public from ever seeing a play. We achieve this by providing the average town of fifty thousand inhabitants with one theatre only: a melancholy and slightly decayed building that shows twice-nightly revue down a back street.

Not only do we need more theatres. We need theatres where you can see the whole stage from a back stall without having the neck of a giraffe or the pliability of a contortionist; where you can

hear properly and breath adequately; where, in fact, you can be as comfortable as in a cinema.

The construction of such theatres will call for zinc. Roofs, weatherings, gutters, rain-water pipes: all will involve zinc. For zinc is long of life, strong against corrosion, protective and economical.

Zinc is also versatile. It adapts itself to every style and method of construction: modern, traditional, site-built, prefabricated. It has proved its value for centuries, but its uses are still extending.

## new theatres need ZINC

*Zinc has helped to roof and protect many pre-war theatres here and abroad. But new techniques are being discovered and our publications describe them. If you would like to have our publication list or to know more about zinc and the Zinc Development Association, write to the Z.D.A., Lincoln House, Turl Street, Oxford.*





## From AN ARCHITECT'S Commonplace Book

**PRIMEVAL BACKGROUND FOR PLANNING.** [*From City Development, by Lewis Mumford (Secker and Warburg).*] If the first place to achieve balance is in the family, where the human personality is nurtured, the co-ordinate pole of planning is the region, for it is against the natural setting of hill and river and sea, of soil and climate, of natural formations and man-made landscape, that the human community defines itself. Geographers and sociologists have reached no unanimity in defining the region; . . . Nevertheless, there is one characteristic of a region that must underlie every geographic or historic reference: it must combine the primeval, the urban, and the rural as part of the daily setting of life. Sky, mountain, ocean, and river are part of man's constant environment; they form the elemental basis of our animal existence; they were associated with man's history, with his thoughts, long before he uttered an intelligible sound or learned to keep a fire burning. No urban existence that pushes the primeval background out of sight, that makes it remote and unavailable, that deprives people of intimate contact with it, hunting, fishing, rambling, exploring, collecting, boating, is likely to produce adequate men and women, able to cope with the realities of life and death.

**Mr. N. E. Kearley, A.M.I.E.E.,** has been appointed **DEPUTY DIRECTOR OF THE COUNCIL OF INDUSTRIAL DESIGN.**

Mr. Kearley has had a wide practical experience of the engineering industry in various technical capacities before becoming Civilian Technical Officer at the Royal Aircraft Establishment, Farnborough. In 1929 he joined the Examining Staff of the Patent Office and later served for several years in the Industries' and Manufacturers' Branch of the Board of Trade. He joined the staff of the Ministry of Supply in 1939, but in 1940 he was given leave of absence to join the Indian Army Ordnance Corps. He served successively as Deputy Assistant Director of Mechanisation, as officer commanding the Mechanisation Design Establishment and as Chairman of the Tank Development Board, Calcutta. He held the rank of Lieut.-Colonel in the Indian Electrical and Mechanical Engineers. He returned to the Ministry of Supply in October, 1945, and has recently rejoined the staff of the Board of Trade at Liaison Officer in Germany.

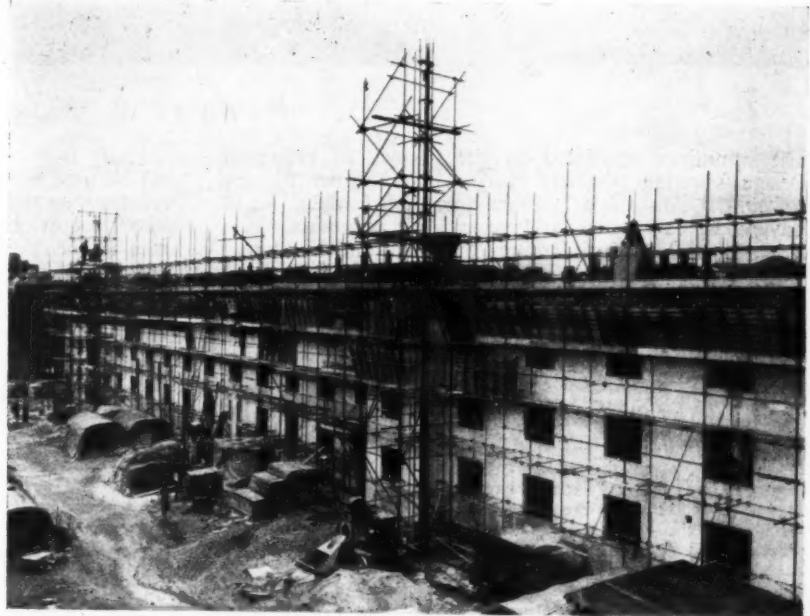
★  
*York has to protect itself against four enemies: time, with its ally the weather; MALICE, GREED AND IGNORANCE—the Archbishop.*

Speaking at the inaugural meeting of the York Civic Trust for Preservation, Amenity, and Design, which was described as a voluntary association of lovers of York, Professor G. M. Trevelyan, Master of Trinity College, Cambridge, and chairman of the estates committee of the National Trust, according to *The Times*, said that the question was not merely one of preserving old houses and seeing that old buildings were not lost altogether. It was a matter of gradually building up taste and public opinion so that when, for instance, a shop had a new front it would be a dignified thing. There was no reason why the twentieth and twenty-first centuries should not produce good buildings as well as the centuries of the past. Cultivation of taste in modern design was the central part of what the Civic Trust was setting out to do. The name and fame of Yorkshire in the world's critical eye depended as much on the amenity of York as on the size of Bradford, Leeds, and Sheffield. The standard of value was modifying. Statistics of trade and commerce were not the sole standards of value as they were in the nineteenth century. Something besides was looked for to-day—

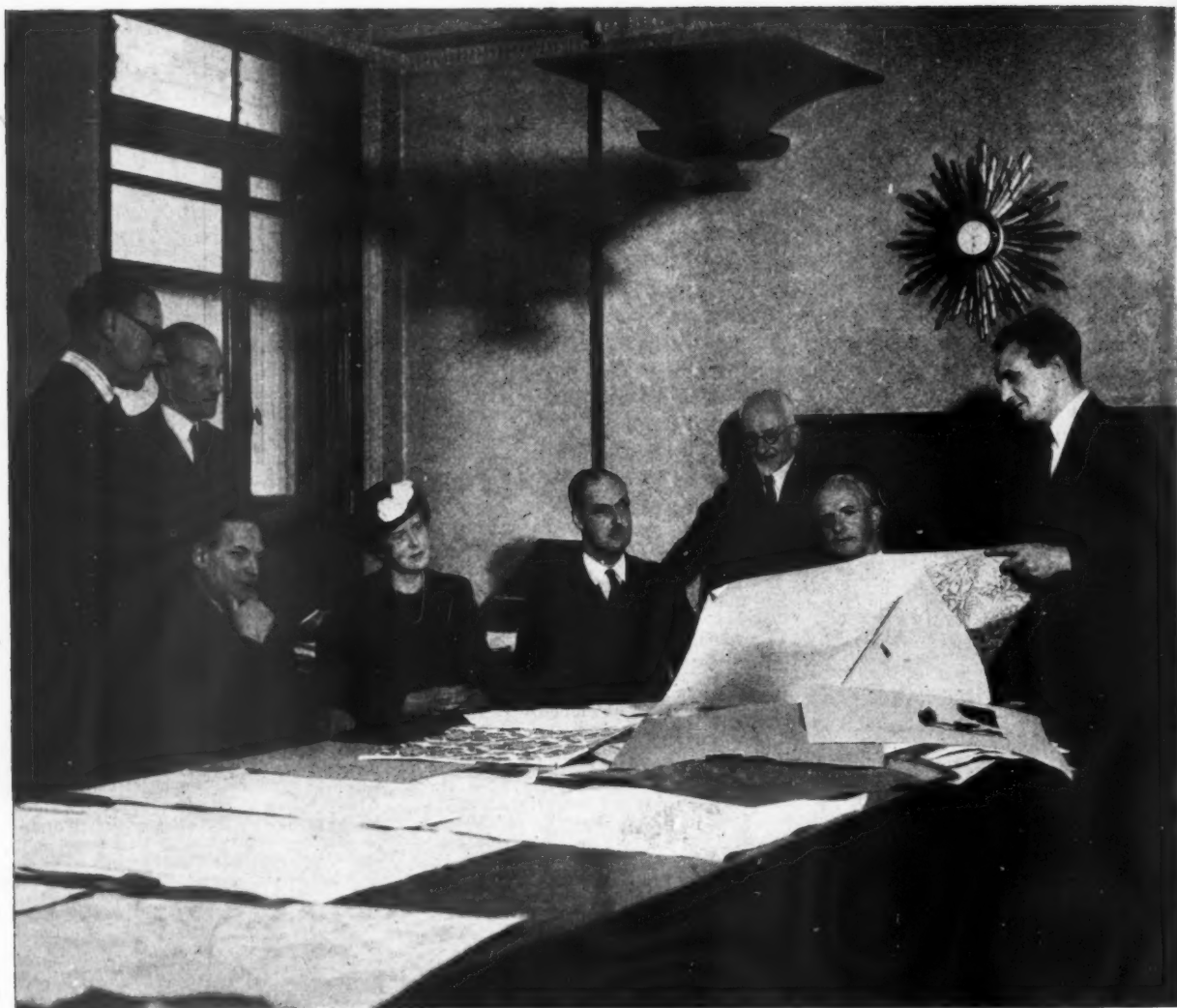
beauty, tradition, cleanliness, and dignity of the common life and its outward appearances in the streets and countryside. The Archbishop of York, Dr. Cyril Garbett, said that York had to protect itself against four great enemies. The first was time, with its ally the weather, which made it necessary for buildings to be perpetually watched and repaired. The second enemy was the malice of man. York has suffered the temporary loss of its Guildhall and the destruction of an interesting church through bombing. Thirdly came the greed of man as expressed in commercialism, which destroyed beautiful buildings and put up hideous advertisements which ruined the landscape. The fourth enemy was ignorance; people thought they were improving and restoring when really they were ruining and destroying. The Dean of York, the Very Rev. E. Milner-White, who has been largely instrumental in founding the Trust, said that York was now lined up with the great preservation and civic societies of places like Oxford, Cambridge, and Bath.

*Local authorities are asked by the Ministry of Health to consider the REPAIR OF BOARDING HOUSES used for billeting.*

The Ministry, in a circular, states: Subject to the paramount claims of the housing programme and to due consideration being given to the local position with regard to availability of labour and materials, it is, in the Minister's view, desirable that local authorities should give sympathetic consideration to the needs for repairs and renovation of boarding houses which have been used for billeting during the war, but which have not been officially requisitioned. Always subject to these provisos, it should be the policy of local authorities to accord to boarding houses similar treatment to that accorded by regional licensing officers to the applications for repair work following de-requisitioning of hotels and other analogous establishments.



One of the eight blocks of reinforced concrete flats in course of construction for the London County Council at Minerva Street, Bethnal Green. There will be 253 flats planned in four storeys and three storeys, flat roofs for children's play and special playrooms for wet weather. No interior courts are provided, the flats being in straight blocks with lines of trees and gardens between them. Work began on the site on January 31 last. By Christmas the first block will be occupied and by March next the whole scheme finished. Messrs. Holland, Hannen and Cubitts Ltd. are the contractors.



## Preview

The committee appointed by the Council of Industrial Design selecting post-war designs of wallpaper for the *Britain Can Make It* exhibition. From left to right: R. B. Bayley, E. C. Lee, T. A. Fennemore, Lady MacGregor, B. P. Wyllic, P. Line, G. Grey Wornum, and F. Muller,

secretary to the committee. Some of the selected designs will be used at the exhibition by architects and designers in setting up the furnished rooms; others in the specimen school rooms, business offices, etc. The exhibition will open at the Victoria and Albert Museum in September.

### *The Ministry of Works has decided to standardise the use of COPPER BOILERS AND COLD WATER CISTERNS in the pre-fabricated plumbing units for temporary houses.*

In the past, although copper tubes with copper alloy fittings were always used, copper back boilers were not invariably specified by the Ministry, and copper cold water cisterns were ordered only for houses intended for districts with aggressive waters. The unit has been or is being installed in all the 44,000 temporary houses so far completed and the 2,000 appearing each week. More than 600 miles of copper tubing and, in all, between 4,000,000 and 5,000,000 lb. of copper and brass, have already been used in manufacturing the units. An additional 7,800,000 lb. of copper and brass, including 800 miles of copper tube, will be required for the 56,000 temporary houses which it is estimated will be required for the

56,000 temporary houses which it is estimated will be completed between now and the end of the year. One of the first models of the unit now in the possession of the Director of Temporary Housing at the Ministry is to be given a home in the Science Museum at South Kensington.

★★

### *The Minister of Town and Country Planning (Mr. Lewis Silkin) met representatives of the local authorities concerned with the development of A NEW TOWN AT HARLOW, Essex.*

Mr. Silkin said he proposed to circulate to the local authorities represented a rough outline plan of the area proposed for the new town. This would provide a basis for discussion and subsequent operations. When the plan was completed, and if the New

Towns Bill, now before Parliament was passed in substantially its present form, the area required would in due course be designated under Section 1 which provides for the hearing of objections and for the holding of a public enquiry. Mr. Silkin said that he would get into touch with each of the local authorities concerned, before appointing members of the Corporation to be responsible for the new town. After the Minister had answered a number of questions on details of the project, the local authorities' representatives expressed their appreciation of the Minister's action in consulting them at this stage, welcomed the proposals, and hoped the project would go forward with all possible speed. Local authorities represented were:—In area: Essex County Council, Herts. County Council, Epping Rural District Council, Ware Rural District Council, Sawbridgeworth Rural District Council, Harlow Parish Council, East Herts. Joint Planning Committee, South-west Essex Joint Planning Committee. Exporting: Tottenham, Wood Green, Leyton, Walthamstow, and Edmonton Borough Councils.

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**Mr. W. H. Forsdike: The Government's PRODUCTION CENSUS SHOULD BE DEFERRED.**

Mr. W. H. Forsdike, President of the National Federation of Building Trades' Employers, in a speech at the half-yearly meeting of the Midland Federation of Building Trades' Employers in Northampton, strongly criticised the voluminous Census of Production Form which the Board of Trade has recently circulated to builders. Not only should the Form be simplified, he said, but its issue was ill-timed. It should be deferred for at least another year, by which time some at any rate of the many forms builders were now required to fill up should have been withdrawn, and the difficulties in getting office staff should have decreased. He also warned the local authorities who were being tempted to set up organizations to build houses by labour employed directly by the authorities to think twice before taking that course. They were the custodians of the public purse, and they could readily confirm from the Ministry of Health that the majority of direct labour schemes for houses undertaken by local authorities between the two wars had proved costly failures, involving large burdens on the rates. He added that the National Joint Production Council of the building industry was now interviewing applicants for the 25 posts of Production Officers which the Council were appointing. These Officers would begin work early in the autumn. The building industry intended to solve its own production problems—and no problem was more important—and once again the building industry was leading the way.

**Up to June 30, 1,577 building projects for NEW FACTORY BUILDINGS and extensions to existing buildings have been approved.**

These will eventually provide additional employment for 133,000 men and 100,000 women. The Board of Trade states that out of the total number approved, 616 are in the Development Areas and will provide employment for 76,000 men and 66,000 women. Two hundred projects have been approved for the North-Eastern Development Area, 196 for South Wales, 180 for Scotland, 24 for West Cumberland, 15 for South Lancashire, and one for Wrexham. Building has begun on 270 of the Development Area projects involving a total floor space of 5½ million square feet and 12 have been completed.

**A Students' Evening was held in connection with the RIBA EXHIBITION OF ARCHITECTS' WORKING DRAWINGS.**

The exhibition included drawings lent by:—Messrs. T. P. Bennett & Son, F.R.I.B.A., Stanley Hall & Easton and Robertson, F.F.R.I.B.A., and Graham Dawbarn, F.R.I.B.A. The evening was attended by about 150 students. Sir Thomas Bennett, C.B.E., F.R.I.B.A., Messrs. Morris L. Winslade, F.R.I.B.A., Graham Dawbarn, M.A., F.R.I.B.A., F.R.A.E.S., M.I.STRUCT.E., J. P. Bett, A.M.I.C.E., M.I.STRUCT.E., and F. L. Preston, A.R.I.B.A., A.A.D.P. (representing Messrs. Stanley Hall & Easton and Robertson) were present, and explained to the students the special points of interest in their respective drawings. The premiated designs in the Pimlico Housing Competition were also on view at the Royal Institute.

## LESSON FROM GERMANY

**T**HE Report of the Ministry of Works' Assessors Team, which spent three months in Germany last winter, has now been published.\* It is a document of some interest and importance and should be studied by responsible persons in all sections of the Building and Civil Engineering Industry. It must not be overlooked in the general run of specialist industrial reports brought back by the investigating teams organized by the British Intelligence Objectives Subcommittee, now operating under the Board of Trade. There is no adulation of all things German in the Report. If we extract from the Germans certain technical information of use to us (and they are, in their present mood, very willing donors) it will not be an historical repetition of *Graecia capta ferum captorem cepit*. In a total war the Germans lost: the overall organization of their building industry, and its technical efficiency, were inferior to ours. But although, for the most part, their industrial and technical problems were similar to ours, and similar solutions were applied, yet in certain restricted fields German wartime practice was sufficiently different, and of sufficient intrinsic merit, to be well worth investigation.

The MOW Assessors had to survey in a broad manner the whole German building and civil engineering industry and to pick out those aspects that might be of particular interest for further British investigation. This was done in the first instance by study of captured documents and military intelligence reports at BAOR headquarters. From this groundwork clues led to key personalities—building scientists, engineers, contractors, architects—who were located and interrogated. When the tale of interesting subjects had taken shape, these were checked by sample investigations at works, buildings, building-component factories, local government offices. Finally, before the Report was submitted, unofficial reference was made to specialists in Britain, to ensure that the investigations recommended should not duplicate information already available.

The result is a list of precise recommendations for study, covering a very wide field. Particular examples are selected in the realms of Town-Planning, Civil Engineering, Structural Engineering, Building Materials, Building Organization, and Architectural Planning. We understand that the Ministry of Works has already begun to set up the organization required to implement the Report, and that one or two investigating teams have been dispatched.

But we would take this opportunity to point out that unless persons interested in this material are vocal and press their demands upon the Ministry, there is a risk that the work, though well begun, will lose momentum and become bogged down in ministerial files and official secretiveness. We therefore urge the professional and trade organizations, the employers' and operatives' federations, each to appoint a special subcommittee, or a liaison officer, to see that the Ministry of

\* BIOS No. 575. *The German Building Industry: Targets for Investigation in Building Science, Civil Engineering, Building and Architecture.* (HMSO 12s. 6d.)



Works does not flag in collecting German intelligence and that it is properly distributed amongst interested parties. As the Report indicates, there is one clear lesson we can learn from Germany—that of Dimensional Standardization. Here Germany has made important progress where the work of Britain and the USA has largely petered out in frustration. Germany cut through the *impasse* offered by the intractability of the 3 in. or 4 in. modulus in three dimensions, by imposing by law a large-scale (1.25 metres) planning grid (plan-dimensions only, not heights) upon all wartime buildings. This made it unnecessary for their standards committee to elaborate the detailed dimensions of a multiplicity of components in different materials. The Grid acted as a magnet to attract the dimensioning of manufactured components into phase with it, due allowances and tolerances being provided. The success of this measure is exemplified by the fact that, although the legal sanction behind it was removed with the abolition of all Nazi ordinances, yet architects, engineers and manufacturers were encountered who persisted in using it from choice, saying that it was economical and simplified their work, without imposing any serious restriction upon freedom in design.



*The Architects' Journal*

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

Phone: Whitehall 0611

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

### FINE ART COMMISSION

Writing the other day in an evening newspaper, Mr. William Gaunt—the pre-Raphaelite Tragedian—dismissed the Royal Fine Art Commission for not living up to its name, and for consisting merely of a bunch of architects offering advice which was often asked for only with reluctance, and usually ignored when given. The charge is not perhaps wholly just. It is true that the members of the Commission are nearly all of them architects—and since the problems they discuss are

largely architectural, it is perhaps as well that they are—but the fact that their advice is so often ignored is not surely their fault?

The Seventh Annual Report, published recently, contains an imposing list of subjects upon which the advice of the Commission was sought, ranging from postage stamps to Euston Station, and from telegraph poles to Alfred Stevens' decorations. They have discussed pubs and bridges, power stations and statues, aerodromes and monuments, New Delhi, Regent's Park, and prefabs. They have acquired a new secretary, a new address, and a grant for a library. Altogether they may well feel proud of the activities thus recorded, and yet . . . there is distilled from the pages of the Report a faint but persistent aroma. [If the word were not now exclusively used by ad.-men to describe the most asphyxiating of cheap perfumes, I should call this aroma elusive.]

It is not the musty breath of antiquarianism. The members of the Commission are scholars but not pedants. It is not the sweet odour of decay, for the members of the Commission are rightly distinguished for their liveliness of mind and industry of purpose. It is not the fragrance of

gentility, nor the stale reek of officialdom. It is, I think, that most lethal of all vapours—the smell of ineffectiveness.

There is that bright, brave smile of the guest at a party who is totally ignored but determined not to admit it. There is the over-eager response to the casually dropped invitation, the patient, cheerful acceptance of the snub. Now this, of course, is a criticism not of the Royal Commission but of its terms of reference. These are, we are told, "to enquire into such questions of public amenity or artistic importance as may be referred to them from time to time . . . and to give advice when so requested . . ." These ludicrously inadequate terms were extended a few years ago by permission being given for the Royal Commission to start giving advice without being asked for it. Now, while it is debatable whether such advice when given should be mandatory, it is clear that the system does not at present secure fully effective results, and it is only fair to the Commissioners to say that they are fully aware of this, and say as much in their report.

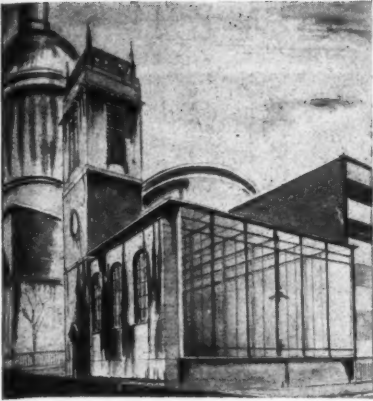
Three improvements would seem advisable. First, that the Commission be strengthened by the election of members from a wider artistic circle—i.e., good contemporary painters and industrial designers, as well as architects and engineers. Second, as their Report hints, that they should have stronger powers. Third, that their advice should be sought at an earlier stage than seems usual at present. It is of little use to alter a minor moulding on a building of basically wrong design, or to fuss over details in a town plan which is fundamentally ill-conceived—and yet, what else, often enough, can be done in the later stages of a large project?

Perhaps if these, and a few other reforms were effected, one could then say to these industrious and distinguished commissioners, "You're a fine art commission," and really mean it.

### FROM THE UNSINKABLE ORIENT

The following comment on the Crystal Palace competition comes from a correspondent now in the East:





A Sharawagg's design for rebuilding the City Church of St. Augustine, Watling Street. A fifth year subject by Eleanor Godfrey at the exhibition of the year's work at the Architectural Association.

"It is heartening for all true lovers of architecture to find that the New Crystal Palace, in every aspect, repudiates the ignoble greenhouse fashion initiated by the lamentable Paxton. The winners of this competition, building soundly upon the wise scholarship of the late Sir Banister Fletcher (to whom it is only fair to add, Paxton had no opportunity to refer) have synthesized in their bold and masculine design all that is most typically English, the glories of our world-famous Oxford Street and Albert Hall. Is it too much

to hope that the second world war, in providing a pause for reflection, has stemmed the dangerous and thoughtless flood of architectural internationalism which in the neurotic thirties seemed set fair to undermine the priceless glories of our island heritage?..."

#### MUSEUM OF MODERN ART., N.Y.

The photograph below is reproduced from the Minutes of the 16th annual meeting of the New York Museum of Modern Art. It is a glossy, well-designed production as smooth and elegant as the building whose activities it chronicles—activities which have ranged from organising travelling exhibitions, providing artists' equipment to the services, publishing books like *Brazil Builds* and *Built in USA*, distributing films, and teaching children.

Altogether a remarkable record of initiative, and it's no surprise to learn that the museum is fourth on the list of the ten most popular buildings to be visited in New York, and that Mr. Goodwin, the museum architect, is preparing drawings for additions to the present structure.

#### ASTRAGAL



In the Sculpture Garden of the Museum of Modern Art, New York, which contains works from the Museum collection. From the Minutes of the 16th Annual Meeting of the New York Museum of Modern Art, on which Astragal comments this week.



## LETTERS

G. B. J. Athoe

(Secretary, the Incorporated Association of Architects and Surveyors)

W. L. Swain

(Chairman, Codes of Practice Heating and Ventilating Committee—Institution of Mechanical Engineers, Institution of Heating and Ventilating Engineers)

H. D. Williams

A.R.I.B.A.

B. R. Davis

National Secretary, Arch. S.A.

### A Vanishing Heritage

SIR,—If all specimens of Georgian architecture were to be mutilated—as Sir Neville Pearson, in a letter to *The Times*, tells us Pelham Crescent is to be mutilated—in order to adapt them to modern ideas of light-admission, then we should also have to say goodbye to Nash and his contemporaries for ever. One might as well remove the spire of a city church for casting a shadow over an adjacent warehouse.

I suggest that not only should Pelham Crescent's balustrade be left alone but the plaques should be placed on the walls to commemorate notable men who have lived in the Crescent—notably Edward John Trelawny, the famous friend of Shelley and Byron—as has been the LCC's custom for years past throughout London.

G. B. J. ATHOE,  
Secretary.

The Incorporated Association  
of Architects and Surveyors

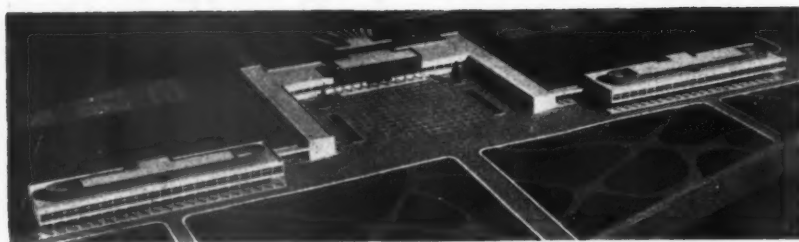
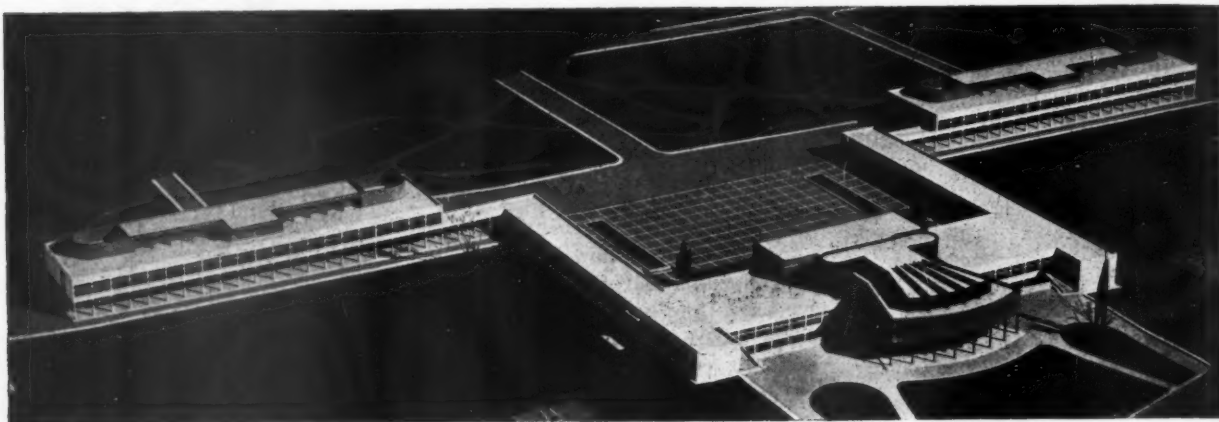
London

### Code of Practice Centralised Domestic Hot Water

SIR,—As Chairman of the main committee responsible for the *Code of Practice—Centralized Domestic Hot Water Service*, I would appreciate the opportunity of clarifying two points in your comments in the issue dated July 11.

It is understood that architects certainly will not have the time to study all these codes individually, but we hope that when inviting schemes and prices for centralised domestic hot water service installations they will call for these to comply with the code. In doing this they will safeguard their clients by ensuring a properly designed installation and also

## GREEK AIR SCHOOL TO BE COMPLETED



This cadet training school for the Greek Air Force, at Eleusis, near Athens, was begun before the war, but its construction was interrupted by events. Construction will soon be resumed. It is of reinforced concrete, and brickwork rendered with a lime and marble stucco, having different coloured aggregates (terra-cotta, ochre, and grey) to articulate the different parts of the building. One wing contains the living quarters for non-commissioned officers, and the other for commissioned officers. The sides of the courtyard contain class rooms, while the central block contains an exhibition room, laboratories, administrative offices and an amphitheatre with hall above. The architect is Thucydidēs Valentis, who was among the three Greek architects to visit this country recently under the auspices of the British Council. He is now chief architect of the Architectural Department of the Greek Air Ministry. Top and centre left, a model of the building. Below left, the present state of construction.

will be sure that all the tenders received will be on the same basis.

With regard to your last comment as to what a small builder would do if faced with a request to carry out a house-heating installation "according to the code," I would point out that this code is for centralised domestic hot water and not for a central heating plant. The latter is in course of preparation and will be issued as a separate document.

W. L. SWAIN,  
Chairman,  
Codes of Practice Heating and  
Ventilating Committee—Institution of Mechanical Engineers, Institution of Heating and Ventilating Engineers.  
London

### An Architect with Degrees in Agriculture

SIR,—I am enclosing an extract from a recently published (and perfectly serious) novel, as I think it may possibly interest you.

My only regret is that I did not take a degree in agriculture; evidently it would have been a great help.

Kettering

H. D. WILLIAMS

The extract from *England Growing*, by Edward Frankland, is as follows: (Mr. Black describes himself as a "land agent"):

"Look here, Mr. Black," said Clare suddenly, "I suppose you wouldn't rent Outhwaite from us?"

"I would certainly consider that," Charles answered cautiously. "But how about your alterations?"

"We should have to get an architect, shouldn't we?"

"Well, as you've proposed me as a tenant, I might perhaps propose myself as architect."

"Oh, splendid!" said Clare. "Are you an architect, Mr. Black?" enquired Cuthbert dryly.

"No, technically I'm not. I took my degree in agriculture, but I think I spent quite as much time on architecture when I was at Oxford. Very much interested in mediæval buildings. Mr. Airey puts all his architectural work in my hands and incidentally saves himself a good deal of expense. I don't think our old farmhouses look too bad, where I've had a hand at them."

"You could put through all those alterations we thought of, what I was saying just now?" Clare looked only half convinced.

"Oh, yes; I could put you on to a really sound builder—not a charming rascal like

our friend Turpin, by the way—I know of a carpenter, rather expensive, but absolutely reliable, I even know of a comparatively honest plumber—and I would be architect and clerk of the works myself, and not charge a penny for it."

### Employment Bureau

SIR,—A Vacation Employment Bureau for the benefit of architects and students, as suggested by Mr. C. R. Adams would, I agree, be most valuable.

I can assure you that Arch.SA would be more than willing to co-operate as suggested, by collecting lists of students' particulars at our Regional Organising Centres, and our Professional Relations Committee could then maintain liaison with architects requiring students' assistance. If the RIBA accepted the scheme this Committee could be situated in London to facilitate the work.

Meanwhile I should be grateful for any indication from architects as to what demand there might be for this service: any letters on this subject addressed to me at 17, Devonshire Place, Birkenhead, will receive my attention.

B. R. DAVIS  
Birkenhead National Secretary, Arch.SA.

## PHYSICAL PLANNING SUPPLEMENT



## MILAN

## OUTLINE PROPOSALS FOR THE REPLANNING AND RECONSTRUCTION

During the first months of 1944 when the city of Milan had suffered bombardment during the war in Italy, a group of architects realised the importance of a planned reconstruction bearing a relationship to the function of Milan as a city and the needs of its inhabitants. *Piano AR*, reviewed below, was the result of the work of this group, and is dedicated to the architect Banfi, who was deported to Germany and died there. The names of those who collaborated in the plan at various times are Albini, Bottoni, Gardella, Mucchi, Peressutti, Pucci, Putelli, Rogers, Banfi, Belgiojoso, Romano and Zanuso. Above, the Piazza Del Duomo in Milan, and below, a typical view of the destruction in the city.

In the course of the recent War, the fighting in Italy led to great destruction, both through aerial bombardment and battles on land; many families were rendered homeless or left in conditions of extreme discomfort. The City of Milan suffered considerably in this destruction, with the result that the first consideration in the minds of the citizens is the provision of new housing, but as the authors of *Piano AR* make clear, the future of the City must not be overlooked in this necessary first step in reconstruction; a co-ordinated plan which attends to the social, industrial and other factors is essential in order that the efforts of those speculators, who see in the opportunity possibilities of financial advantage, may be countered. The place of private enterprise in reconstruction is, however, realised and it is considered that in those areas which can be decided upon quickly at the outline plan stage, work of value to the community can be proceeded with by this section of the building industry. Milan has therefore concentrated on the immediate preparation of an outline plan which will enable the life of the City to proceed without the delay arising from the lengthy work of detailed plans.

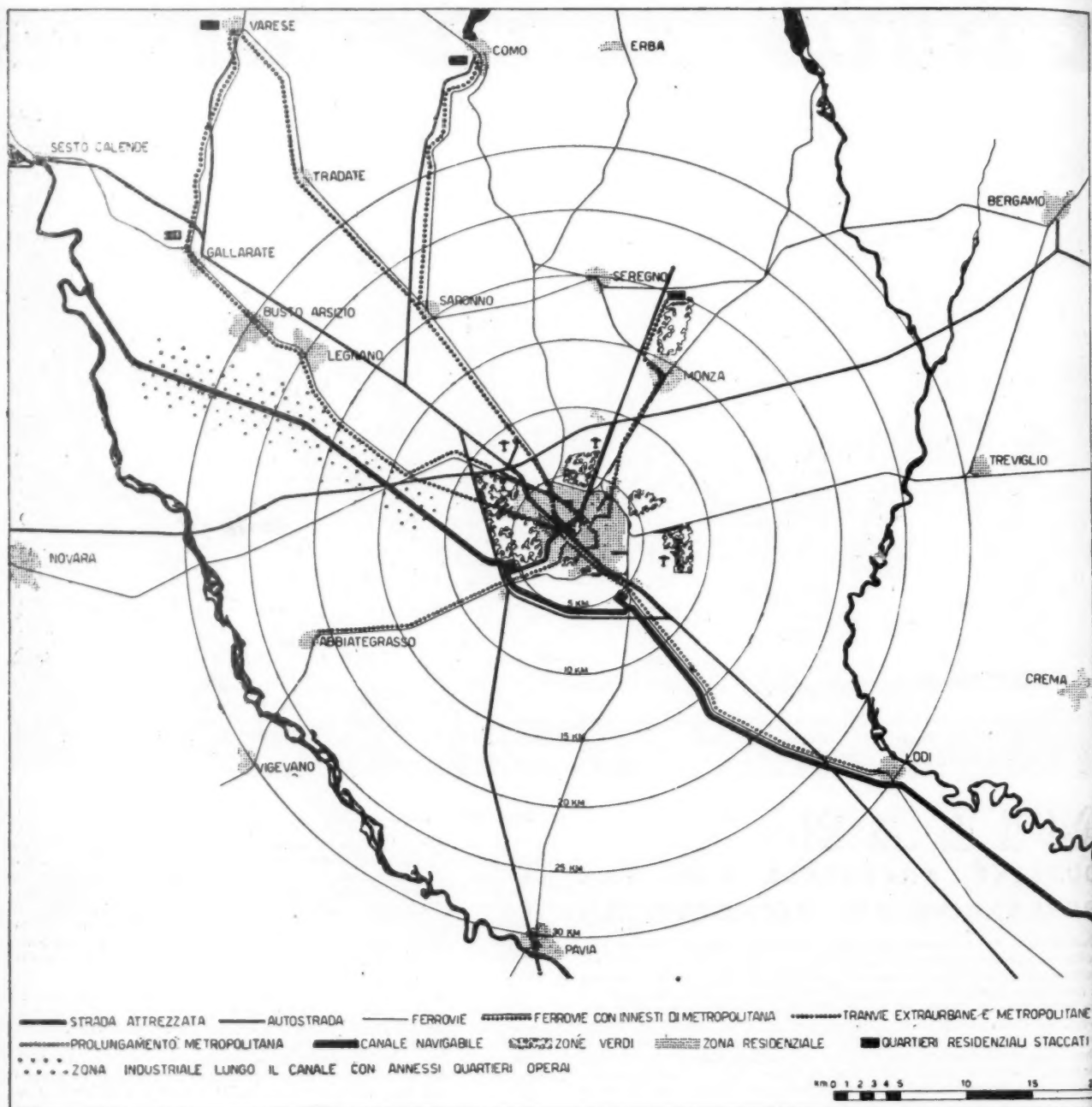
## functions of the city

The plan for Milan has been designed to give a balanced economy for the city and better conditions for the people, and the problem has been tackled in a resolute manner. The value of concentrating on a broad outline plan giving the major proposals for housing, industry and transport, with due regard to the regional setting, is apparent in the race to get conditions of life back to something approaching normal, and it is in this broad conception of first principles that the plan has the greatest interest and value to the planner in this country.

The first decision, which the authors of the plan made, was to agree on the functions of Milan, and consequently the lives and work of its inhabitants. These are considered to be administration, commerce, industry and culture, together with other minor interests. This variety of functions has led the planners to consider a simplification of the structure, and they recommend the removal of a great part of the industry to new areas outside the city; a dislocation of traffic due to industrial transport, conditions of poor hygiene, and the difficulty of providing good surroundings within the city for the housing of the workers, are the reasons put forward. The areas suggested for the siting of industry have been decided upon in their relation to adequate transport facilities and the availability of essential commodities. Residential areas are to be associated with the new industrial locations, enabling the workers to enjoy the facilities







## REGIONAL OUTLINE PLAN

offered by gardens, and the various community buildings which will be provided; furthermore, long journeys to and from work will be eliminated. A particular point is made of the fact that the inhabitants of these new areas will benefit from the experience of actively taking part in the production of food in their own gardens and of being situated within the sphere of influence of agricultural surroundings. The complaint that dissociation from the interests of city life will result, can be ruled out by better and quicker means of transport into the heart of the city from these new outside areas. Under these proposals, 300,000 persons are to be moved out of the city, which had a population of 1,100,000 in 1939. The remainder, it is considered, are tied to residence in the city to maintain its various functions. A maximum future day population of the city itself is set at 1,000,000, of which 200,000 could well live outside. The figure of 800,000 actual residents within the built-up area of the city is considered to be the limit which will permit good conditions of living, without having to increase the area to any great extent.

Decisions having been made concerning the future population of the city, the authors of the plan proceeded to relate the interests of work, recreation and habitation. Up to the year 1800 the city maintained an equilibrium, since lost in the rapid expansion which

The proposals for the replanning of Milan include the decentralisation of 300,000 persons to the surrounding region. The proposals for rehousing these persons, and for providing them with work in a new industrial area outside the city, are shown in the above Regional Outline Plan. The new navigable canal can be seen running through the new industrial area.

led to building vertically without the provision of adequate open spaces.

### city pattern

The new plan for Milan provides for the gradual transformation of the city from its present pattern of disorganized and unhygienic building to conditions where the amenities of sun, open spaces and quietude may be enjoyed. The old character of Milan will be revived by the provision of small open spaces throughout the city which the destruction facilitates; there will also be large green zones, particularly on the west side, including the provision of facilities for sports and mass spectacles. A new central area is scheduled in a part of the city which is now free from buildings. To this new

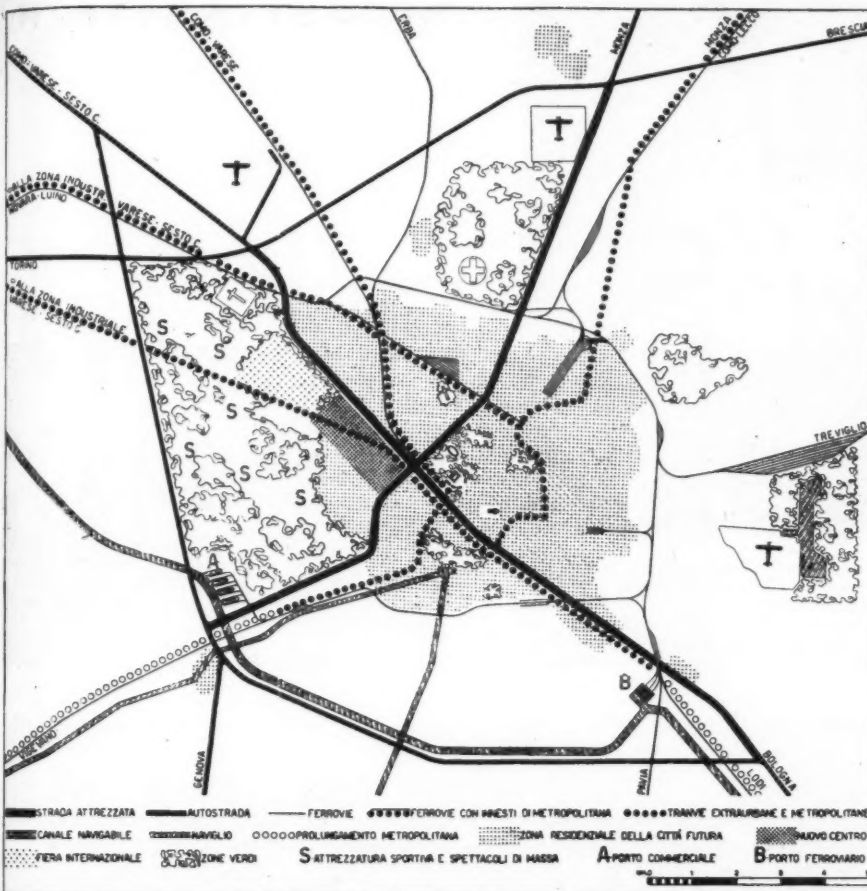
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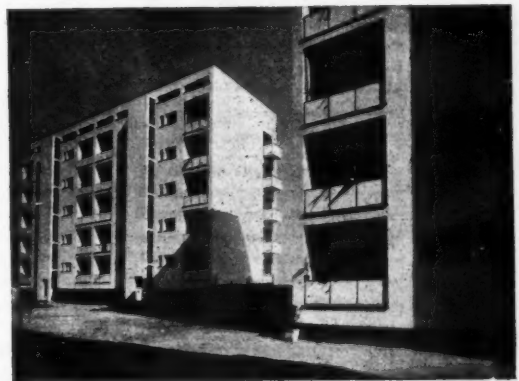
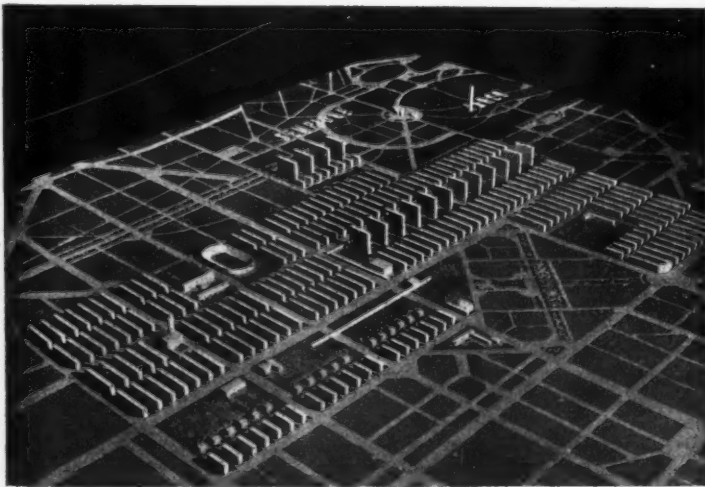
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## CITY OUTLINE PLAN



The basic proposals for the city area of Milan are shown on the City Outline Plan, which includes many interesting features, such as the large green zone adjacent to the new Centre, providing for sporting events of a spectacular nature. Below, some of the new flats erected in Milan—architects, Albini, Camus, and Palanti. Below left, a model of the proposed reconstruction of the Sempione-Fiera quarter, the layout influenced by the existing road pattern. Nevertheless, although the various social and commercial elements have been sited skilfully, the result has a monotony and rigidity which does not express an Italy liberated from dictatorship.



## REHOUSING

centre will be transferred those firms at present occupying inadequate premises, such as those installed temporarily in houses, and additional administrative accommodation will also be provided for those new commercial firms which are likely to be inaugurated. In the old city centre, buildings of interest will be retained (La Scala and the museums, for example) and with the segregation of traffic from this zone the historical part of the city will be enjoyed and admired without interruption.

### industry

A large proportion of industry will be moved out of Milan under the new proposals to suitable areas outside the city, in particular to the north-west alongside the navigable canal. New industries will be directed to these zones immediately, and existing industries decentralized when their plant and buildings become out of date. At the same time, residential accommodation will be provided

for the workers in these new factories. The main industrial zone can be identified on the accompanying outline plans.

### residential

In addition to the residential accommodation contiguous with the new industrial areas, further housing will be provided in localities already existing in the region which is within the immediate sphere of influence of Milan; for example, Gallarate-Crenna, Como, Varese, etc., and where the climate and amenities of landscape are better than in the city itself. It is considered that many who work in the city, but who need not live there, will be encouraged to move out by improved transport facilities.

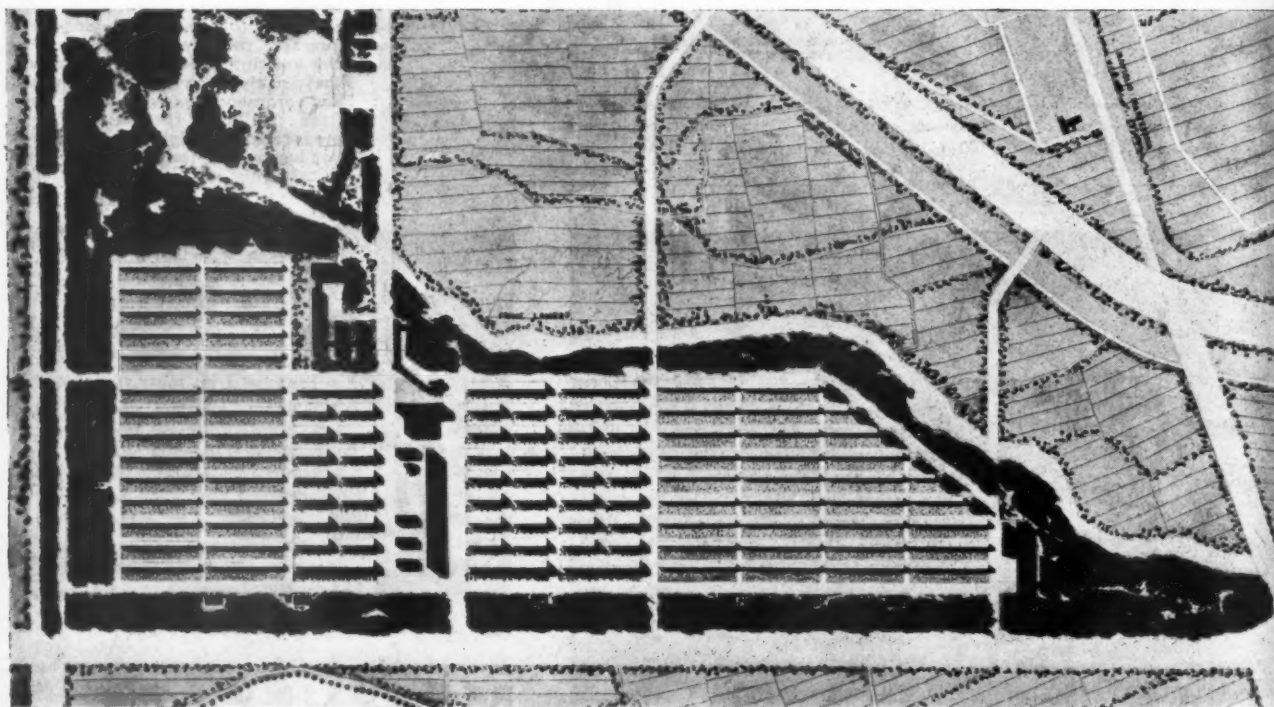
### transport

Many proposals are put forward for improving the various means of transport; the construction of a new navigable canal from



Above, a photograph illustrating the conditions under which many of the people of Milan are forced to live, through the loss of their homes during the war. Right, the first efforts in reconstruction in which all and sundry were recruited to clear away the debris. Below, a further example of residential planning for the city—in this case considerable attention has been given to surrounding open space which relieves to some extent the monotony of the regular pattern.

## RECONSTRUCTION



Locarno to Venezia is scheduled for immediate construction, thus utilizing labour which would otherwise be unemployed, because materials for building and machinery for factories are not yet available in large quantities. This project, which was proposed by the provincial administration runs through the new major industrial zone, whilst in the city itself there will be two small ports on the canal to serve commerce and the railway.

Road traffic from north to south, and east to west, which hitherto passed through the city, will be by-passed by new roads which can be identified on the outline plans. For that traffic which has legitimate business in the city, a system of elevated motor roads is suggested which cross near the new central area, and which have been planned to pass through devastated areas to minimize the destruction of buildings. These road proposals, it is contended, will relieve Milan of the suffocating effect that traffic has had on the city since the rise of motor transport. It is not considered that a vast network of a local metropolitan railway system is justified in

Milan, but certain provisions are made to give rapid access from the new areas which are to take the decentralized population. A new airport is suggested to the north of the city served by the new motor road system and the railway.

### immediate provisions

The authors of the new *Piano AR* consider that certain work must be done immediately during the time of preparation of a detailed plan. The repair of war damage and the provision of temporary accommodation is given high priority, and all actual new building is to be suspended whilst this work is carried out except for the provision of housing by private enterprise in the areas Corso Sempione, Scalo Farini and Ferrovia Varesina. The repair of factories, which will not be affected under decentralisation proposals, is also to proceed quickly, and the improvement of the railways and tramways to encourage decentralization.



A close-up of a typical facade showing the recessed balconies separated by the glazed dining alcove off the living room. These flats are built by the FSB Housing Association for the lower income groups. The whole scheme is composed of eight blocks centrally heated and contains a number of shops at street level. Construction is of reinforced concrete and brickwork.

## FLATS IN COPENHAGEN

DESIGNED BY V. KAASTRUP

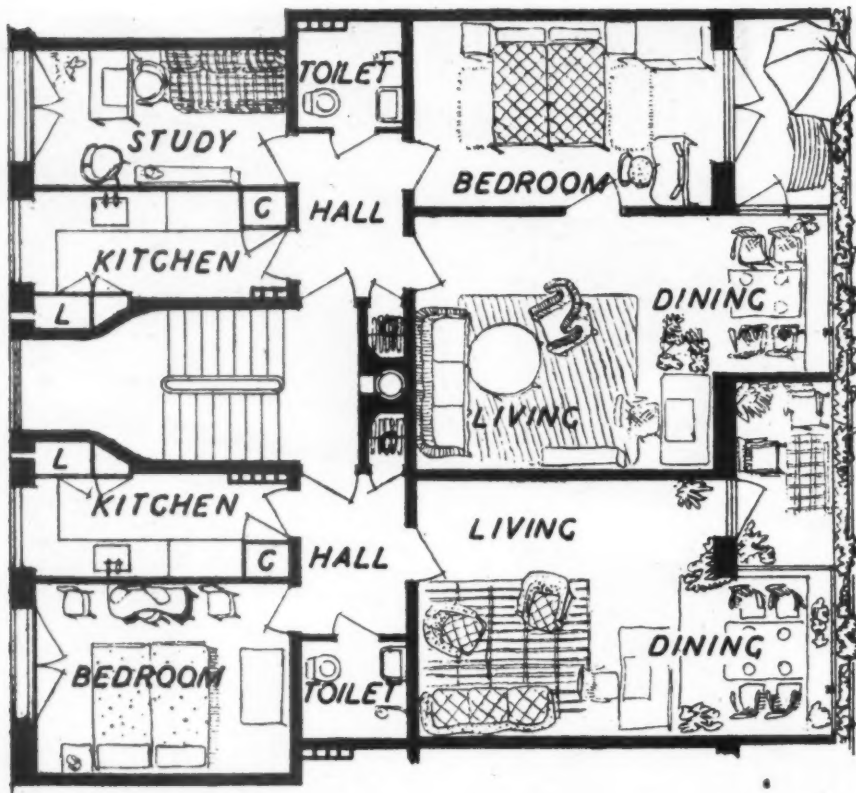
This flat scheme called Bispeparken, designed mainly for the working artisan and lower middle classes, was built by Foreningen Sorecalt Boligbyggeri, a private housing association which builds dwellings with the public support of loans at low interest guaranteed by the City Council. FSB administers some 6,000 dwellings and is one of the four big housing associations in Copenhagen.

Bispeparken has 327 flats in eight blocks which also include shops. The cost was about £387,000, which works out at about 14 shillings per square foot floor area excluding cellarage. The annual rent is about 1s. 6d. per square foot

less the interest on a premium of £20-£25 per flat. Rent for flat with two rooms and kitchen is £3 12s. 6d. per month, and that for a three room flat is £4 7s. per month, excluding payment for heating, which is from a hot water system having a central heating plant. In Denmark, building costs are about 58 per cent. higher now than they were in 1939-40, but public support for social building schemes is also much higher now; the result is that interest charges are half what they were, and rents remain approximately the same in 1946 as in 1939.

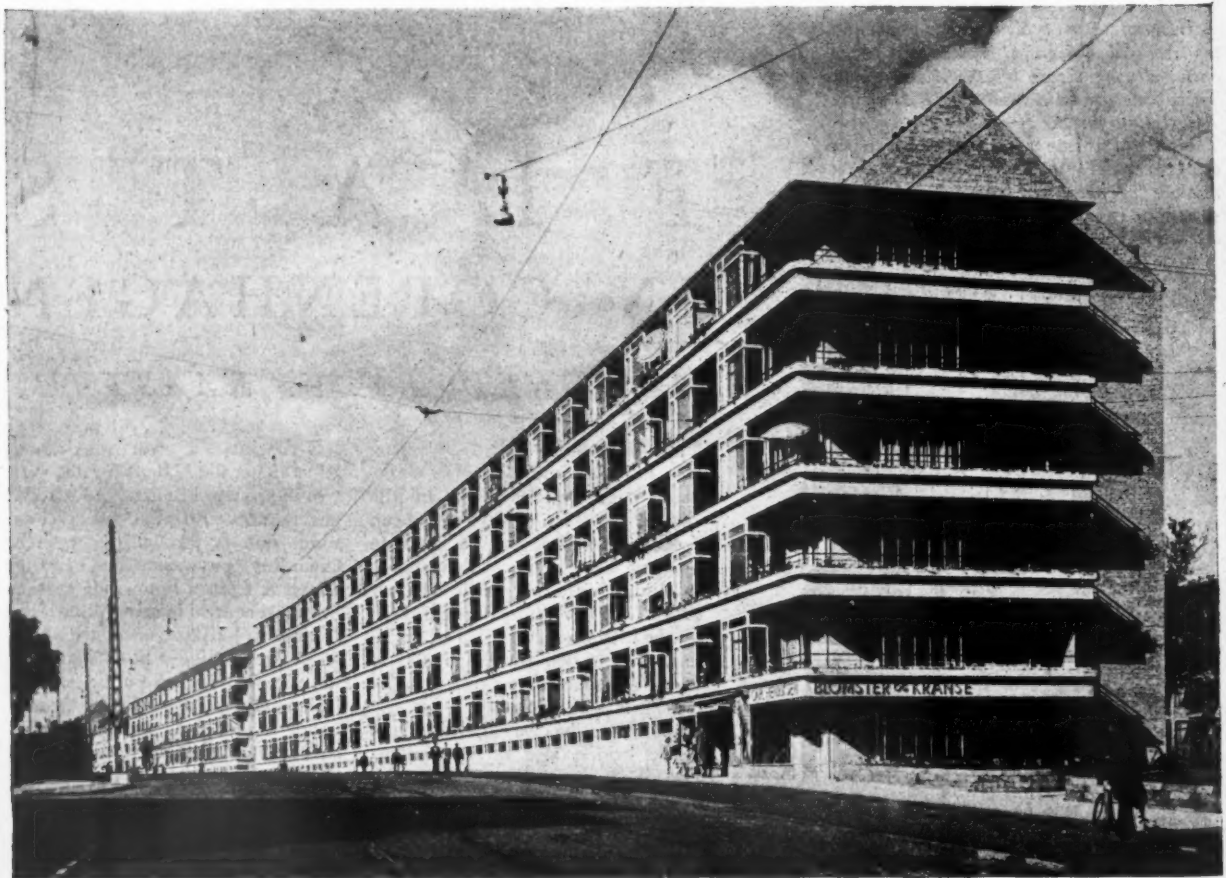
The Bispeparken flats are of reinforced concrete and brickwork,





with floors of reinforced concrete hollow clay block construction covered with beech boarding. Each flat has a recessed balcony, designed so that it has complete privacy. This type of balcony has proved to be more expensive than the older projecting type. Each kitchen has a built-in concrete slab working table faced with terrazzo. The Danish working class does not like to eat in the kitchen, so that a dining alcove has been provided off each living room. At present, there are only showers in the toilet rooms but small bath tubs will be added later. A refuse shoot runs down the inside wall of each public stairway, with access at each landing.

*Below, part of the scheme lying along the main street. Left, typical plans of two of the flats.*





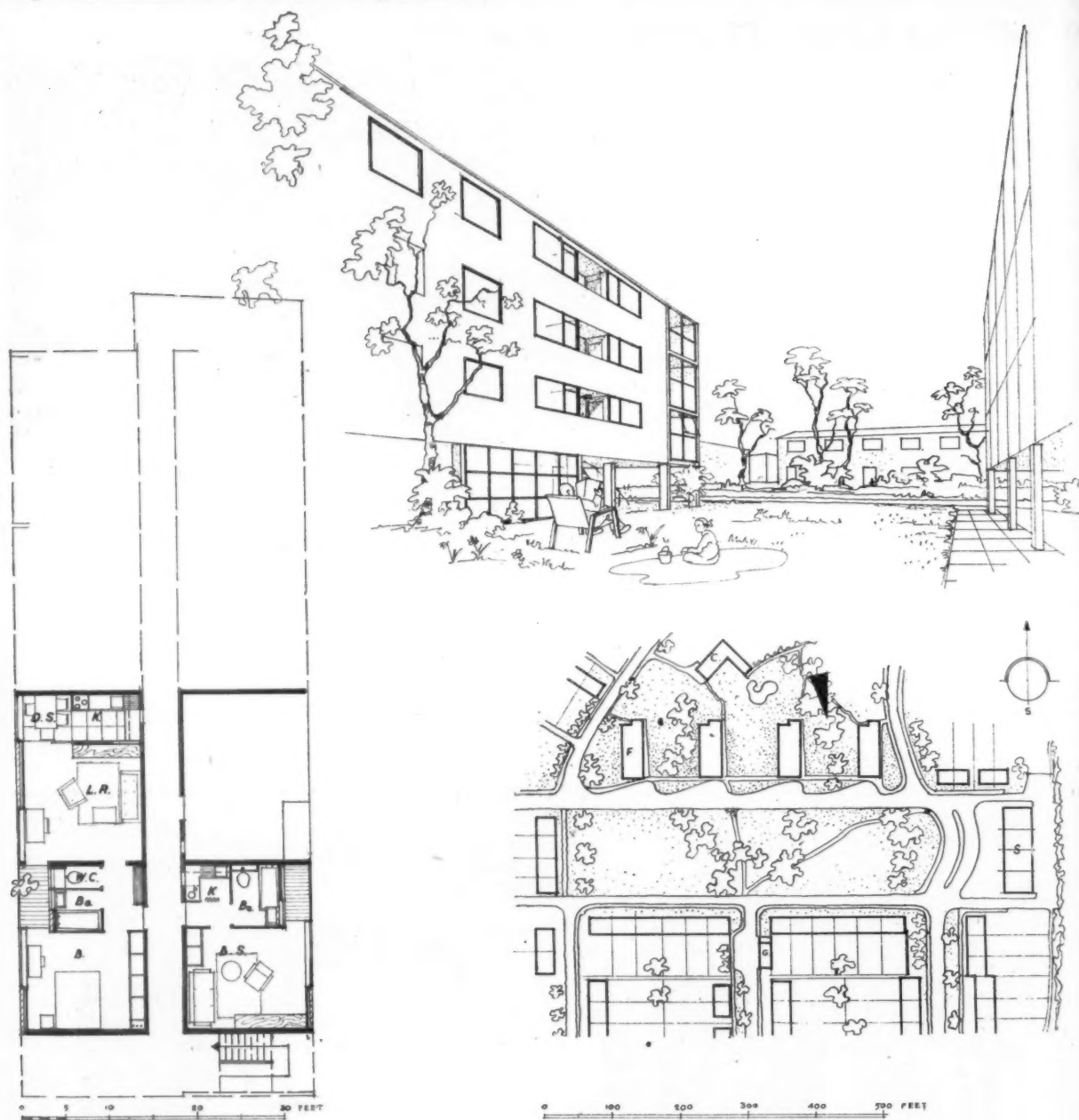
# BISPEPARKEN FLATS IN COPENHAGEN

DESIGNED BY V. KAASTRUP



Top right, the whole scheme from the air. Below, the living room of the architect's own flat at Bispeparken, with its dining alcove and recessed balcony.





# HOUSING PROJECT

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

**PLANNING**—The scheme was prepared for the Borough of Surbiton last year. Plans were drawn for approximately 350 houses and flats. The centre of the estate was opened up to form a communal garden, and in conjunction with this a few essential shops were provided, in addition to a children's playground and creche. These gardens would be linked up with a proposed com-

munity centre to the north.

Four small blocks of one- and two-room flats were planned at the edge of the communal garden. In order to give privacy to these flats, and to provide a continuous, uninterrupted garden, the flats were raised on stilts to a height of about 7 ft. 0 in. above ground. The plans were contained within a 19 ft. 0 in. grid, which would enable either the single room

flats or two-room ones to be increased according to need.

**CONSTRUCTION**—The flats were planned to suit the box-frame type of reinforced-concrete construction, with external walls and partitions carried on the slab. External walls would be built up with a 4½-in. brick outer skin rendered (in case no facing bricks were available) and an inner skin of foamed slag or light-weight concrete slabs.

# 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.

## STRUCTURE

2650

### Prestressed Concrete

ARCH ROOF IN PRESTRESSED CONCRETE. (*Concrete and Constructional Engineering, April 1946, pp. 112-115.*) Barrel vault roof in prestressed concrete over garage in India, 420 ft. by 120 ft. in plan. Details of construction.

The whole area is surrounded by brick walls and is roofed by 12 barrels, 120 ft. long by 35 ft. wide each, which rest on brick piers. The thickness of the roof shell is 2½ in. Tie beams are arranged under the springings of the barrels in the 120 ft. direction. To allow for expansion and contraction a reinforced concrete rocker is provided at one end of each tie beam. In the longitudinal direction of the building, the roof was cast in continuous units of not more than four barrels.

The interesting feature of this structure is the prestressing of the beams by an eccentric force of 264 tons. This was induced through five steel cables concreted in the beam, but left loose inside steel sheathing so as to keep the cabin free from the concrete during prestressing. Each cable comprised 32 steel wires of ⅜ in. dia. in two layers around a hollow core of ½ in. dia. The cable was made by hand with a wooden template on the site. The stirrup reinforcement was fixed first and then the 125 ft. long cable was taken by 15 men lifting it at every 8 to 10 ft. and threaded through the stirrups. At both ends of each cable anchor blocks were placed in position. Twenty-one days after concreting, the cables were stretched and anchored thus transmitting their tension as precompression on the concrete.

2651

### Prefabrication

PREFABRICATION. (*The Architectural Forum, April, 1946, pp. 137-142.*) Advantages and difficulties of prefabrication. Industry rapidly developing into big business status. Lines along which successful development can be achieved.

Prefabrication in America has reached the status of Big Business, and recent proposals estimate that the prefabrication industry can produce 850,000 housing units by the end of 1947. If successful on a large scale, prefabrication could offer great advantages for industry. It could use the now deserted giant war plants, which with their long one-storey assembly lines are ideal for the mass production of houses. It could offer year round work for semi-skilled labour from war industry. It could build profitably on scattered individual lots, and thus use existing utilities—sewers, water, streets, etc.—before asking municipal aid to provide them in new districts.

The article contains a table in which some 25 well-known prefabricators give facts and figures on their houses. There is a wide range of products in which a company may specialize in house fabrication—panels,

walls, complete sections, entire house shells. More specialized products are, for instance, Fuller's four room—two bath—unit, the Key-in-the-Lock House, the Packaged House, the Basic House.

The materials used in most of the houses are timber and plywood, either in the form of a stud-and-building-board panel with an outer veneer of clapboard or shingle, or in the form of a single stressed-skin plywood panel employing war-perfected phenol bonding methods. Concrete, because of its availability and low skilled labour demands, seems promising but not yet exploited. Metal is least active of all.

There are a number of difficult problems which have to be solved if prefabrication is to compete successfully. The most immediate is that of transportation. Two methods are being proposed to overcome territorial limitations. The first is to set up a chain of plants throughout the country. The second is to make the house parts light and simple enough to be shipped easily and inexpensively.

The next and most difficult problem which the manufacturer has to face is the setting up of machinery to ensure efficient and prompt erection on the site. For the handling of all details connected with erection on the site the big companies insist on full-time dealers to instal their houses, and indeed the future of prefabrication may depend on successful local dealers, providing and supervising foundations, erection of chimneys, installation of sewer and water connections, etc. It will also be the dealer's task to keep buyers informed about all the facts of the particular brand chosen.

In addition to a programme chosen for dealing with individual consumers, prefabrication must solve two more difficulties relating to the community. These are the revision of hostile building codes and a resolution of difficulties with trade unions.

There remains to convince the public that prefabrication can be permanent, good-looking and "homey." The present tactic is to camouflage the prefab. house so as to make it look like a conventional house built by conventional means. But there are those who disagree with this approach and hold that a house produced industrially should display the features which straight-line industrial production can achieve.

2652

### Unitroy System

UNITROY SYSTEM OF HOUSE CONSTRUCTION. (*The Architects' Journal, April 18, 1946, pp. 303-306.*) Steel framed single- or two-storey building based on 3 ft. module with hipped roof. Walls and roofs clad with panels incorporating reed and cork. Walls faced externally with asbestos sheeting finished with Tyrolean Cullamix and internally with wallboard. External joints sealed with plastic caulking.

## MATERIALS

2653

### Timber Pests

TIMBER PESTS. THEIR ORIGIN, PREVENTION AND CURE. (*Timber Development Association booklet.*) Wood destroying fungi. Prevention of decay of timber in buildings. Stains of timber. (Insect attacks on seasoned and on unseasoned timber.) Marine borers. Control measures.

Includes a detailed bibliography and 8 appendices:

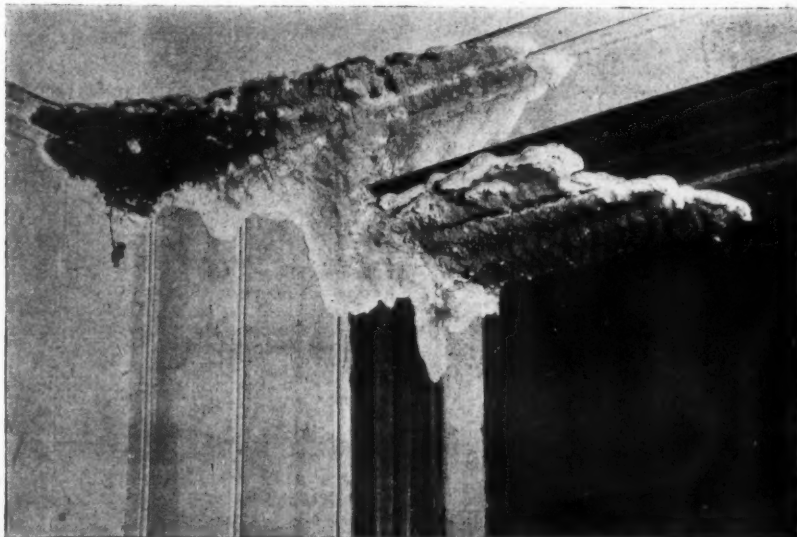
I. Characteristics of decayed or decaying wood.

II. Summary of means of preventing fungal attack.

III. Summary of measures for eradication of decay.

IV. Comparative table for identification of common rot-causing fungi in buildings.

V. Some commercial timbers naturally resistant to decay.



From the TDA booklet on Timber Pests. A dry rot (*Merulius lacrymans*) fruit body in a doorway. See No. 2653.



VI. Comparative table for identification of common rot-causing fungi in buildings.

VII. Comparative table for identification of damage by marine borers.

VIII. Commercial timbers immune or resistant to marine borers.

Illustrated by 20 full-page plates.

#### 2654 Timber Pests

THE ENEMIES OF TIMBER. (*Jenson & Nicholson Ltd.*, 36, St. James's Street, London, S.W.1. Price 1s. 0d.) Booklet on wood-destroying fungi (dry rot) and insects (boring beetle, death watch beetle, furniture beetle, powder post beetle, house longhorn beetle, shipworm, termites). Advice on preservation. Well illustrated.

#### 2655 Timber Seasoning

TIMBER SEASONING. (*Timber Development Association*.) Guide to correct and economic timber drying.

This booklet comprises publications issued by the Forest Products Research Laboratory, and is so arranged as to give a complete account of timber seasoning. The information given indicates that, if correctly operated (i.e., if the conditions of the circulating air are so controlled as to suit the state of the timber at any given time), a kiln can season timber at least as well as the slower air-seasoning method. Appendices, bibliography and tables add to the usefulness of this publication.

#### 2656 Timber Reference Books

TDA QUARTERLY REVIEW. (*Timber Development Association*, April 1946.) Activities of various committees. Timber: applications, statistics and general information. Statistical data on production and consumption of softwood and hardwood. Useful library catalogue.

A Library Catalogue of reference books, text-books and other publications available at the Headquarters Library is issued with this number of the Review. Branch libraries are listed on the last page of the catalogue.

#### 2657 Timber Leaflets

TIMBER. (*Timber Development Information Leaflets*.) Continuation of the Association's Information Service on scientific and economic uses of timber.

Leaflets Nos. 1-20 are the first of a series to be issued for the use of architects, builders, engineers, etc. They are of uniform size (8½ in. x 11 in.), neatly headed, and contain useful information in condensed form. The first leaflet, *List of Publications*, may be useful as a source of reference.

#### 2658 Timber Flooring

GRADING AND SIZING OF SOFTWOOD TONGUED AND GROOVED FLOORING. BS 1297: 1946. (*British Standards Institution*, 2s. 0d.) Tolerances regarding dimensions, checks, shakes and knots.

## MISCELLANEOUS

#### 2659 Book on Surveying Profession

TO BE A SURVEYOR. *Arthur J. Willis, F.S.I.* (*Methuen & Co. Ltd.*, 6s. 0d.) A book for those members of the

Forces and of the general public who are considering the choice of a profession.

It may come as a surprise to those who have only come up against one branch of the profession, to know that surveying is defined in the Royal Charter and Bye-Laws of the Chartered Surveyors' Institution as "the art of determining the value of all descriptions of landed, mineral and house property and of the various interests therein; the practice of managing and developing estates; the science of measuring and delineating the physical features of the earth and of measuring and estimating artificers' work."

Obviously the term Surveyor is more or less generic and the choice of a career must be narrowed down to one or two branches of the profession. Mr. Willis deals with each main category on its own—the Land Surveyor, the Land Agent, the Estate Agent and Valuation Surveyor, the Quantity Surveyor, the Building Surveyor and the Mining Surveyor—and although each chapter is brief and readable he succeeds in giving a clear picture of each of the various branches.

The question of entering the profession is dealt with next; the alternatives of training in a technical school or a practitioner's office, with or without articles. Following this is an informative chapter, with salary scales, on the prospects of public services with the various Government Departments and Local Authorities. It is no doubt impracticable to quote salary scales for all types of executives and undesirable to draw a comparison between public service and private practice, but it might have been stressed that there are many openings in the profession for senior men at comparatively high salaries.

One chapter is devoted to a sketch of a typical week's work by a Quantity Surveyor with a small private practice. As may be expected from Mr. Willis, he draws his picture with a sure hand, but as the branches of the profession differ so widely and the duties of an individual vary so much with the size of his practice, this chapter may be of doubtful value.

Mr. Willis then deals with the future of the profession and the various Professional Institutions to which a surveyor can belong, and the book ends with a useful appendix.

The book is easy to read and there is no doubt that it fills a particular need at the present time. Anyone considering the profession as a career would do well to obtain a copy.

#### 2660 Pocket Book

SPON'S PRACTICAL POCKET BOOK. *Messrs. E. and F. N. Spon, Ltd.* (8th Edition. 12s. 6d.) 570 pages of miscellaneous information for builders and architects.

Arranged in alphabetical order the information in this well-known publication is easy to find. Whether it is wise to attempt to include in any single book information ranging from design requirements of various special buildings such as theatres and slaughterhouses to detailed data about weight of materials is open to question. If it is attempted the result is only valuable if the information is correct and all up to date—a formidable task. In the present publication it would appear that some of the information is anything but up to date.

#### 2661 Electric Service Cables

PROVISION OF ELECTRICITY SERVICE CABLES FOR SMALL HOUSES. *British Standard Code of Practice. Draft for Comment. Second Proof*, 1946. (*British Standards Institution*, 1s. 0d.) Short code giving general information,

size and type of cable, methods of running cable into house, use of looped services to pairs and terrace houses and recommendations for dealing with overhead supplies.

#### 2662 Electric Supply Controls

CONSUMER'S ELECTRICITY SUPPLY CONTROLS FOR SMALL DWELLINGS. *British Standard Code of Practice. Draft for Comment. 2nd Proof*, 1946. (*British Standards Institution*, 1s. 0d.) General information. Responsibilities of builder, supply company and electrical contractor. Description of principal components. Design requirements for supply control box with dimensioned illustrations.

The chief merit of this Code is the attempt to provide a tidy arrangement of equipment in a minimum of space. It is to be hoped that standard control boxes of the type illustrated will become available at low cost. They would be a great improvement in both appearance and safety over the normal pre-war arrangement.

## 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, 13, Queen Anne's Gate, Westminster, S.W.1.

#### 2663 Water Repellent

Q Have you any information concerning Aquella water repellent?

A Aquella is manufactured in the USA by Messrs. Aquella Products, Inc., 1,270, Sixth Avenue, Rockefeller Center, New York 20, N.Y., who have, as yet, no agents in this country.

#### 2664 Fireproofing Thatch

Q Is there a simple fire-proofing process for a thatch? The occupants of a thatched cottage near the railway line fear that sparks from engines may do damage.

I am considering some solution that can be sprayed by a local builder, and I hear that the Home Office recommend a mixture of: Sulphate of ammonia, 28 lb.; carbonate of ammonia, 14 lb.; borax, 7 lb.; boric acid, 7 lb.; alum, 14 lb.; water?

Can this mixture be recommended, and if so, what is the quantity of water needed? Also how much should be used for a given area of thatch?

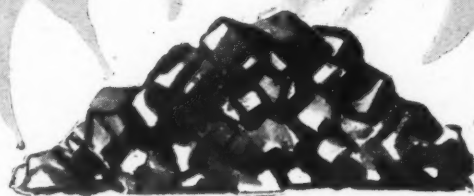
A The Home Office mixture should be dissolved in 40 gallons of water and sprayed in the normal manner—amount to be used varying with the thickness of thatch.

The efficiency of this solution diminishes after a time, especially after heavy rain. It is recommended, therefore, that when thatching a roof initially, fireproof boarding should be laid under the thatch to prevent the fire spreading downwards into the house.



# STOP

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Northern Ireland Agents: CENTRAL MERCHANTS, Ltd., Upper Queen Street, Belfast.



These photographs show Bakelite-veneered Flexoply panels on the L.M.S. Coronation Scot. The large photograph shows the corridor to the kitchen car and the small bottom photograph the interior of the kitchen car.



# FLEXOPLY

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This is the third issue of a special section which is virtually a resumption of our pre-war Trade Notes. It now covers a wider scope, however, under a new title recording not only the marketing of new designs and the reappearance of familiar products, but also the general trend of developments within the industry. Manufacturers who have new designs in hand or any other news of interest to architects are invited to send full information to the Editor.

## THE INDUSTRY

[by Philip Scholberg]

### HEATING FOR THE SMALL HOUSE

According to Post-War Building Studies No. 19, the pre-war fuel consumption in this country was something like 1½ tons of coal per head, or roughly five tons per house per annum. And it must be admitted that the heating obtained from the fuel was none too good. Now that there is hardly any fuel we are being encouraged to use more insulation and more efficient appliances, and a number of manufacturers have designed appliances specifically for the small house programme, particularly in relation to the "background" heating which seems now to be officially recommended.

Ideal Boilers, as one might expect, have a number of new designs which are intended mainly for the housing programme. The first is the Neofire, an open fire for use in the living room with a boiler for indirect hot water supply. This boiler has sufficient capacity to heat approximately 40 square feet of radiating surface plus the average amount of piping, and will also supply domestic hot water via a cylinder of 20-gallon capacity. Indirect heating of the cylinder is virtually essential as it is almost impossible to remove scale from boilers of this type. The illustration on this page shows the fire set in a typical surround: fuel was originally intended to be coke or anthracite, but it has been found in practice that ordinary house coal can be used equally well. Gas ignition is provided for the fire.

This brings us to the second fitting, which

is designed to work in conjunction with the first. Background heating by warm air ducts is often but not invariably successful, and it is probably more satisfactory to transmit the heat via the more conventional pipework and radiators, though the cost may be somewhat higher. Ideal have evolved a device which they have named the Firerad; this consists of a cast iron stove enamelled fitting which looks like the ordinary fire surround, but which incorporates a radiator. Set in the face of it is a 1 kilowatt electric fire or fuelless gas fire to be used for topping up the background convection heating as necessary. While the design of the surround-cum-radiator will by no means appeal to everybody, I have little doubt that it will be popular with the tenants of semi-detached pairs, which is perhaps the main thing. The unit is designed to give adequate heat for rooms up to 1,500 cubic feet and fixing is by four rag bolts.

The third unit is a well designed little magazine boiler known as the O-M. This gives a greater output than the Neofire, and is intended to take care of the heat requirements of a more ambitious central heating system as well as supplying domestic hot water. It burns small coke or anthracite up to 1½ inch size, and the magazine is large enough to hold a charge of fuel which should last at least 24 hours. The design is a simple rectangular box with a casing in cream stove enamel while the top and the lower half of the front are black vitreous.



The Neofire produced by Ideal Boilers—a new open grate with boiler.

Some people might prefer the whole thing in cream, but there is a lot to be said for black in the areas where ashes and fuel are liable to make a mess and where careless handling of stoking tools can chip the finish. (Ideal Boilers and Radiators, Great Marlborough Street, London, W.1.)

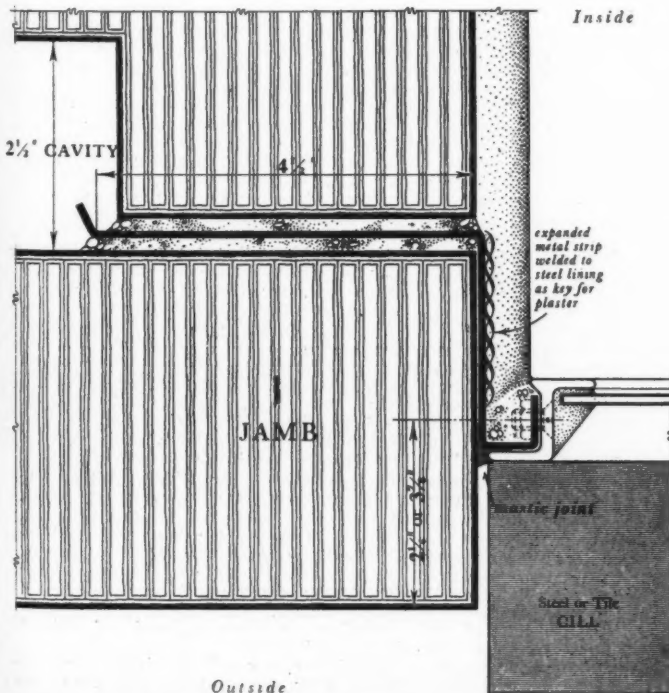
### STEEL WINDOWS

A new catalogue from Henry Hope and Sons seems quite like old times, particularly as the general layout, full information and high standard of draughtsmanship is well up to pre-war standards. The present list (No. 230) contains the complete post-war range of standard metal windows and doors for domestic use as set out in BSS 990, and certain types in the pre-war range, for which the demand was small, have been dropped, though they can still be made to special requirements. It is interesting to note that the whole of Hope's output is to be hot dip galvanized. The BSS demands that the windows should be rustproofed and leaves the choice to the manufacturer. Hopes maintain that there are other processes which are satisfactory and perhaps cheaper, but that many of them are dependent on the human element and that failures are therefore possible. So galvanising it is, and if you want a window in any other form of rustproofing you will just have to get it from somebody else. This seems to me a most praiseworthy attitude for any manufacturer to adopt. I have little doubt that Hopes will lose a few orders by it, but they are, in effect, saying that if you have any trouble it will be their fault and you can't very well say much fairer than that. Many architects will welcome a firm which is prepared to take even a small worry off their minds. The only point to note about the galvanising is that the windows should be given about a month to weather before they are painted.

From the design point of view I notice that some of the sections have been stiffened up slightly and that the fittings have been improved. There is also a new combined damp resister and fixing lug for use with cavity walls. This is built in and the window is then fixed with bolts instead of lugs. Expanded metal strip is welded to the steel lining to provide a key for plaster on the internal face of the window opening. The usual two courses of slate are eliminated and this device can be described as a halfway house between normal fixing and the full steel sub-frame. (Henry Hope & Sons, Ltd., Smethwick, Birmingham, 40.)

### SMALL HOUSE ELECTRICITY SUPPLIES

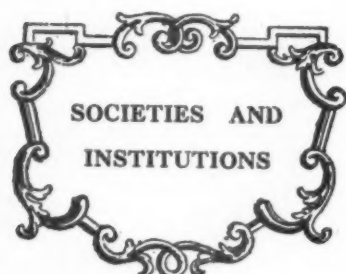
For many years meters, fuses and main switches have been tucked away in some cupboard under the stairs with festoons of VIR protruding from the ends of conduit and wandering vaguely from one piece of equipment to the next and taking up a great deal too much space. Now at last the



From Henry Hope's new catalogue of steel windows, all of which are now galvanized. The detail shows the new damp resister and window lug.



EDA has appointed a technical committee to consider the problem and the result is a properly standardised series of fittings which will go on a board 18 inches by 24 and still leave room for the largest size of prepayment meter. The unit consists of three boxes which contain the supply authority's main fuse and meter connections, a 60 amp main switch, and a fuse chamber with two 5 and four 30 amp circuits, while there is provision for two extra circuits in large houses. Apart from the improvement in tidiness and appearance there are many advantages in this from the point of view of ease of wiring, and the whole unit should be welcomed by contractors as well as designers. EDA has issued a leaflet describing the whole thing and making sensible comment on the best place to install the board in the now almost standardised plan. There are also some useful working drawings to show how the installation may be made in the inner leaf of a cavity wall. (Electrical Development Association, 2, Savoy Hill, London, W.C.2.)



*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 economize 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.*

ABT

## Charles Abrams

July 28, at the Alliance Hall, S.W.1. Meeting of the Association of Building Technicians. Talk on THE BUILDING INDUSTRY IN AMERICA, by Charles Abrams, Professor of Housing and Land Economics at the New York School of Social Research, now on a visit to this country.

**C. Abrams:** Building remains largely a handicraft organisation, in this respect contrasting with other phases of industrial effort; e.g., in the nine years from 1907 onwards the cost of the automobile was reduced by more than seventy per cent. because of improvements in its manufacture. Large scale enterprise does not

overlook building, but generally it confines itself to the production of materials rather than the building of houses, and it is still the case that the house is put together by people who are in a small way of business themselves, while drawing their materials from the big industries. The business of building in America is divided into two groups of personalities differing from the standpoint of organisation, and differing also from the standpoint of power. On the one side you have an unorganised group of land owners; these are not like the great land owners of England; in America the land owner is a little fellow. In the same class of unorganised are the developers, architects and consumers. On the other side is the well organised group of manufacturers of materials, financiers, and to some extent, labour. Labour is not fully organised in America, but where it is it has made a fairly satisfactory advance.

If we consider the house itself, about 30,000 parts go into it and it requires about 500 separate operations to put it together; yet the building industry is so important in the national economy that the manufacture of one major material among those many parts is enough, when it gets round into all the houses, to constitute a major industry in itself. As to finance, the last figure I have seen of first mortgages controlled by savings banks, life insurance companies, building and loan associations, and similar institutions show that in the Thirties 82 per cent. of all first mortgages were owned by this type of institution. Labour has had a certain degree of success with the contractors with whom it effects its bargainings: I believe that one-third of the AFL members are in the building trades. Organisation of land owners and consumers is practically non-existent. Real estate boards often claim to speak for the owner, but actually they represent the real estate brokers and other financiers.

I cannot speak highly of the quality of the work produced. No one connected with building houses is interested in long-term durability. The architect might be expected to have a good influence in America, he is well trained and experienced; but while intellectually constituted to prevent abuses, develop new methods and impart originality to the design, he fails in all these respects. When designing a church or monument he does a good job; he may do a good job on a skyscraper but he is dispensable in the building of a home, and is forced to adjust himself to the conditions of the industry. The blue print he produces is affected by the demand for maximum profit with minimum outlay. Public housing seems to offer a modest opportunity to the architect: America is learning a lot about building temporary houses and about large-scale multiple development. The Government's entry into home building may open a new era for the architect, bringing new technique for mass production, and also giving the architect an interest not only in research but even more in welfare.

Here are some interesting figures from the American census of 1935:—Out of 75,000 firms engaged in construction 11,000 were general contractors, and 64,000 special trade contractors and sub-contractors. There were 100,000 employers in the construction industry with more than 800,000 employees. Of the employers, 22,000 were general building contractors and 8,000 handled other phases of construction. Of the 64,000 special trade contractors more than half had three or fewer employees. There were a few engaged on big projects, but most contracting and building work was done by people of small and moderate means. The cost of materials represented from 45 to 60 per cent. of the cost of building the house. The manufacture of materials was by large-scale organisation. There were large firms in plumbing, steel and copper. Four leading companies controlled 81 per cent. of prepared finished plaster, 91 per cent. of moulding and gaug-

ing plasters and 83 per cent. of neat plasters. Five cement corporations controlled 40 per cent. of cement capacity. Four companies produced 60 per cent. of reinforcement bars. Two corporations controlled 95 per cent. of plate glass production.

Concentration and big business does not necessarily mean either low costs or high. There is no incentive to manufacture at a low price. With so many different materials going into the house, what difference will it make if the man who produces hardware cuts his costs by 15 per cent.? It will not make any difference. So also with labour. If labour costs are cut by 20 per cent., the selling price of the house will be reduced by only 5 per cent.

(In reply to a question, Mr. Abrams said that, according to the Government standard, 39 per cent. of the houses in the United States were unfit to live in. In the case of farmhouses the proportion was two-thirds.)

## RIBA

### Examinations

The RIBA INTERMEDIATE EXAMINATION was held in London, Manchester, Leeds, Newcastle, Edinburgh, Belfast and Cardiff from May 24 to 30, 1946. Of the 242 candidates examined, 92 passed and 150 were relegated. The successful candidates are as follows:—

Alford, R. B. L.; Allan, Robert; \*Bartholomew, Victor G.; Baxter, Robert C.; Bean, Norman S.; Bernhardt, Douglas V.; Bickford, R. J.; \*Bishop, Lloyd J.; Boxell, Cyril L.; Brown, Dennis H.; Bustard, Edward H.; Carter, Geoffrey B.; Castle, Victor; Castle-Cleary, W. R.; Chamberlin, P. H. G. (subject to approval of Testimonies of Study); \*Chipperfield, John E.; Chitty, Howard J.; Clarke, William A.; Clarke, A. Derek; Clarkson, Allan R.; Clegg, Peter R.; Cooper, Malcolm; Coppock, John G.; Dale, Thomas S. S.; Edgcombe, John; Edwards, Cyril E.; Elderton, C. F. E.; Elliott, Arthur W.; Ferrie, James W.; Finkle, Gerald M.; Gabrel, Sidney; Goodchild, J. M. (Miss); Graham, Robert C.; Grey, George A.; Hall, Charles F. (subject to approval of Testimonies of Study); \*Hastilew, Noel; Hobbs, Arthur F.; \*Hollis, Richard G.; Hopkins, Roy; Jefferies, Reginald; \*Kelly, George D.; Laird, Colin; Lobban, William; Lovatt, Thomas; McCusker, Joseph B.; Mason, Robert J.; Mawhinney, J. A.; Mellling, Frank; Mellor, Kenneth; Michaels, Leonard; \*Miles, Godfrey; Mold, Arthur H. W.; \*Moth, Eric D.; Needham, P. R.; Noble, Charles W.; Nutter, F. G.; Oakley, David F.; Olney, Ronald P.; Padbury, J. Neil; Paget, Alfred E.; Patterson, Sydney J.; Pell, Arthur; \*Penfold, Henry G.; Phillips, Norman M.; Pianca, Reginald A.; Quigly, C. M. (Miss); Riordan, Cecil E.; Roe, Stuart A.; Roffey, Alan A.; Scott, Norman K.; \*Slipper, Arthur W.; Smith, Frederick A.; Smith, James E.; Smith, Keith P.; Stephens, Harry P.; Stevens, Reginald; Tatnall, Derek L.; Thomas, George A.; Todd, Anthony C.; Tooby, George D.; Torrance, H. D. B.; Turner, Raymond G.; Vass, Claude R.; \*Vinton, Leonard G.; Wellwood, William R.; Williams, Elwyn T.; Williams, Francis; Williams, Geoffrey G.; \*Williamson, Albert E.; Wilson, Geoffrey; Winder, William J.; Yates, Arthur.

\*Subject to the approval of History Theses or Theses.

The following candidates have also completed their qualifications and have now passed the Intermediate Examination:—Black, J. P. R.; Corder, D. M.; Trebilcock, R. W.



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A.J. 8.8.46

## RIBA

### New Members

The following new Members have been elected to the Royal Institute of British Architects.

*As Hon. Fellow (1):* Downey, Most Rev. Richard, D.D., PH.D., LL.D., Archbishop of Liverpool.

*As Hon. Associates (2):* Tallents, Sir Stephen (George), K.C.M.G., C.B., C.B.E.; Taylor, Miss Margaret Stephens.

*As Fellows (9):* Duffy, Thomas (Preston); Freeman, Philip Garforth (London); Goddard, Henry Gordon (Leicester); Green, David John (Lowestoft); Hall, Harold Saunderson (Grimsby); Heathcote, Major Charles Harold (London); Highet, Graeme Ian Campbell (London); King, Laurence Edward (London); Tayler, Herbert (Lowestoft).

*As Associates (21):* Atkinson, George Arthur (Kingston-upon-Hull); Bryan-Brown, Miss Beatrice Grace (London); Bullen, Henry Walker (London); Clark, Miss Connie Kingston-upon-Hull); Cottrill, Allan (London); Downie, Miss Margaret Nancy (London); Guttery, Miss Beryl Margaret (Cheam); Jeffcoat, Stanley (Buxton); Kemp, Alan Murray (London); Lang, David Ebenezer (Edinburgh); Lewis, Graham Everard (Chichester); Logan, William (Edinburgh); Owen, Roy Edwin (Pett's Wood, Kent); Powell, Peter Nolan (Cardiff); Smith, Frederick Neale (London); Stanley, Eric Weston (Manchester); Urquhart, William John (Edinburgh); Watson, Clarence Lonsdale (Scarborough); Wilkie, Alexander Abercrombie (Dumfries); Wones, Guy Knight (Wolverhampton). *Overseas:* Ferguson, Robert Stirling (Westmount, P.Q., Canada).

*As Licentiate (20):* Ambler, James

(Shrewsbury); Ayers, William Cecil (Bradford); Boyman, Leslie Thomas (London); Bradley, Harry (Nelson, Lancs.); Davidson, Charles Stewart Milne (Paignton); Denning, George Ernest Walter (Devonport); Green, Leonard Henry (West Wickham); Jones, Maxwell (Southport); Kane, John Robert (Bicester); Llewellyn, Benjamin Thomas (Swansea); Macdonald, David (London); Mendus, Howell (Swansea); Neill, John McBride (Belfast); O'Hara, Francis (East Calder, Midlothian); Pratley, Gilbert John (London); Richardson, Ralph Edwin (Newcastle-on-Tyne); Cheppard, Cyril Alfred Frederick (Heston); Stacey, Joseph (London); Thomson, Duncan (Eascote, Ruislip); Thraves, John Herbert (Newport, Mon.)

### Announcements


Mr. Jocelyn R. Douglas, A.I.A.S., Corporate Quantity Surveyor, is now in practice at "Wilgate," Herne Bay Road, Tankerton, near Whitstable, Kent, and would welcome up-to-date catalogues and technical data. He was previously Senior Assistant with London Quantity Surveyors.

Mr. T. Makemson, Director of Iron Castings in the Iron and Steel Control, is being released by the Ministry of Supply and is returning to his post as Secretary of the Institute of British Foundrymen. He will, however, continue to act as Honorary Adviser on Iron Castings to the Ministry.

### Correction

In our issue for July 4, page 6, it was stated that the mural on the ceiling of the Future of Chemistry exhibit at the Chemistry at Your Service exhibition was painted by John Hulton. This is incorrect. The name should read John Hutton.

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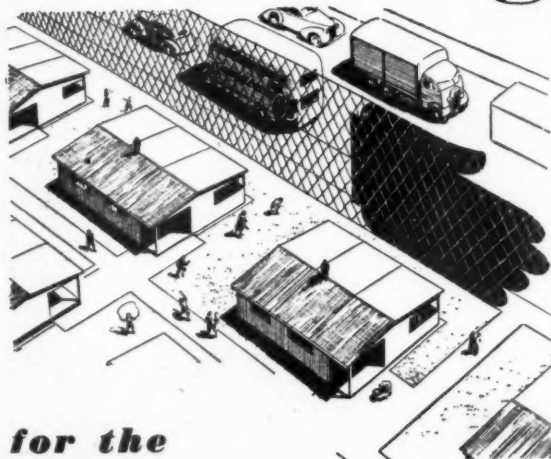
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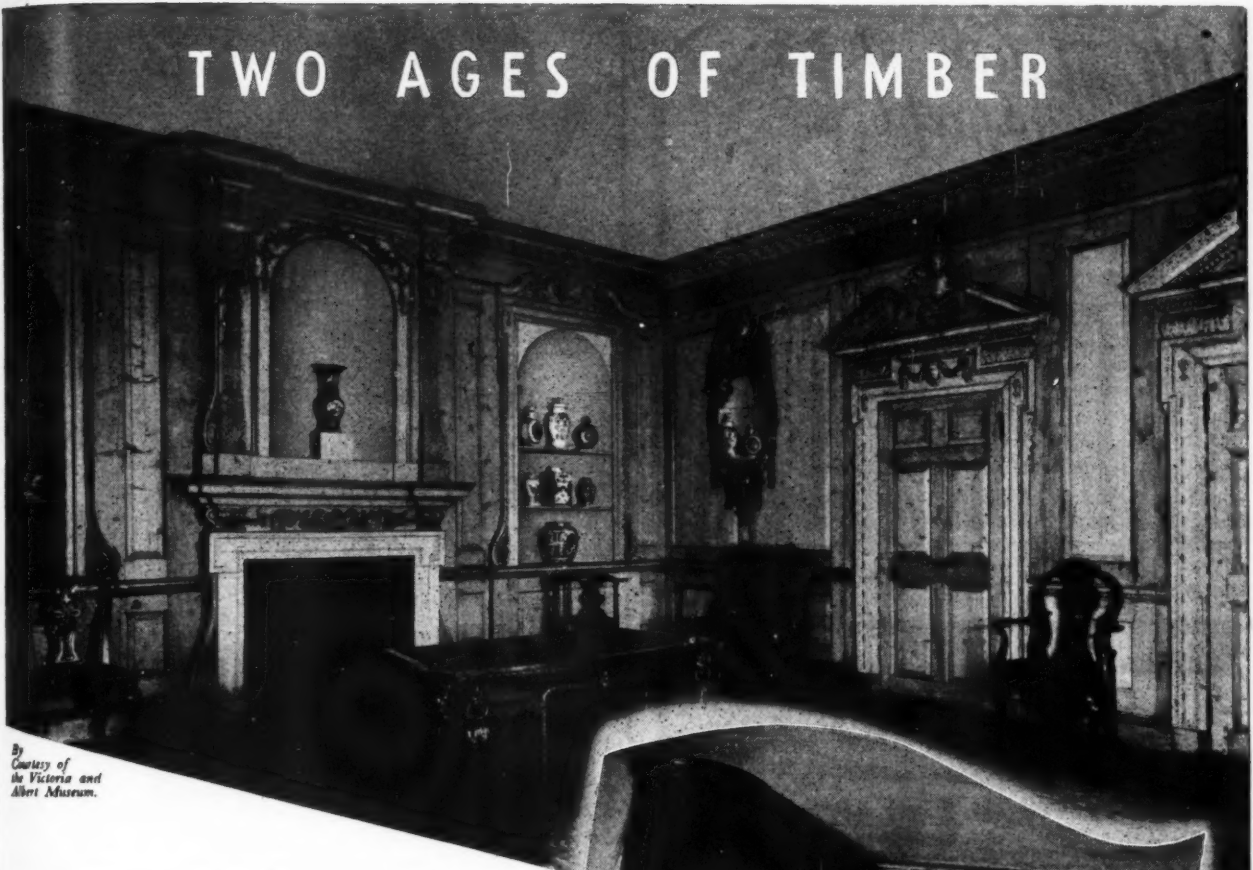


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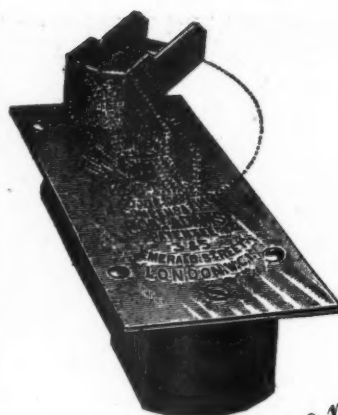
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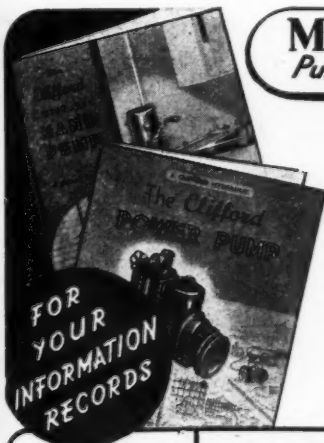
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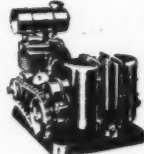
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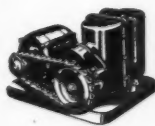
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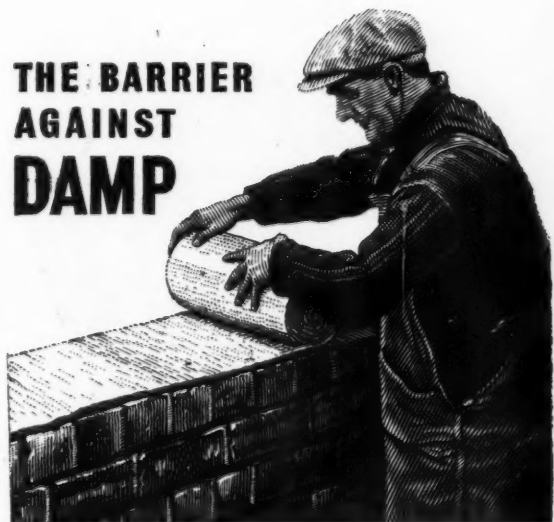


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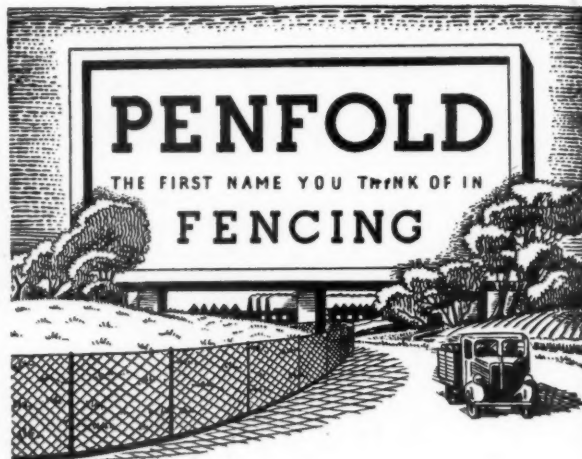
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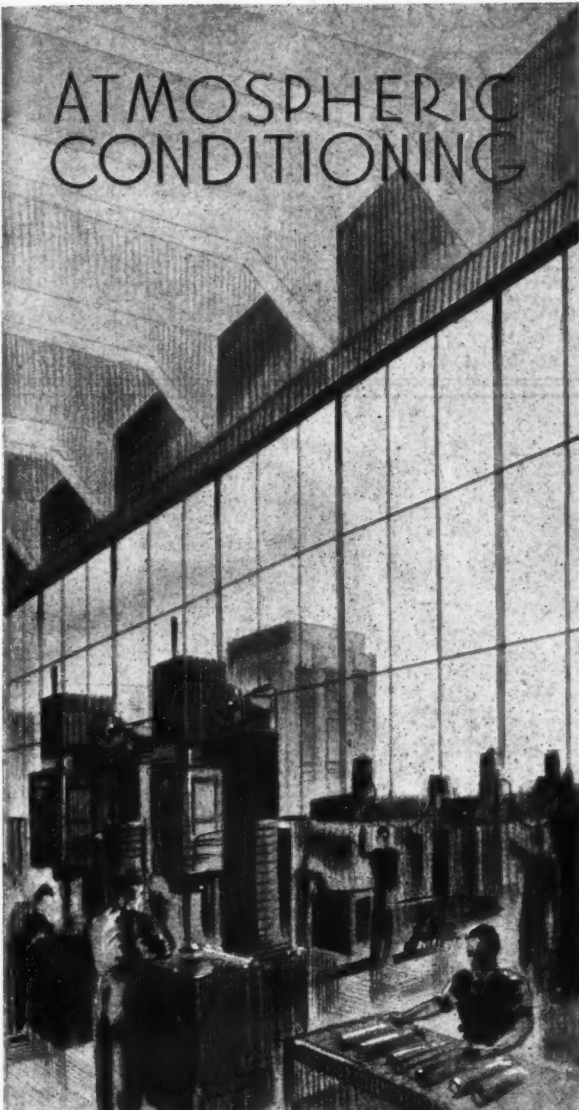
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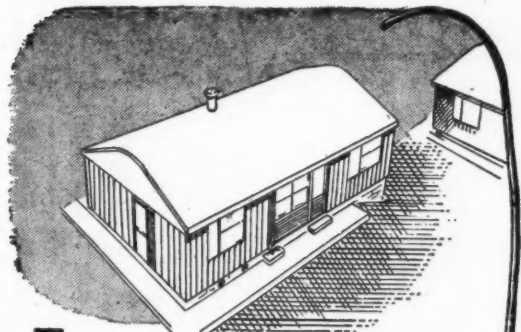
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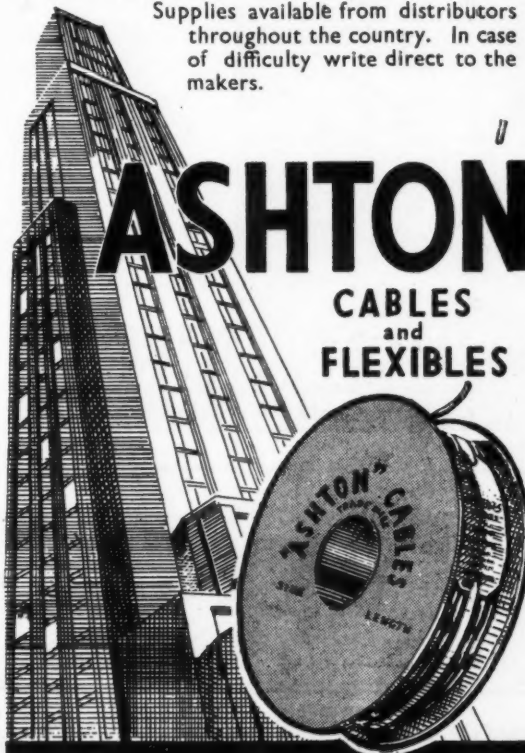
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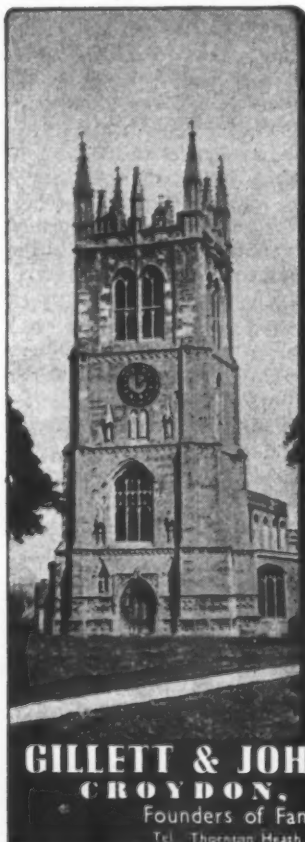
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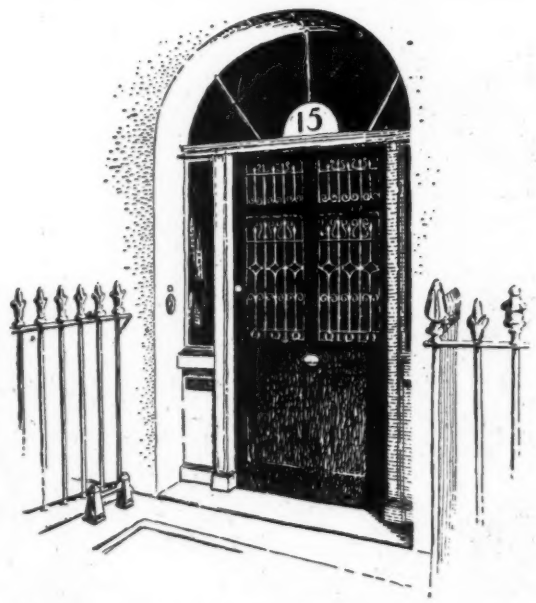
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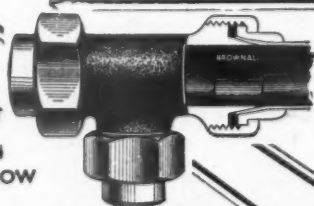
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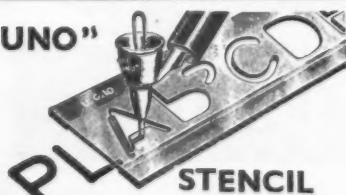
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(c) Working up, etc., in connection with domestic buildings and general working up (junior).

(d) Measurement of roads and sewers and housing work on cottage estates, preparation of interim and final bills on Schedules.

(2) ARCHITECTS, BUILDING SURVEYORS, TECHNICAL ASSISTANTS (ARCHITECTURAL) AND JUNIOR DRAWING OFFICE ASSISTANTS. Required for:—

(a) Work in connection with the design and development of housing schemes for cottage estates and block dwellings (experience in domestic architecture preferred).

(b) Similar work in connection with schools and hospitals.

(c) The preparation of estimates and specifications for works of cleaning and painting, repairs and minor alterations at schools and hospitals.

(d) Assistants to district surveyors. A knowledge of the London Building Acts and by-laws is necessary for these positions.

(e) Junior drawing office assistants for general drawing office work. Should be able to finish plans from rough drawings, take dimensions and make sketches. Pay, according to age and experience, up to 65s. a week, plus cost-of-living addition.

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Ex-Service candidates with experience prior to their war service will be specially considered.

Application forms may be obtained from the Clerk of the Council, County Hall, Westminster Bridge, London, S.E.1, enclosing stamped addressed foolscap envelope.

Canvassing disqualifies. 947

## CITY OF OXFORD.

Applications are invited for the appointment of a Temporary ARCHITECTURAL ASSISTANT, in the Department of the City Estates Surveyor and Architect to the Education Committee; applicants should be Associate Members of the R.I.B.A., and have had experience of School work.

Salary will be from £460 to £510 per annum, according to experience, plus cost-of-living bonus, at present £59 16s. per annum.

Applications, stating age, qualifications and details of experience, and accompanied by copies of two recent testimonials, should be sent to the Architect to the Education Committee, Town Hall, Oxford, not later than the 24th August, 1946. 698

## BOROUGH OF COLNE.

## ENGINEER AND SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, on the permanent staff of the Engineer and Surveyor's Department. The salary will be in accordance with Grade III of the National Joint Council Scale of Salaries (£390 to £435), plus cost-of-living bonus, at present £59 16s. per annum.

Applicants must be qualified architects, experienced in the preparation of specifications and estimates, with particular reference to housing development, and should have had a thorough training in design and building construction, preferably with a local authority. Preference will be given to a person holding a recognized architectural qualification by examination.

The appointment will be determinable by one month's notice in writing on either side, and is subject to the Local Government Superannuation Act, 1937. The successful candidate will be required to pass satisfactorily a medical examination. The candidate appointed will be required to devote the whole of his time to the service of the Council.

Applications, endorsed "Architectural Assistant," stating age, qualifications, present and previous appointments, details of experience, and giving the names of three persons to whom reference can be made as to character and capabilities, must be delivered to the undersigned not later than the 15th August, 1946. Canvassing in any form will disqualify.

L. A. VENABLES.

Town Clerk. 623

Town Hall, Colne, Lancashire.

## CHICHESTER RURAL DISTRICT COUNCIL.

## ENGINEER AND SURVEYOR'S DEPARTMENT.

## TECHNICAL ASSISTANTS.

Applications are invited for the appointment of two Technical Assistants, with salary of £460, rising £15 × £15 × £20 to £510 per annum, plus war bonus, at present £59 16s.

Applicants must have good experience in the design and construction of one or more of the following works:—Housing, sewerage, sewage disposal, estate roads and layouts.

Preference will be given to candidates who possess one of the following qualifications:—

(a) Institution of Civil Engineers

(b) Institution of Municipal and County Engineers.

(c) Royal Institution of Chartered Surveyors.

(d) Royal Institute of British Architects.

(e) Institution of Structural Engineers.

(f) Town Planning Institute.

(g) A University Degree in Engineering or Estate Management.

The appointments will have a probable duration of four years, subject to satisfactory service, and to the Council's Scheme of Conditions of Service and the Local Government Superannuation Act, 1937. The successful candidates will be required to pass a medical examination.

Further particulars may be obtained from the Council's Engineer and Surveyor, East Pallant House, Chichester.

Applications, endorsed "Technical Assistant," giving full particulars of age, qualifications and experience, together with copies of two recent testimonials, must be delivered to the undersigned not later than the 21st August, 1946.

LEONARD BAILEY.

Clerk to the Council.

Pallant House, Chichester.

20th July, 1946. 631

## COUNTY BOROUGH OF SWANSEA.

## APPOINTMENT OF BOROUGH ARCHITECT.

Applications are invited for the post of Borough Architect. The salary is £1,200 per annum, rising by yearly increments of £100 to a maximum of £1,400. A cost-of-living bonus will be payable (the present rate is £59 16s. a year), and a car allowance will also be made.

Applicants must be Registered Architects and Fellows or Associates of the Royal Institute of British Architects, and possess wide and thorough experience in the service of a Local Authority.

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

The appointment may be terminated by three months' notice by either party.

Terms and conditions of the appointment and forms of application may be obtained from the undersigned.

Applications, accompanied by copies of three recent testimonials, must be delivered to the undersigned not later than Saturday, the 31st August, 1946.

Canvassing, directly or indirectly, will disqualify.

T. B. BROWN.

Town Clerk. 637

The Guildhall, Swansea.

18th July, 1946.

## Amended Advertisement.

## BOROUGH OF WHITEHAVEN.

## ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment, in the Borough Surveyor's Department.

Applicants must be Members of the Royal Institute of British Architects, and should have had experience in housing and general building works as carried out by a local authority. Experience in taking off and billing quantities will be an advantage.

The salary will be at the rate of £420 per annum, rising by annual increments of £15 to £465 per annum, plus cost-of-living bonus, of £59 16s. per annum.

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be addressed to the undersigned not later than Monday, the 19th August, 1946.

The Council will be prepared to offer the tenancy of a house to the successful applicant.

A. D. VICKERMAN.

Town Clerk.

Town Hall, Whitehaven.

19th July, 1946. 625

## BOROUGH OF TAUNTON.

## ARCHITECTURAL ASSISTANTS.

Applications are invited for the above appointment. Candidates should possess an up-to-date knowledge of building construction and materials, and be competent and expeditious draughtsmen.

Salary will be £330 × £15 = £375 per annum, plus cost-of-living bonus, at present £59 16s. 3d. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, experience, qualifications, and whether married or single, etc., with copies of testimonials, should be submitted to the undersigned by not later than 15th August, 1946.

MAJOR A. G. JURY, A.R.I.B.A.,

Architect to the Council.

Architect's Dept., 2, Baldwin Road.

Taunton. 665

## METROPOLITAN BOROUGH OF BETHNAL GREEN.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS (TEMPORARY STAFF).

Applications are invited for the appointment of two Architectural Assistants (Temporary Staff), in the Borough Engineer and Surveyor's Department, for work in connection with Post-War Housing.

Candidates must have had wide experience in the preparation of designs, working drawings, specifications, and estimates. Preference will be given to Associate Members of the R.I.B.A. fully conversant with the Principal Building Acts and Regulations.

Salary, in accordance with A.P.T. Division, Grade V of the National Scales of Salaries, £460, rising to £510 per annum (plus London "weighting," at present £20 per annum), plus cost-of-living bonus, at present 23s. per week.

Applications, stating age, qualifications and experience, with copies of three testimonials, endorsed "Architectural Assistant," must reach the Borough Engineer and Surveyor, Town Hall, Bethnal Green, E.2, before noon on Wednesday, the 28th August, 1946.

S. P. FERDINANDO.

Town Clerk. 658

## BOROUGH OF SURBITON.

## BOROUGH SURVEYOR'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above-mentioned permanent appointment, at a salary in accordance with Grade A.P.T./III of the National Scheme of Conditions of Service, namely, £410 per annum, rising by annual increments of £15 to a maximum of £455 per annum, plus bonus, which is at present at the rate of £59 16s. per annum. The salary stated includes the weighting for the London area.

Applicants should be Registered Architects and/or members of the Royal Institute of British Architects, or hold similar qualifications. Experience in housing work of a local authority would be an advantage.

Housing accommodation will be made available for the successful applicant, if necessary, at a rent to be agreed.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Applications, on forms to be obtained from the undersigned, must be delivered not later than the 30th August, 1946.

Canvassing, either directly or indirectly, will disqualify.

R. H. WRIGHT.

Town Clerk. 693

Council Offices, Surbiton.

**HUNTINGDONSHIRE COUNTY COUNCIL.**  
**COUNTY ARCHITECT'S DEPARTMENT.**  
**APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE I).**

Applications are invited for the above-named appointment, on the established staff, at a salary of £330-£375 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

The person appointed will be a contributory employee under the provisions of the Local Government Superannuation Act, 1937, and will be required to pass a medical examination.

The appointment is terminable by one month's notice on either side.

Applications, stating age, qualifications, experience and date on which duties could be commenced if appointed, together with copies of testimonials, should be sent to Mr. T. H. Longstaff, M.Inst.C.E., F.R.I.B.A., County Architect, Walden House, Huntingdon, by not later than Monday, 26th August, 1946.

J. B. KELLY,

*Clerk of the County Council.*

Gazeley House, Huntingdon.

7th August, 1946.

669

**CITY OF BIRMINGHAM EDUCATION COMMITTEE.**

**APPOINTMENT OF ASSISTANT ARCHITECT.**

Applications are invited for the appointment of an Assistant Architect, on the staff of the Chief Education Officer, at a salary scale of £500-£700 per annum, together with a war bonus at present amounting to £56 1s. The Committee may pay a commencing salary higher than the minimum in the light of the candidate's qualifications and experience.

The selected candidate will work under the direction of the Architect to the Education Committee, Mr. W. W. Benslyn, F.R.I.B.A.

Applicants, who should preferably be members of the Royal Institute of British Architects by examination, must be experienced designers, preferably with a knowledge of the planning and design of school buildings. Previous administrative experience is desirable. The appointment will be subject to the provisions of the Local Government Superannuation Act, and the successful candidate will be required to pass a medical examination.

Forms of application, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than the 24th August, 1946.

E. L. RUSSELL,

*Chief Education Officer.*

Education Office, Margaret Street,  
Birmingham, 3.

673

**STAFFORDSHIRE COUNTY COUNCIL.**

**DEPARTMENT OF THE COUNTY SURVEYOR AND COUNTY PLANNING OFFICER.**

Applications are invited for the under-mentioned appointments:—

(1) **TOWN PLANNING ASSISTANT.** Salary A.P.T. Grade III, of National Scale (£390-£435 per annum), plus cost-of-living bonus, £59 16s.

(2) **TOWN PLANNING ASSISTANT.** Salary A.P.T. Grade II, of National Scale (£360-£405 per annum), plus cost-of-living bonus, £59 16s.

(3) **ONE JUNIOR PLANNING ASSISTANT.** Salary A.P.T. Grade I, of National Scale (£330-£375 per annum), plus cost-of-living bonus of £59 16s.

(4) **ONE CLERK.** Salary General Division Grade of National Scale (£160 per annum at 21, rising to £300 at 30 years of age), plus cost-of-living bonus of £59 16s.

(5) **TOWN JUNIOR SURVEYING ASSISTANTS.** Salary Misc. Grade I of National Scale (£265-£300 per annum), plus cost-of-living bonus of £59 16s.

Applicants for (1) and (2) should have had previous experience in a Town and Country Planning Office, and be able to assist in the preparation of planning proposals, including control of interim development.

Applicants for (3) should have had experience in a planning office, and have been engaged on basic surveys, layouts, etc., and be good draughtsmen.

Applicants for (5) should be good surveyors and draughtsmen, and have knowledge of the procedure under the Restriction of Ribbon Development Act, 1933 and 1943.

The above-mentioned appointments will be terminable by one month's notice on either side, and be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to pass a medical examination.

Applications, together with copies of not more than three recent testimonials, must be received by the undersigned not later than Friday, the 23rd August, 1946.

Canvassing, directly or indirectly, will be a disqualification. Applicants must state in their applications whether they are related to any member of the County Council.

T. H. EVANS,

*Clerk of the County Council.*

County Buildings, Stafford.

30th July, 1946.

686

**BOROUGH OF SWINDON.**  
**BOROUGH ARCHITECT'S DEPARTMENT.**  
**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the permanent appointment of Architectural Assistant, in the Borough Architect's Department, at a salary in accordance with Grade IV of the Administrative, Professional and Technical Division of the National Scales (£420 to £465), plus such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 16s.).

Candidates should have experience in Housing and the General Architectural work of a local authority, including experience in the preparation of Bills of Materials, Specifications, and schedules of all classes of public buildings.

Preference will be given to candidates possessing an Architectural qualification and who are Associates of the Royal Institute of British Architects.

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

Forms of application may be obtained from the undersigned, and applications, endorsed "Architectural Assistant," must be delivered to me not later than noon on Saturday, 31st August, 1946.

D. MURRAY JOHN,

*Town Clerk.*

Civic Offices, Swindon.

1st August, 1946.

680

**WHITLEY BAY URBAN DISTRICT COUNCIL.**

**APPOINTMENT OF ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of Temporary Architectural Assistant, in the office of the Surveyor to the Council, at an inclusive salary of £9 9s. per week. It is essential that candidates have experience of housing schemes, and preference will be given to persons holding R.I.B.A. diploma or equivalent qualification.

The appointment is terminable by one month's notice on either side, and subject to satisfactory service is likely to last two years.

Applications, endorsed "Architectural Assistant," stating age and full details of experience, accompanied by copies of three recent testimonials, are to be delivered to the Surveyor, Council Offices, Whitley Bay, Northumberland, not later than noon on the 24th August, 1946.

Canvassing, either directly or indirectly, will disqualify.

ARTHUR S. RUDDOCK,

*Clerk of the Council.*

Council Offices, Whitley Bay.

27th July, 1946.

677

**COUNTY BOROUGH OF GREAT YARMOUTH.**

**APPOINTMENT OF SENIOR TOWN PLANNING ASSISTANT AND TOWN PLANNING ASSISTANT.**

Applications are invited for the appointment of:—

(a) **Senior Town Planning Assistant,** at a salary of £460 per annum, rising to £510 per annum, and

(b) **Town Planning Assistant,** at a salary of £390 per annum, rising to £435 per annum.

Each of the appointments is subject to a cost-of-living bonus, which is at present £59 16s. per annum.

Applicants for the post of Senior Town Planning Assistant should have had experience in the preparation and administration of planning and reconstruction schemes, and they must be Corporate Members of the Town Planning Institute.

Applicants for the position of Town Planning Assistant should have had experience in Municipal Estates duties, especially as connected with planning and reconstruction, and should be Corporate Members of the Royal Institution of Chartered Surveyors.

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

Applications, stating age, qualifications, experience, present and previous appointments, and accompanied by copies of three recent testimonials, must reach the undersigned not later than the 24th August, 1946, endorsed "Senior Town Planning Assistant" or "Town Planning Assistant," as the case may be.

Canvassing, either directly or indirectly, will be a disqualification, and candidates must disclose when making application whether to their knowledge they are related to any member or senior officer of the Council. A candidate who fails to do so will be disqualified, and if appointed will be liable to dismissal without notice.

FARRA CONWAY,

*Town Clerk.*

Town Hall, Great Yarmouth.

31st July, 1946.

695

**WEST SUSSEX COUNTY COUNCIL.**  
**COUNTY ARCHITECT'S DEPARTMENT.**  
**APPOINTMENT OF DEPUTY COUNTY ARCHITECT.**

Applications are invited from Fellow or Associate Members of the Royal Institute of British Architects for the whole-time appointment of Deputy County Architect, at a salary of £750 per annum, rising by annual increments of £50 to £1,000 per annum, plus cost-of-living bonus, at present £59 16s.

The appointment may be made at a commencing salary higher than the minimum of the scale should the qualifications and experience of the successful applicant justify this.

A car will be provided in connection with the duties pertaining to the post, and private mileage will be permitted in accordance with the basic petrol ration and at rates laid down by the County Council.

The appointment will be terminable by three calendar months' notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a medical examination.

Forms of application are not being issued in this instance.

Applications, stating age, qualifications, and experience, and particulars of present and previous appointments, with dates, salaries, and designations, together with the names and addresses of three persons to whom reference can be made, must be delivered to F. R. STEELE, F.R.I.B.A., F.S.I., M.T.P.I., County Architect, County Hall, Chichester, endorsed "Deputy County Architect," not later than Saturday, the 31st August, 1946.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether to their knowledge they are related to any member of the Council or the Head of any Department or his standing Deputy. A candidate who fails to do so will be disqualified, and if appointed, will be liable to dismissal without notice.

T. C. HAYWARD,

*Clerk of the County Council.*

County Hall, Chichester.

25th July, 1946.

671

**NORTH LINCOLNSHIRE JOINT PLANNING COMMITTEE.**

**ASSISTANT PLANNING OFFICER.**

Applications are invited for the appointment of Assistant Planning Officer, at a salary in accordance with the National Scales of Salaries, Grade V, A.P.T. Division (£460 per annum, rising by two annual increments of £15 and one of £20 to £510, plus war bonus, at present £59 16s.).

Applicants should have had experience in the preparation of planning schemes and the control of Interim Development, and preference will be given to persons who are studying for the examinations of the Town Planning Institute. The possession of engineering, surveying, or architectural qualifications will be an advantage.

The office of the North Lincolnshire Joint Planning Committee is in Brigg, and the successful candidate will be required to pass a medical examination and contribute to the Superannuation Scheme under the Local Government Superannuation Act, 1937. The appointment will be terminable by one month's notice on either side.

Applications, stating age, past and present appointments, details of experience and qualifications, together with copies of not more than two recent testimonials, should reach the undersigned not later than Saturday, 31st August, 1946.

L. W. HEELER,

*Clerk to the Joint Committee.*

Municipal Offices, Town Hall Square,  
Grimsby, Lincs.

696

**TARVIN RURAL DISTRICT COUNCIL.**  
**TECHNICAL ASSISTANT.**

Applications are invited for the appointment of (a) General Engineering, or (b) Architectural Assistant, in the Office of the Engineer and Surveyor.

Applicants must have had sound training and had previous experience in design and construction of (a) general engineering works, or (b) building works, particularly in relation to housing. Preference will be given to persons qualified by examination (a) Institute of Municipal and County Engineers, (b) R.I.B.A.

The salary will be in accordance with Grade II (Technical Division) of the National Joint Council Scheme, viz., commencing at £360, plus war bonus, at present £59 16s.

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

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed "Technical Assistant," and must reach this office not later than the 20th August, 1946.

J. H. MOORE DUTTON,

*Clerk to the Council.*

Westminster Buildings, Newgate Street,  
Chester.

26th July, 1946.

672



## WAR OFFICE.

Applications are invited for the post of ARCHITECT in the War Office. The post, which is a temporary one, will be filled by competitive interview of suitable applicants.

Male candidates only will be considered. They should have had a sound general and technical education, preferably a University education, and they should be fully qualified registered architects and at least Associates of the R.I.B.A. or the equivalent. They should have at least five years' experience (including supervision of works) either as a principal in a firm of Architects or in an appointment of similar status in a Government Department or other public body. First hand knowledge of military requirements and experience in tropical or other overseas countries is desirable.

The range of pay is £900 to £1,025 a year, plus a consolidated addition of £105 a year.

A form of application may be obtained from the Under-Secretary of State, War Office (C.4.D.), Montagu House Annexe, Whitehall, S.W.1. Application forms must be returned to him by 17th September, 1946. 678

## LINDSEY (Lincs) COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff:—

(a) SENIOR ASSISTANT ARCHITECT (Grade IV). Salary £240-£465.

(b) MAINTENANCE ASSISTANT (Grade IV). Salary £240-£465.

(c) ENGINEERING ASSISTANT (Grade III). Salary £390-£435.

(d) SENIOR QUANTITY SURVEYOR (Grade V). Salary £460-£510.

Cost-of-living bonus is in addition to the above salaries, and is at present £59 16s. per annum.

Applicants for (a) must be either Associate Members of R.I.B.A. or at least over 30 years of age, and be experienced in the preparation of working drawings and specifications for Local Authorities Buildings.

(b) Must be able to take charge of maintenance for all types of Educational Buildings, and must have a sound knowledge of repair work, to be able to prepare working drawings and estimates for small works, and have a knowledge of Quantities. Applicants must have a professional qualification if under 30 years of age.

(c) Must be experienced in the design and supervision of heating, hot water supply, electrical and general mechanical installations, and the supervision of maintenance and repairs. Applicants should hold a suitable technical qualification.

(d) Should be Professional Associate Members of the Chartered Surveyors' Institute, and experienced in the preparation of Bills of Quantities for Public Buildings, etc.

It is desirable that the successful candidates for (b), (c) and (d) should provide his own car, for which he would receive an allowance for an 8 h.p. car on the Council's scale.

Appointments will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government's Superannuation Act, 1937.

The successful candidates will be required to pass a medical examination.

Applications by letter only, accompanied by not more than three recent testimonials, should be sent to A. R. Clark, Acting County Architect, County Offices, Lincoln, not later than the 15th August, 1946.

ERIC W. SCORER,

Clerk of the County Council.

County Offices, Lincoln. 679

## COVENTRY LOCAL EDUCATION AUTHORITY.

## THE TECHNICAL COLLEGE.

Principal: J. Wilson, B.Sc., B.Com., M.I.Mech.E.

## BUILDING DEPARTMENT.

Required two additional Full-time TEACHERS for the Building Department:—

(a) One qualified to take Builders' Quantities and Building Construction. Experience in Costing and Estimating would be a further recommendation.

(b) One for Carpentry and Joinery and General Building Subjects. Candidates should hold one of the following as a minimum qualification, as well as having the necessary practical experience: Higher National Certificate, L.I.O.B., F.R.I.C.C. Full Technological Certificate of the City and Guilds.

The Teachers may be required to teach in the Junior Technical School (Building) Trade Classes, and up to Higher National Certificate in the part-time day classes.

Salary in accordance with the Burnham Scale (£300-£15-£525). Increments may be given for practical experience.

On receipt of a stamped addressed envelope forms of application may be obtained from the undersigned, and should be returned within fourteen days of the publication of this advertisement.

FRANK H. HARROD,

Director of Education. 674

## CITY OF LINCOLN.

## CITY ENGINEER'S DEPARTMENT.

## APPOINTMENT OF ARCHITECTURAL ASSISTANTS

Applications are invited for the following Permanent Appointments in the City Engineer's Department, for which candidates are advised to obtain further particulars.

(1) ARCHITECTURAL ASSISTANT (Grade IV).

Salary in accordance with Grade IV, £420-£15-£465, of the Scales of the National Joint Council, plus cost-of-living bonus.

(2) ARCHITECTURAL ASSISTANT (Grade III).

Salary in accordance with Grade III, £390-£15-£435, of the Scales of the National Joint Council, plus cost-of-living bonus.

Candidates should be Associate Members of the Royal Institute of British Architects (or hold equivalent qualifications), and have had good experience in general architectural work, including housing, and in the preparation of working drawings and specifications.

Forms of application can be obtained from and should be returned to the City Engineer, Corporation Offices, Silver Street, Lincoln, not later than Saturday, 24th August, 1946, endorsed "Architectural Assistant."

J. H. SMITH,

Town Clerk.

Corporation Offices, Lincoln.

29th July, 1946.

683

## COUNTY OF ESSEX.

## COUNTY ARCHITECT'S DEPARTMENT.

## APPOINTMENT OF ASSISTANT ARCHITECTS.

The Essex County Council invite applications for the appointment of Assistant Architects on the staff of the County Architect, as below:—

(a) Salary scale £460-£510.

(b) Salary scale £420-£465.

In fixing the commencing salary in each case regard will be had to the experience and qualifications of the successful candidate. There will also be paid such (if any) bonus and travelling and subsistence allowances as may be from time to time determined by the Council. The amount of bonus at present payable is 23s. per week.

Candidates should be members, by examination, of the Royal Institute of British Architects, and be experienced in the planning and construction of public buildings.

Applications must be made on a form to be obtained from the County Architect, Mr. H. Connolly, F.R.I.B.A., and returned to him at the address stated below, together with copies of not more than three recent testimonials, not later than 30th August, 1946.

The envelope should be sealed and endorsed "Assistant Architect," (a) or (b) as the case may be.

Canvassing, either directly or indirectly, is forbidden.

JOHN E. LIGHTBURN,

Clerk of the County Council.

County Hall, Chelmsford, Essex.

29th July, 1946.

684

## URBAN DISTRICT OF PORTADOWN.

## APPOINTMENT OF ARCHITECT.

The Portadown Urban District Council require the temporary services (in a full-time capacity) of an Architect for Town Planning and Housing Schemes, to be carried out in collaboration with the Town Surveyor. The Town Planning Scheme will require to be co-ordinated with the Armagh County Scheme.

Provided the Council is satisfied with the services given, the appointment will be for a period of 12 months in the first instance. Salary at the rate of £500 per annum, payable monthly. The appointment will be subject to the approval of the Ministry of Health and Local Government (N.L.), and may be terminated on three months' notice by either side with like approval.

Applicants must be registered Architects, and should hold the final examination Certificate of the Town Planning Institute, and comply with the other provisions specified in the Local Authorities (Architects' Qualifications) Regulations (Northern Ireland), 1946 (S.R. & O. 1946, No. 79). Preference will be given to ex-Service applicants possessing the required qualifications provided that the Council is satisfied that such applicants can or within a reasonable time will be able to fill the vacant post efficiently.

Vouched travelling expenses will be repaid to applicants selected to attend for interview.

Applications, stating qualifications, age, and experience, and accompanied by copies of two recent testimonials, will be received by the undersigned up to 12 noon on Wednesday, 21st August, 1946.

GEORGE MCGOWAN,

Clerk of the Council.

Town Hall, Portadown, N. Ireland.

29th July, 1946.

685

## WORKING URBAN DISTRICT COUNCIL.

## ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments, which are subject (1) to the Scheme of Conditions of Service (Administrative, Professional and Technical Division), approved by the National Joint Council for Local Authorities; (2) to the Local Government Superannuation Act, 1937; (3) the successful candidates passing a medical examination; (4) the determination of the appointments by one month's notice on either side.

(a) ENGINEERING ASSISTANT, with special drainage experience (Grade III, £390-£435).

(b) GENERAL ENGINEERING ASSISTANT (Grade II, £360-£405).

(c) QUANTITY SURVEYOR (Grade IV, £420-£465).

(d) SECOND ARCHITECTURAL ASSISTANT (Grade I, £330-£375).

(e) ASSISTANT BUILDING INSPECTOR (Grade I, £330-£375).

The above salaries are exclusive of cost-of-living bonus, at present £59 16s. per annum. Preference will be given to applicants who have passed a recognized Professional examination.

Forms of application may be obtained from Mr. H. P. Tame, A.M.Inst.C.E., Engineer and Surveyor, Council Offices, Woking, and should be returned to the undersigned, endorsed "Appointment (a), (b), (c), (d), (e)," as the case may be, not later than 30th August, 1946.

F. H. SMITH,

Clerk to the Council.

Council Offices, Woking.

1st August, 1946.

694

## CARMARTHENSHIRE COUNTY COUNCIL.

## COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the Staff of the County Architect's Department:—

(a) TWO ASSISTANT ARCHITECTS. Salary £450 per annum.

(b) ONE ASSISTANT ARCHITECT. Salary £320-£15-£350 per annum, plus in each case the appropriate cost-of-living bonus, at present £59 16s. per annum.

Candidates for appointments (a) must be Registered Architects, preferably A.R.I.B.A., with good general experience in design and construction of public buildings, including schools.

Candidates for appointment (b) should have passed the Intermediate Examination of the R.I.B.A.

The appointments, in the first place, will be temporary, but there will be a possibility of the successful applicants being placed on the permanent superannuable staff after a period of six months' satisfactory service.

The appointments will be subject to one calendar month's notice on either side.

Applications, stating age, qualifications, previous and present appointments, full details of experience and date when available, together with copies of three recent testimonials, should be sent to W. T. Lloyd A.R.I.B.A., County Architect, County Offices, Spilman Street, Carmarthen, not later than the 24th August, 1946.

DANIEL JOHNS,

Clerk of the County Council

County Offices, Carmarthen.

697

## Architectural Appointments Vacant

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

Wherever possible prospective employers are urged to give in their advertisements 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.

**JUNIOR ASSISTANT (19-21 years)** for private practice; housing and industrial surveys, working drawings and specifications. Clark, 44, Gt. Russell Street, W.C.1. Museum 0500. 587

**LADY SHORTHAND TYPIST (Junior)** required for busy Architectural practice. Clark, 44, Gt. Russell Street, W.C.1. MUS. 0500.

**ARCHITECT/SURVEYOR** (preferably Associate of the R.I.B.A.) required by East Coast Brewery; must have wide experience of licensed premises, design, alterations, maintenance, and ability to control building department; permanent position for suitable man. Write, giving age, experience, salary required, and when available, Box 591.



**ARCHITECT**, Suffolk Coast, requires two Assistants; £250-£400 p.a., according to training and experience. All particulars to Box 596.

**JUNIOR ASSISTANT** required in busy Country Architect's Office; good draughtsman, knowledge of surveying and levelling; preferably able to drive a car. Full particulars of training and salary required to Parkinson & Doe, L./A.R.I.B.A., Montagu House, Huntingdon. 598

**STRUCTURAL ENGINEER DESIGNER/ DRAUGHTSMEN** required for steelwork and for reinforced concrete structures. Applicants please state qualifications, experience, and salary required, to The Secretary, Ministry of Works, 122, George Street, Edinburgh. 608

**JUNIOR ARCHITECTURAL ASSISTANT** wanted for varied practice; country houses, agricultural buildings and cottages, church work, schools, rural housing, private housing schemes; Intermediate R.I.B.A. standard; neat and accurate draughtsman; able to take levels and make site surveys; commencing salary £250 to £300; accommodation for single man will be found. Apply, with full particulars, to Maurice Jones & Graham, L./A.R.I.B.A., 15, The Tything, Worcester. 624

**EXPERIENCED Architectural Draughtsman** required; must have thorough knowledge of building construction, and be capable of preparing detailed working drawings and specifications from sketch designs for large commercial and industrial buildings; knowledge of estimating and preparing of bills of quantities an advantage; write, stating age, qualifications, and full details of experience; salary according to experience. Box 634.

**ARCHITECTURAL ASSISTANTS** required (male or female). Write, stating age, experience, salary required, Francis Naylor & Partners, Chartered Architects, Martins Bank Building, Warrington. 643

**EXPERIENCED ARCHITECTURAL ASSISTANTS** required immediately; must be first-class draughtsmen, well trained and qualified. Apply, stating age, experience, and salary required, to Herbert J. Rowse, F.R.I.B.A., Martins Bank Building, Liverpool, 2. 659

**ASSISTANT** required; must have passed Inter. R.I.B.A., and preparing for Final; housing, hospitals; salary £250-£350, according to qualifications and experience. G. H. N. Inman, F.R.I.B.A., The Charterhouse, Charterhouse Square, E.C.1. Tel.: Clerkenwell 4414. 661

**ARCHITECTURAL ASSISTANT** wanted, in London office of Staff Architect to large industrial company; well trained, good draughtsman, able to handle large and small jobs from sketch plans to finish; salary £400 to £500, according to qualifications. Apply Box 670.

**CAPABLE ASSISTANTS** for preparation of working drawings and specifications required in small but progressive London office. Box 676.

**ARCHITECTURAL and Surveying Assistant**, with good general knowledge, required immediately. Reply, stating age, experience, when available, and salary required, to J. M. Porter & Co., The Estate Office, Colwyn Bay. 681

**QUALIFIED** or experienced Architectural Assistants are invited to apply for vacancies in the Architects' Department of a multiple company in West Midlands; applicants are requested to give full details of experience, age, and salary required, to Box 685.

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# Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Abbey Building Supplies Co. ....	lxix	Franki Compressed Pile Co., Ltd. ....	xxiv	Penfold Fencing, Ltd. ....	lv
Accrington Brick Co., Ltd. ....	lxix	Frazer, Ltd. ....	xxxvi	Pilkington Bros., Ltd. ....	lv
Adams, Robert (Victor), Ltd. ....	lv	Fullwood, R. J., & Bland, Ltd. ....	lii	Plysi Formwork, Ltd. ....	lv
Aerialite, Ltd. ....	lv	General Electric Co., Ltd. ....	lv	Potterton, Thomas (Heating Engineers), Ltd. ....	lv
Aero Pipe & Glass Co., Ltd. ....	xxxix	Gillett & Johnston, Ltd. ....	lx	Pressed Steel Co., Ltd. ....	xxxvi
Allied Paints & Chemicals, Ltd. ....	lv	Gray, J. W. & Sons, Ltd. ....	lx	Prodorite, Ltd. ....	lv
Aluminium Development Assoc. ....	lv	Greenwood's & Airvac Ventilating Co., Ltd. ....	lv	Pyrotenax, Ltd. ....	xxxvi
Aluminium Union, Ltd. ....	lv	Haden, G. N., & Sons, Ltd. ....	lv	Rinalah, Ltd. ....	lx
Anderson, C. F., & Sons, Ltd. ....	lv	Hall, J. & E., Ltd. ....	lv	Restall, Fredk., Ltd. ....	lv
Ardor Insulation Co., Ltd. ....	lv	Harvey, G. A., & Co. (London), Ltd. ....	lxii	Ronuk, Ltd., & Co., Ltd. ....	xxxii
Arens Controls, Ltd. ....	xxi	Haskins, Ltd. ....	lv	Rubery, Owen & Co., Ltd. ....	lxii
Ascot Gas Water Heaters, Ltd. ....	xxxviii	Head, Wrightson & Co., Ltd. ....	lv	Ruberoil Co., Ltd. ....	lv
Ashwell & Nesbitt, Ltd. ....	xxxviii	Helliwell & Co., Ltd. ....	lx	Rushton, J. V. (Birmingham), Ltd. ....	lv
Automatic Telephone & Electrical Co., Ltd. ....	xxxviii	Higgs & Hill, Ltd. ....	lx	Sadd, John & Sons, Ltd. ....	xi
Belling & Co., Ltd. ....	xxxv	Hobdell Engineering Co., Ltd. ....	lx	Sankey, J. H., & Son, Ltd. ....	lv
Bigwood, Jos., & Son, Ltd. ....	v	Holden & Brooke, Ltd. ....	lx	Sankey-Sheldon, Ltd. ....	lv
Birmetals, Ltd. ....	lx	Holloway, W. F., & Brother, Ltd. ....	xxxvii	Saunders & Taylor, Ltd. ....	lv
Boulton & Pat., Ltd. ....	lx	Hope, Henry, & Sons, Ltd. ....	lx	Scaffolding (Gt. Britain), Ltd. ....	lx
Braithwaite & Co., Engineers, Ltd. ....	lxiv	Horseley Bridge & Thomas Piggott, Ltd. ....	lx	Service Electric Co., Ltd. ....	lx
Bratt, Colbran, Ltd. ....	lxiii	Ideal Boilers & Radiators, Ltd. ....	xxxix	Sharmar & Sons ....	lx
Briggs, William, & Sons, Ltd. ....	xxxiii	Imperial Chemical Industries, Ltd. ....	lx	Sharp Bros. & Knight, Ltd. ....	lx
British Electrical Development Assoc. ....	lx	International Correspondence Schools ...	lxviii	Smith, Henry (Constructional Engineers), Ltd. ....	xxxiv
British Ironfounders' Assoc. ....	lx	Isteg Steel Products, Ltd. ....	lxviii	Smith, Stanley, & Co. ....	lx
British Steelwork Assoc., The ....	lx	Jenkins, Robert, & Co., Ltd. ....	xxxii	Spon Bookshop, The ....	lv
Britmas Electrical Co., Ltd. ....	lx	Ketton Portland Cement Co., Ltd. ....	lxiii	Staines Kitchen Equipment, Ltd. ....	lv
Bromsgrove Guild, Ltd. ....	lx	Key Engineering Co., Ltd. ....	lxiii	Sterling Textile Industries, Ltd. ....	lv
Brown, Donald (Brownall), Ltd. ....	lxvii	Kieft, Cyril, & Co., Ltd. ....	xxxiv	Sundeala Board Co., Ltd. ....	lxv
Cargo Fleet Iron Co., Ltd. ....	xxix	King, Geo. W., Ltd. ....	lxiv	Sutcliffe Speakman & Co., Ltd. ....	xxii
Carrier Engineering Co., Ltd. ....	lx	King, J. A., & Co., Ltd. ....	lxv	Tarmac, Ltd. ....	lv
Cement Marketing Co., Ltd. ....	lx	Laing, John, & Son, Ltd. ....	lxv	Taylor Woodrow Construction, Ltd. ....	lv
Cheecol Processes, Ltd. ....	lx	Lead Industries Development Council ...	lxv	Telephone Rentals, Ltd. ....	lv
Clarke & Vigilant Sprinklers, Ltd. ....	lx	Linden Doors, Ltd. ....	lxv	Thompson Beacon Windows, Ltd., John Thornborough & Son (Manchester), Ltd. ....	lx
Clifford Aero & Auto., Ltd. ....	lx	Limmer & Trinidad Lake Asphalt Co. ....	lxv	Thorp, John B. ....	lx
Colt Ventilation, Ltd. ....	lx	Lloyd Boards, Ltd. ....	lxv	Trussed Concrete Steel Co., Ltd. ....	lxv
Copperad, Ltd. ....	lx	London Brick Co., Ltd. ....	lxv	Tudor Accumulator Co., Ltd., The ....	lxv
Copper Development Assoc. ....	lx	Lunn, Sir Henry, Ltd. ....	lxv	Turners' Asbestos Cement Co., Ltd. ....	lxv
Corner, G., & Co., Ltd. ....	lx	Main, R. & A., Ltd. ....	lxv	Twistee Reinforcement, Ltd. ....	lxv
Crittall Manufacturing Co., Ltd. ....	lx	Mallinson, William, & Sons, Ltd. ....	lxv	Uni-Secc Structures, Ltd. ....	lxv
Cutting, R. C. & Co., Ltd. ....	lx	McCarthy, M., & Sons, Ltd. ....	lxv	Universal Asbestos Co., Ltd. ....	lxv
Davidson, C., & Sons, Ltd. ....	lx	McKechnie Bros., Ltd. ....	lxv	United Steel Companies, Ltd., The ....	lxv
Diespeker & Co., Ltd. ....	lx	Merchant Trading Co., Ltd., The ....	lxv	Val de Travers Paving Asphalt Co., Ltd. ....	lxv
Dunlop Rubber Co., Ltd. ....	lx	Metropolitan-Vickers Electrical Co., Ltd. ....	lxv	Van Dorn Electric Tools ....	lxv
Durafencing, Ltd. ....	lx	Mills, Scaffold Co., Ltd. ....	lxv	Vent Axia, Ltd. ....	lxv
Durham Timber Co., Ltd. ....	lx	Ministry of Labour & National Service ...	lxv	Versil, Ltd. ....	lxv
Electrolux, Ltd. ....	lx	M.K. Electric, Ltd. ....	lxv	Walsall Conduits, Ltd. ....	lxv
Ellison, George, Ltd. ....	lx	Morris, Herbert, Ltd. ....	lxv	Wardle Engineering Co., Ltd. ....	lxv
English Joinery Manufacturers Assoc. ....	lx	Morris, M. A., Ltd. ....	lxv	Wareite, Ltd. ....	lxv
En-Tout-Cas, The, Co., Ltd. ....	lx	Mumford, Bailey & Preston, Ltd. ....	lxv	West, A., & Partners, Ltd. ....	lxv
Esavian, Ltd. ....	lx	Newman, Wm., & Sons, Ltd. ....	lxv	Wilkinson Rubber Linetex, Ltd. ....	lxv
Ewart & Son, Ltd. ....	lx	North British Rubber Co., Ltd. ....	lxv	Wimpey, George, & Co., Ltd. ....	lxv
Excel Asphalt Co., Ltd. ....	lx	Odoni, Alfred A., & Co., Ltd. ....	lxv	Zinc Alloy Rust Proofing Co., Ltd. ....	lxv
Federation of Coated Macadam Industries ....	lxv	Oliver, Wm., & Sons, Ltd. ....	lxv	Zinc Development Assoc. ....	lxv
Flexo Plywood Industries, Ltd. ....	lxv	Patchett & Co., Ltd. ....	lxv		
Floor Renovations, Ltd. ....	lxv				
Freeman, Joseph, Sons & Co., Ltd. ....	lxv				

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PAGE  
liv

xxxvi  
xxxvi  
ix

i  
xxxvii  
xiii

xi

lv

lxi  
lxi

xxxiv  
lxi

liv

xxii

lxi

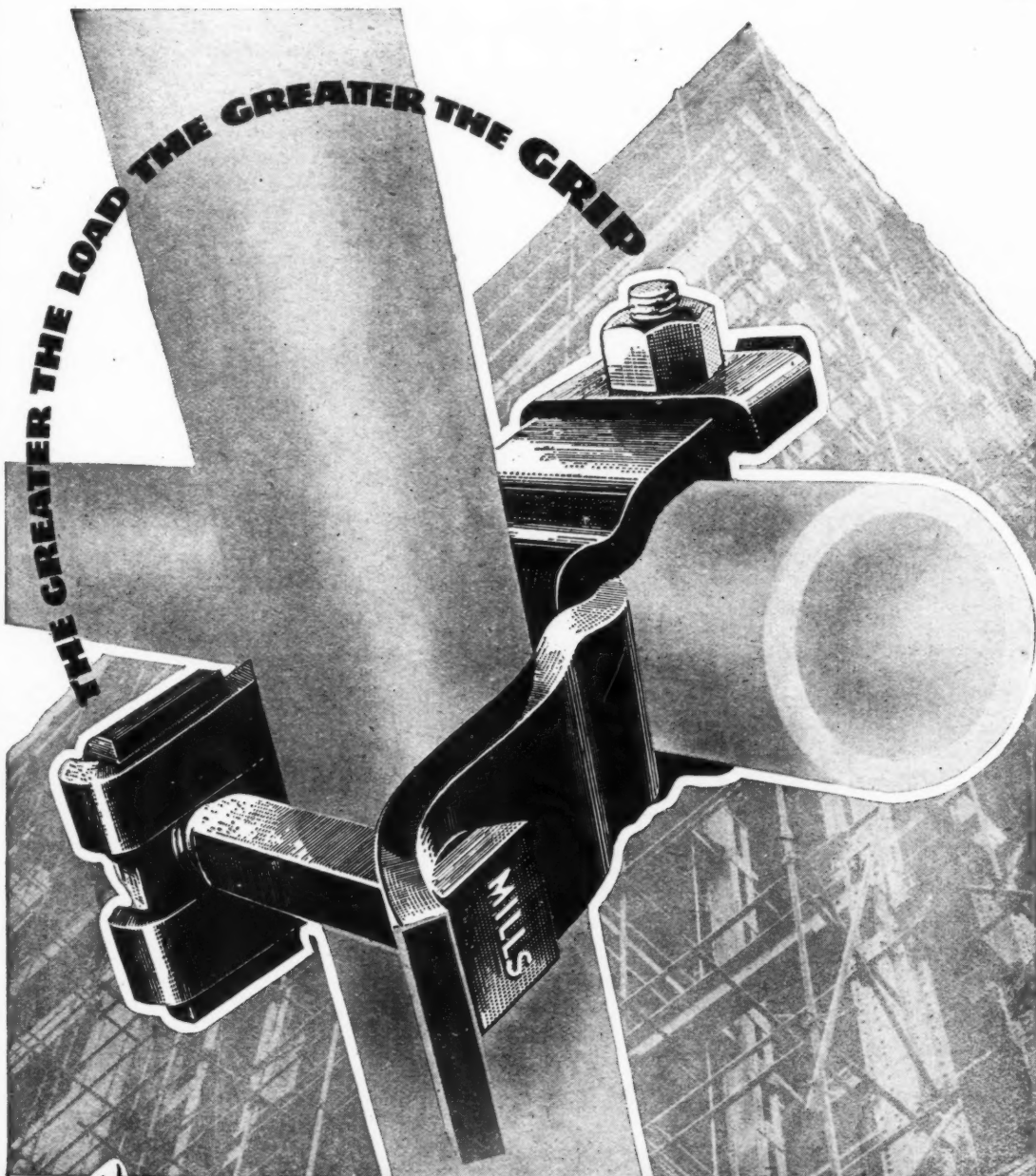
xix

iii

iii  
xxv  
lvi  
xi

xlvi





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