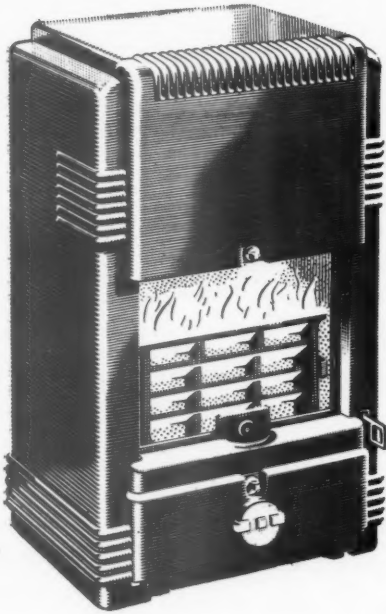


NEW-FASHIONED CENTRAL HEAT

EXAMPLE THE OTTO CENTRAL HEATING STOVE



SPECIFICATION:

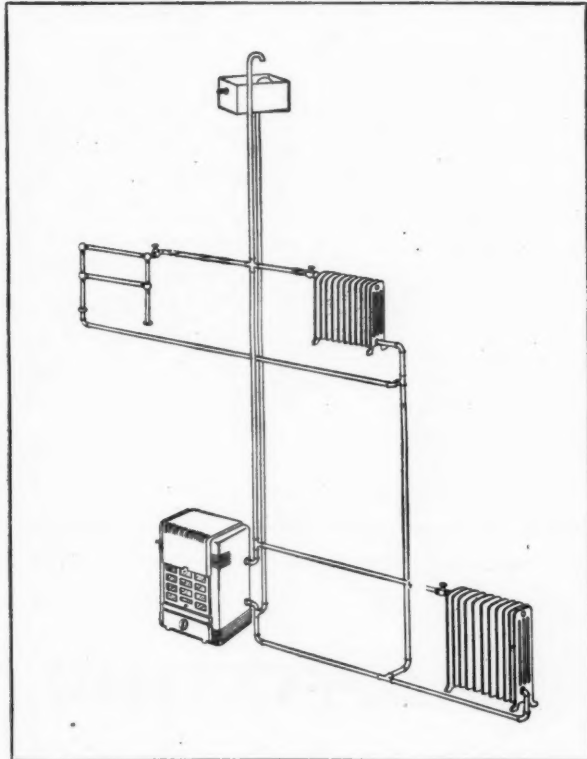
The central heating boiler is supplied with No. 2 Otto Stove which, with normal firing, heats an area of 3,600 cubic feet — the equivalent of a room 20' x 18' x 10'. If the central heating boiler is fitted to the Otto Stove, the heating area is reduced, and stoking must be increased. The boiler provides heating sufficient to 40/60 sq. ft. radiating surface, dependent on room temperature required, construction of room, windows, doors, etc.

Two radiators and one towel rail can be operated from this boiler unit. If one radiator and/or the towel rail is eliminated, there is better heating and less stoking.

SIZE: $\frac{1}{2}$ " B.S.P. 14 thread per inch.

FLOW: Height 20 $\frac{1}{2}$ " from ground.

RETURN: 8 $\frac{1}{2}$ " from ground.



MATERIALS AND CONSTRUCTION: Boilers can be either right or left hand, and in wrought iron or copper, in order to suit local water conditions.

FUEL: While the Otto will burn any kind of solid fuel, some types such as anthracite doubles and the patent smokeless fuels are recommended for all-night burning when radiator heating is operated. Good quality hard kitchen nuts with broken coke can also be used during daylight hours.

ONE OF THE MANY CONTRIBUTIONS TO THE POST-WAR HOME THAT WILL BE MADE BY

ALLIED IRONFOUNDERS LIMITED



Proprietors of: AGA HEAT LIMITED; ALLIED IRON (R.W.) LTD. BRITISH BATH CO. LTD.; THE BURTON FOUNDRY CO. LTD. CALLENDER ABBOTS FOUNDRY COS. LTD.; THE JAMES CLAY (WELLINGTON) LTD.; THE COALBROOKDALE CO. LTD.; M. COCKBURN & CO. LTD.; E. W. CROSTHWAITE LTD.; DOBBIE, FORBES & CO. LTD.; EXCELSIOR FOUNDRY CO.; THE FALKIRK IRON CO. LTD.; THE FORTH & CLYDE & SUNNYSIDE IRON COS. LTD.; GENERAL GAS APPLIANCES LTD.; F. HELM LTD.; P. E. HOOLE & CO. LTD.; McDOWALL STEVEN & CO. LTD.; PLANET FOUNDRY CO. LTD.; SINCLAIR IRON CO. LTD.; THE WELWYN FOUNDRY CO. LTD.

KETLEY • WELLINGTON • SHROPSHIRE

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accrington Brick & Tile Co.	—	Gaze, W. H., & Sons, Ltd.	xxiv	Newman, Wm., & Sons, Ltd.	ii
Aero Pipe & Glass Co., Ltd.	xxv	General Cable Manufg. Co., Ltd.	—	Newsom, H., Sons & Co., Ltd.	xxi, xxxviii
Aga Heat Ltd.	—	Gillett & Johnston, Ltd.	xxxiv	Northampton Building Society	xxxvii
Allied Ironfounders, Ltd.	iii	Gray, J. W., & Son, Ltd.	xxxvi	North Wales Slate Quarries Assoc.	—
Allied Paints & Chemicals, Ltd.	—	Greenwoods & Airvac Ventilating Co., Ltd.	xxxix	Paragon Glazing Co., Ltd.	xxxv
Anderson, C. F., & Son, Ltd.	—	Hall, J. & E., Ltd.	xvii	Parsons, C. H., Ltd.	xvi
Arens Controls Ltd.	xxii	Harvey, G. A., & Co. (London) Ltd.	—	P.I.M. Board Co., Ltd.	—
Ashley Accessories	—	Haywards, Ltd.	xxxvii	Poles, Ltd.	xxxiv
Austins, of East Ham, Ltd.	viii	Helliwell & Co., Ltd.	—	Pollard, E., & Co., Ltd.	iv
Bailey, Sir W. H., & Co., Ltd.	—	Henleys Telegraph Works Co., Ltd.	xxix	Powell Duffryn, Ltd.	vi
Benham & Sons, Ltd.	—	Higgs & Hill, Ltd.	xv	Pyrene Co., Ltd., The	xii, xx
Benjamin Electric Ltd.	—	High Duty Alloys, Ltd.	xi	Radiation Ltd.	—
Birmetals, Ltd.	ix	Horseley Bridge & Thomas Piggott Ltd.	—	Roberts, J. W., Ltd.	xxxiii
Blackburn, Thomas, & Sons, Ltd.	—	Horton Manufacturing Co., Ltd.	—	Ross, S. Grahame, Ltd.	v
Booth, John & Sons (Bolton), Ltd.	—	Hunting Aerosurveys, Ltd.	—	Ruberoide Co., Ltd.	xiii
Boulton & Paul, Ltd.	xxxvi	Ilford, Ltd.	xiv	Rubery, Owen, & Co., Ltd.	xxx
Braithwaite & Co., Engineers, Ltd.	xxxviii	Imperial Chemical Industries, Ltd.	—	Rustproof Metal Window Co., Ltd.	xiv
Bratt Colbran, Ltd.	xxvi	International Correspondence Schools Ltd.	xxxviii	Sankey, J. H. & Son, Ltd.	—
British Commercial Gas Assoc.	—	Isteg Steel Products, Ltd.	vii	Scaffolding (Gt. Britain), Ltd.	—
British Trane Co., Ltd.	—	Kerner-Greenwood & Co., Ltd.	—	Sharman, R. W.	xxxviii
Broad & Co., Ltd.	—	Laing, John, & Son, Ltd.	—	Sharp Bros. & Knight, Ltd.	—
Brown, Donald (Brownall), Ltd.	xxxviii	Langton, Wilfrid, Ltd.	xxxix	Silicate Paint Co., Ltd.	—
Brush Electrical Engineering Co., Ltd.	—	Lead Industries Development Council	xxxv	Spiral Tube & Components Co., Ltd.	—
Burn Bros. (London), Ltd.	—	Lillington, George, & Co., Ltd.	—	Spooner's, of Hull	xxxix
Caston & Co., Ltd.	—	Lloyd Boards, Ltd.	xxxv	Standard Range & Foundry Co., Ltd.	—
Celotex Limited	—	Loft Ladders, Ltd.	—	Steel & Gunton, Ltd.	—
Chloride Electrical Storage Co., Ltd.	—	McCall & Company (Sheffield), Ltd.	xxxiv	Steel Scaffolding Co., Ltd.	xix
Clarke & Vigilant Sprinklers Ltd.	—	McCarthy, M., & Sons, Ltd.	xxxviii	Stephens, Henry, C., Ltd.	xxxix
Clarke, T., & Co., Ltd.	—	Magnet Joinery Co., Ltd.	—	Stott, James, & Co. (Engineers), Ltd.	xxxi
Crittall Manufacturing Co., Ltd.	—	Matthews & Yates, Ltd.	—	Tarslag, Ltd.	x
Davidson, C. & Son, Ltd.	—	Mavitta Drafting Machines, Ltd.	xxxiii	Thompson Beacon Windows, Ltd., John	xxxviii
Docker Bros.	xxxiii	Merron, Ltd.	x	Trussed Concrete Steel Co., Ltd.	xxiii
Eagle Pencil Co.	xxxvi	Metropolitan-Vickers Electrical Co., Ltd.	xxxviii	Twistell Reinforcement, Ltd.	—
Electric Lamp Manufg. Co., Ltd.	—	Mills Scaffold Co., Ltd.	xi	United Ebonite & Lorival, Ltd.	xxxiv
Electrolux, Ltd.	—	M.K. Electric, Ltd.	xxii	Universal Asbestos Manufacturing Co., Ltd.	—
Ellison, George, Ltd.	xxxvi	Modern Telephone Co., Ltd.	xxxvii	Walker, Crosswell & Co., Ltd.	—
English Joinery Manufacturers Assoc.	xviii	Newalls Insulation Co., Ltd.	vi	Wardle Engineering Co., Ltd.	xxxix
Etchells, Congdon & Muir, Ltd.	—			Waxed-Papers, Ltd.	xxxviii
Franki Compressed Pile Co., Ltd.	—				
Froy, W. N., & Sons, Ltd.	—				

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

SHOPFITTING Whether it be a tiny shop or large store, our experience and organisation are equal to its equipment. Further, we have records and details of the requirements of storage and display for every department and line of business, however diverse and unusual. There can be hardly a trade for which we have not built fronts and show-cases from the designs of eminent architects, coupled with the requirements of knowledgeable tradesmen; consequently we have a great wealth of records and experience of what is required, all of which are freely at the service of the architectural profession.

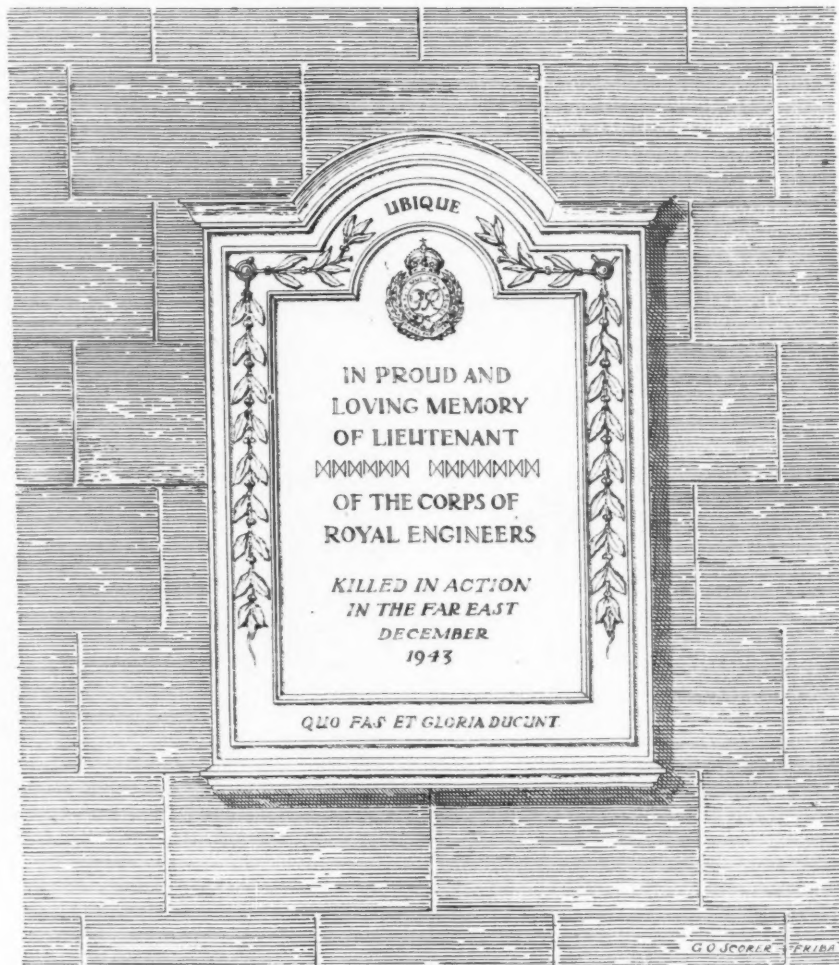
POLLARDS
for POLLARD & CO. LTD.
COMPLETE SHOPFITTING SERVICE

Head Office : 159-173, ST. JOHN STREET, LONDON, E.C.1 Tel. Clerkenwell 6701 (12 lines)

West End Showrooms : 299, OXFORD STREET, LONDON, W.1

THE SHAPE OF THINGS TO COME

AND THE SPIRIT AND TRADITION OF THE PAST.



DESIGN FOR MEMORIAL TABLET

FROM THE STUDIOS OF

**S. GRAHAME
ROSS Ltd.**

ARCHITECTURAL CRAFTSMEN & ENGINEERS.

BATH ROAD, SLOUGH.

TELEPHONE: BURNHAM 686.

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

TELEPHONE: WELBECK 8464.

SPECIALISTS IN FINE ARCHITECTURAL METALWORK.
GATES, RAILINGS, GRILLES, RAINWATER HEADS, ETC.
REPRODUCTIONS FAITHFULLY CARRIED OUT. ~

THE CLOSEST ATTENTION IS GIVEN TO ENQUIRIES
FOR WAR MEMORIALS. DRAWINGS PREPARED
AND ESTIMATES SUBMITTED. APPLICATIONS
MADE FOR THE GRANTING OF FACILITIES AS
AND WHEN NECESSARY. ~

ARCHITECTS' DESIGNS CAREFULLY EXECUTED.

PAGE
ii
xxxviii
xxxvii
xxxv
xvi
xxxiv
iv
vi
xii, xx
xxxiii
v
xiii
xxx
xiv
xxxviii
xxxix
xix
xxxix
xxxi
x
xxviii
xxiii
xxxiv
xxxix
xxxviii



Preservation of what little timber is available has now become vital



PRESOTIM

THE FINEST DECORATIVE WOOD PRESERVATIVE

PRESOTIM enhances the natural beauty of the wood and protects it against dry rot and all forms of insect attack.



Available in ample quantities and in a variety of colours

Full details from the Manufacturers:—

POWELL DUFFRYN LIMITED

By-Products Department,
113A, BUTE STREET, CARDIFF.
Telephone : Cardiff 8750

49,416A

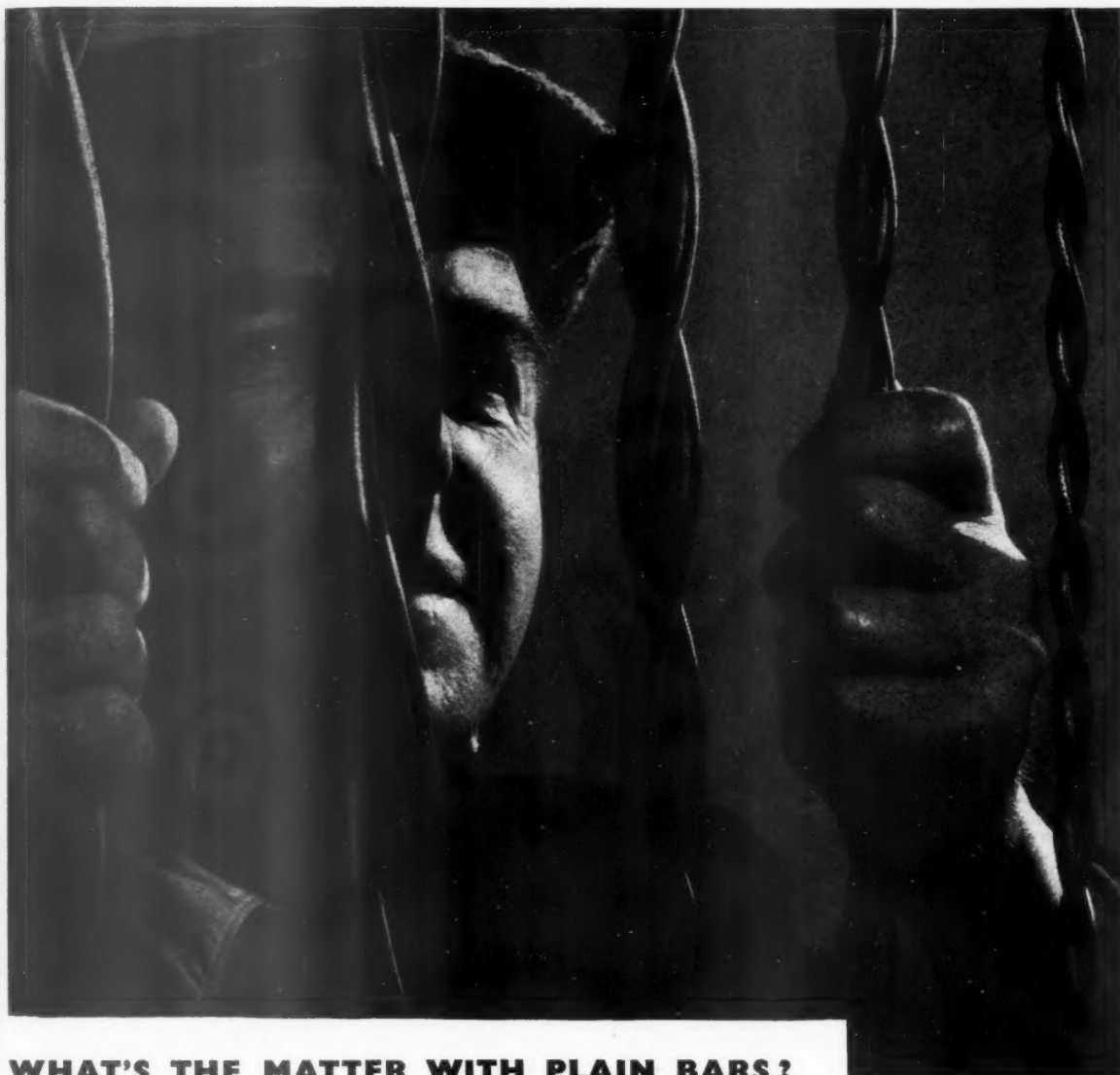


Quiet...

Ensure quiet in the buildings
you design by specifying

NEW WALLS *asbestos* *acoustic* MATERIALS

NEW WALLS INSULATION CO., LTD.
WASHINGTON STATION, CO. DURHAM



WHAT'S THE MATTER WITH PLAIN BARS?

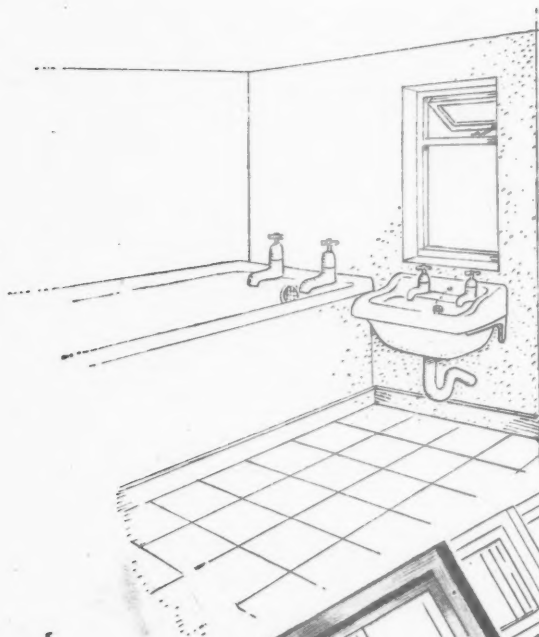
Once in a while we come across somebody who says to us, "What's the matter with plain bars?" Well, we've got nothing at all against plain bars except to suggest that they're used in a different way. What we do is to take two plain bars, twist them together by the "Isteg" process and produce an "Isteg" bar with a permissible working stress greatly in excess of that permitted for plain bars of similar length and weight. It just happens that this not only saves steel and time and money but provides a form of reinforcement which is keyed to the concrete throughout its entire length and doesn't call for the use of hooks or over-lengths. It seems to us that the matter with plain bars is that they don't get together often enough.

Isteg reinforcement is made by twisting together—cold—two ordinary round mild-steel bars between longitudinally fixed heads. This cold working process—which is exclusive to Isteg—raises the yield point and provides the maximum increase of strength without loss of ductility.

ISTEG STEEL

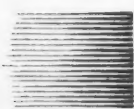
REINFORCEMENT

ISTEG STEEL PRODUCTS LTD · 66 CANNON STREET · LONDON · EC4

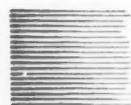


Single light windows for bathrooms, lavatories and larders are obtainable from the EJMA range of Standard Wood Casements in a number of combinations of fixed light or opening sash, with or without vent.

Wooden windows made quickly, made well and attractive to look at, that is the EJMA range. And that is why they have been adopted by Austins to be made by their method.



AUSTINS
OF EAST HAM

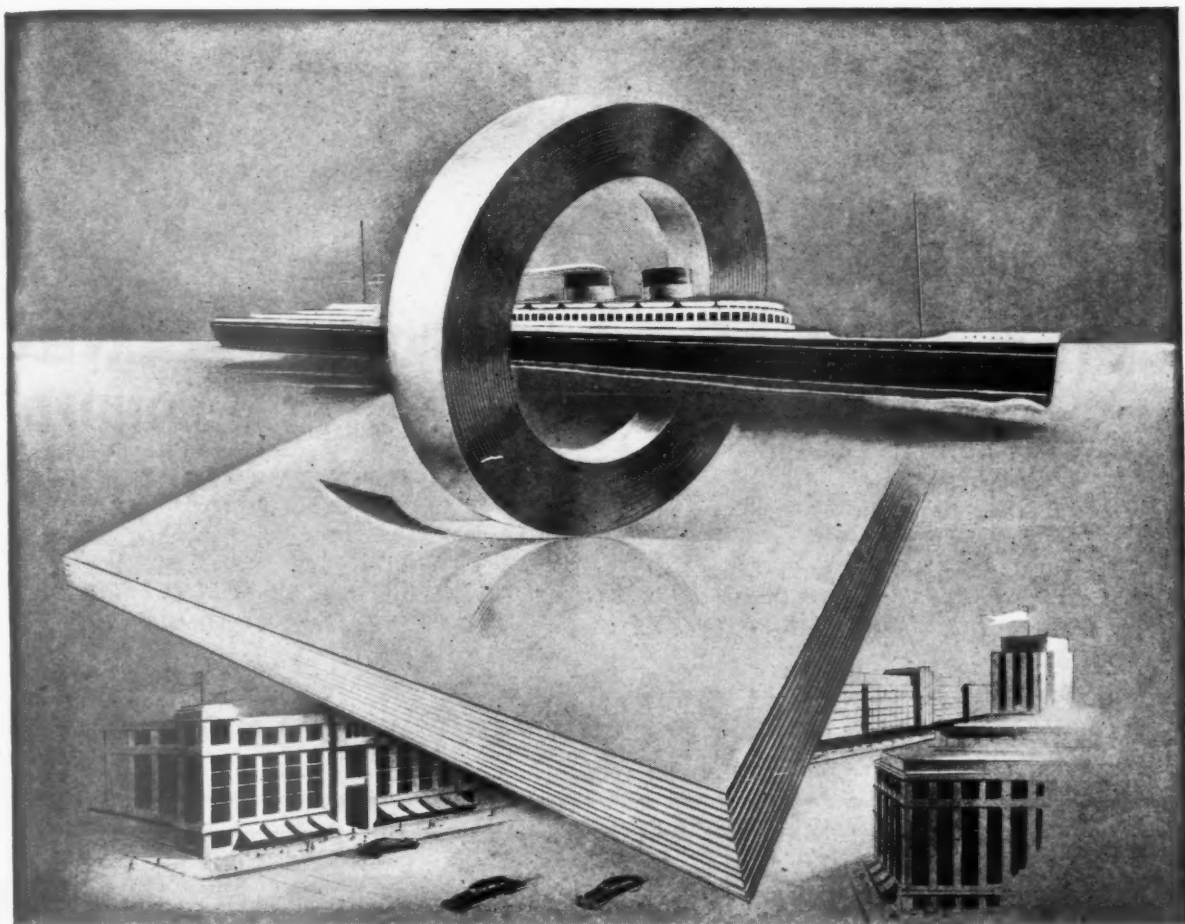


LONDON, E.6

[LIMITED]

GRAngewood 3444

Stoneham & Kirk



"STREET and SHIP"—(Sheet and Strip)

A slip of the pen—or more correctly of the typine—yet a very happy slip ... don't you think? ... For in these post-war years—yet to come—light metal sheet and strip, to say nothing of other wrought forms, will be used more and more for both street and ship. Before the war the architect, builder, and shop fitter, had found

that light metals had a definite place in the street scene . . . and constructors of great and little ships were discovering manifold uses for light metals in the maritime world. **"STREET AND SHIP"** . . . it is a happy phrase. **"SHEET AND STRIP"** — if in light metal—is a happy solution.

BIRMABRIGHT

BIRMETALS LIMITED BIRMINGHAM 32

COMPONENT COMPANY OF BIRMID INDUSTRIES LTD.





COMPOUNDLY CURVED RESIN BONDED PLYWOOD FORMATIONS

THE NEW STRUCTURAL AND DECORATIVE MEDIUM AT THE DISPOSAL OF ALL ENGAGED
ON WAR PRODUCTION TODAY—OR PLANNING FOR HAPPIER DEVELOPMENTS TOMORROW



MERRON LIMITED BOW LONDON E3

Specialists in **REINFORCED CONCRETE CONSTRUCTION** of all types

Consult us on your problems for war-time
or post-war—however big, however small.

By Appointment to: Admiralty, War Office, Air Ministry, Ministries of Aircraft
Production, Works, Supply and other Government Depts.,
Main Line Railway Companies, Municipalities, County
Councils, etc., etc.



Free Copy of "Engineering Data"

This very practical Booklet gives specially
prepared Tables of facts and functions for
all interested in Civil Engineering. A
complimentary copy will be sent to Direc-
tors and Executives, on request to Tarslag
Ltd. (Civil Engineering Contractors),
Dept. A.1., Wolverhampton. (Please use
the letterhead of your firm).

TARSLAG LTD

CIVIL ENGINEERING CONTRACTORS

WOLVERHAMPTON & STOCKTON-ON-TEES



"What?"

—a section with undercuts in one operation?"

DEFINITELY, Sir, and a far more complicated section than this if you require it! The answer is "extrusion"—any section which the designer's ingenuity can devise can be produced in one operation, to final dimensions. Extrusions, forgings, castings — **HIDUMINIUM** Aluminium Alloys lend themselves readily to every manufacturing process. Their versatility makes them indispensable

materials for post-war development in many branches of industry. If you use—or intend to use—aluminium alloys, you are invited to write for further information and full technical data to the Sales Department

HIDUMINIUM
ALUMINIUM ALLOYS



HIGH DUTY ALLOYS LIMITED • SLOUGH



A·N·T·I·C·I·P·A·T·I·O·N

The designer of beautiful architecture who anticipates and provides in his design for all the essential "accessories" to his building will go a very long way towards achieving perfection.

There is no accessory more important than Fire Fighting Equipment: it *must* be there ready for immediate use. But modern architects have devised many ingenious arrangements for recessing and blending it into the scheme. Copies of Information Sheet No. 105 giving dimensional details of equipment and recesses are available to the profession.



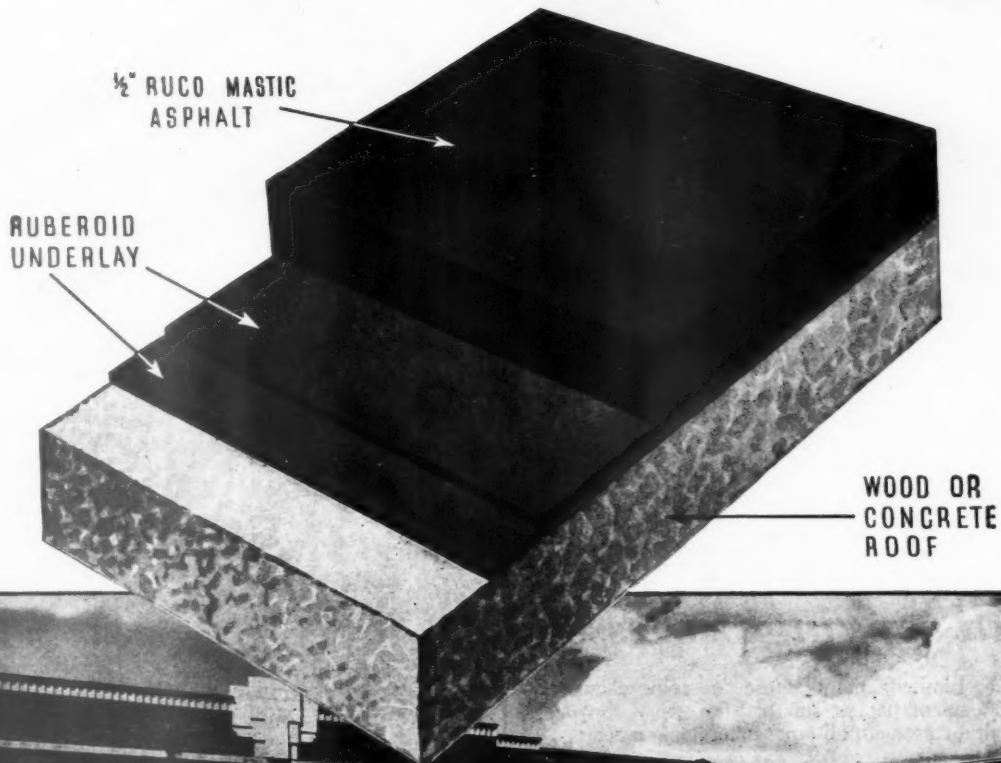
THE PYRENE COMPANY LIMITED, Fire Engineers

GREAT WEST ROAD, BRENTFORD, MIDDLESEX

Telephone : Ealing 3444 (14 lines).

Telegrams : "Pyrene, Brentford."

The Ruco Ruberoid Roof

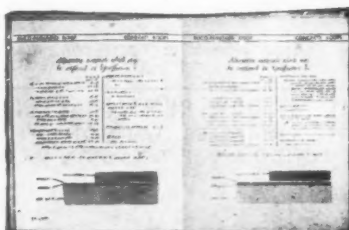


Grammar School, Mansfield.
Architects :
Messrs. Cook, Howard & Lane,
Mansfield.

The Ruco Ruberoid Roof consists of two or more layers of Ruberoid Underlay surfaced with $\frac{1}{2}$ " Ruco Mastic Asphalt. This is one of the most frequently specified Ruberoid Roofs, because of its excellent wearing properties and exceptionally low cost per year of service. The specification is suitable for all types of flat concrete or boarded roofs, particularly where the surface is to be used for foot traffic

Ruberoid Contract Departments located in London, Birmingham, Manchester, Newcastle, Edinburgh, Dublin and Belfast, promptly undertake work on any scale and in any part of the country. Estimates sent on receipt of plans

RUBEROID ROOFING



As our industry is controlled and priority has to be given to Government work, our ability to execute orders is subject to the regulations imposed on our industry by the Ministry of Works.

THE RUBEROID CO., LTD.,
1, COMMONWEALTH HOUSE, NEW OXFORD ST., LONDON, W.C.1

Architects and Engineers are invited to write for a copy of this Ruberoid Publication No. 326 entitled "Standard Specifications for Ruberoid Roofs."



Ilford DOCUMENT Papers

for all copying processes

Ilford Limited manufacture a comprehensive range of document papers suitable for every copying process and for use with all types of copying machines.

Ilford Document Papers are coated with a high speed, contrasty, orthochromatic emulsion which yields excellent negatives with intense blacks and clean white lines, and are available to suit every subject. These papers are supplied in cut sizes or in rolls to fit the standard document copying cameras.

Ilford Limited are always willing to give expert advice on all matters concerning the application of Photography to plan copying in Engineering and other Industries.

Ilford Document Paper is made in grades as under:—

ILFORD Document Paper No. 4

Recommended for ordinary commercial use—coated on standard grade paper which is fairly thick and strong. Highly orthochromatic.

ILFORD Document Paper No. 4T

Highly orthochromatic. Coated on a thin tough base for use when copies are required for mailing.

ILFORD Document Paper No. 1

Coated on a smooth, thin rag base. Highly orthochromatic. Recommended for making copies that have to remain in perfect condition over long periods.

ILFORD Ortho Photomechanical Paper

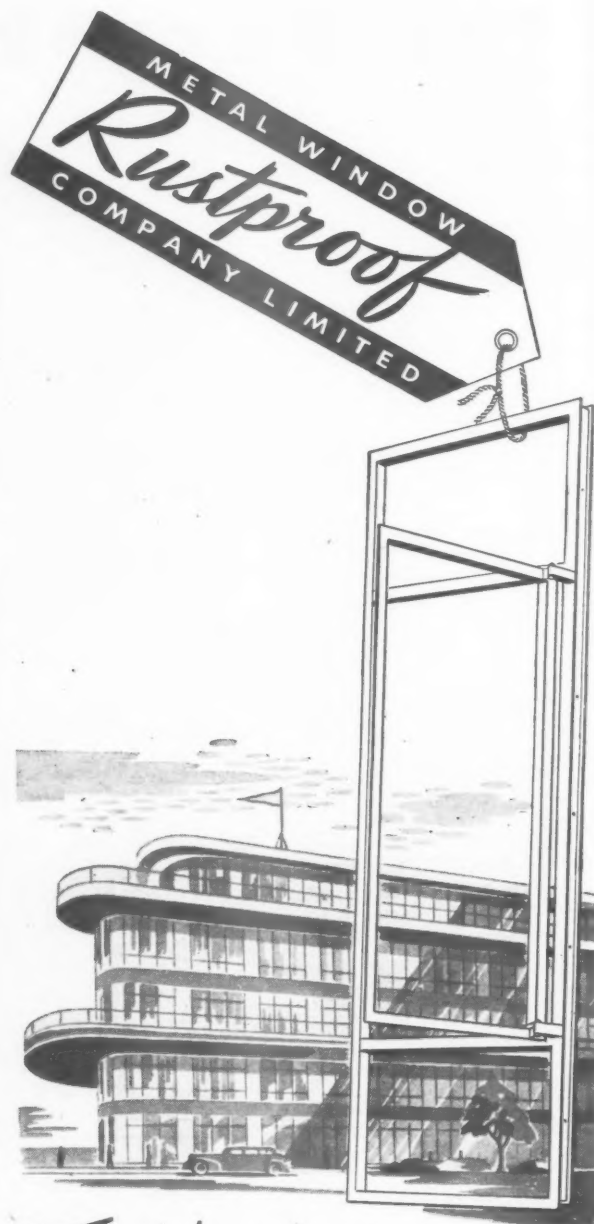
for copying intricate plans containing fine lines, giving cleaner and stronger reproductions.

ILFORD Photomechanical Paper

A slower paper coated with a non-ortho emulsion.

The Ilford booklet "Photography Applied to Plan copying in Engineering and other Industries" describes several convenient processes applicable in every drawing office.

ILFORD LIMITED, ILFORD, LONDON



*The Window
is part of the Plan*

Both from the point of view of utility and appearance, the window is all-important. For public buildings after the war—and for hotels, hospitals, factories, private houses, etc.—there will be Rustproof Metal Windows, giving maximum durability with minimum cost of upkeep.

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

PUMPED CONCRETE

Large quantities of high-quality concrete are most efficiently placed by means of the concrete pump and pipe line.

Experience in the use of this equipment was gained by us in 1934, when the first machines were imported into this country from Germany.

With this, and with more modern British equipment, we have pumped 198,000 cubic yards of concrete in the construction of Power Stations, Warehouses, Office Buildings and Explosives Stores.

HIGGS AND HILL LIMITED

BUILDING AND CIVIL ENGINEERING CONTRACTORS

CROWN WORKS
LONDON, S.W.8

COVENTRY
WARWICK ROAD

LEEDS
ST. PAUL'S STREET

hear-
public
itals,
l be
num
keep.

TED
ICE:
2764

Industrial

IRONCLAD SWITCH UNITS



"BRITMAC" Ironclad Industrial Switch units have earned the utmost confidence of Architects, Consultants, Electrical Contractors and their clients for many years. The switch unit illustrated, catalogue No. P.1542, with flat lid, is one of the comprehensive range available. May we send you full details of the "BRITMAC" Ironclad Range?



ELECTRICAL
ACCESSORIES
FOR ALL WAR-TIME
INSTALLATIONS

POINTS OF PERFECTION

C • H • P A R S O N S • L T D

Telephone:
ACOCKS GREEN
1642 5 LINES

Britannia Works
Wharfdale Rd. Tyseley
BIRMINGHAM 11

Telegrams:
"HECTOMAR"
BIRMINGHAM

**L
I
F
T
S
!**



BY J. & E. HALL LIMITED

DARTFORD · KENT · London Office: 10 St. Swin's Lane, E.C.4

EJMA windows

Certification Trade Mark



are pleasant windows

Present day exteriors rely for a great deal of their effectiveness upon the use of well designed and beautifully proportioned windows, so the joinery trade of this country, when designing the new Standard Wood Casements, aimed at producing windows which would be as great a credit to post-war housing schemes as the Georgian wooden windows were to 18th century housing.

For particulars of the full range of EJMA Standard Wood Casement Windows and Doors apply:—

THE ENGLISH JOINERY MANUFACTURERS ASSOCIATION
SACKVILLE HOUSE, 40, PICCADILLY, W.1. REGENT 4448. [INCORPORATED]

BIG BEN

5 STAR COUPLER



STEEL SCAFFOLDING COMPANY LTD.

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

Telephone : Victoria 7455

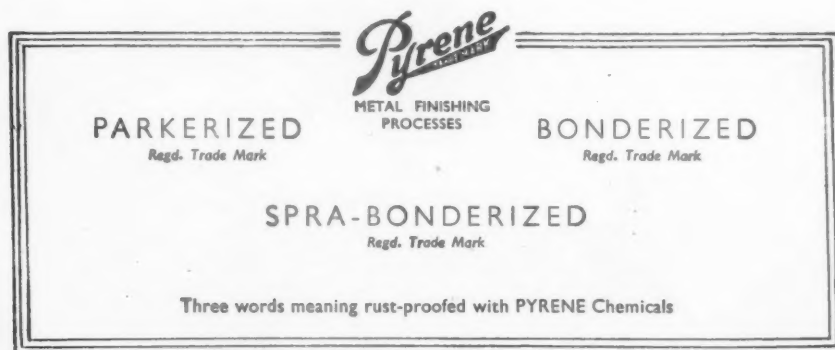
"ERSATZ"

. The literal meaning of this word is simply "substitute," but through German misuse it has become distorted into "cheap" or "inferior."

In this country, however, not all substitutes which have become necessary owing to shortage of imported material are inferior. Many new ideas which would never have been considered but for war conditions, will prove to be either better or more economic than the originals which they have replaced.

For example, where architects have specified non ferrous metals in the past because steel fittings have been prone to rusting, they will find that the substitution of "PARKERIZED" and "BONDERIZED" iron and steel in lieu of brass, copper, etc., is practical and economical.

Experience has shown that a high degree of resistance to corrosion can be obtained by "PARKERIZING" or "BONDERIZING," thus enabling iron and steel to be used for projects for which in the past ferrous metals were not considered suitable.



THE PYRENE COMPANY, LIMITED, METAL FINISHING DIVISION
Great West Road, Brentford, Middlesex



Lincoln Cathedral

...an inspiration in craftsmanship

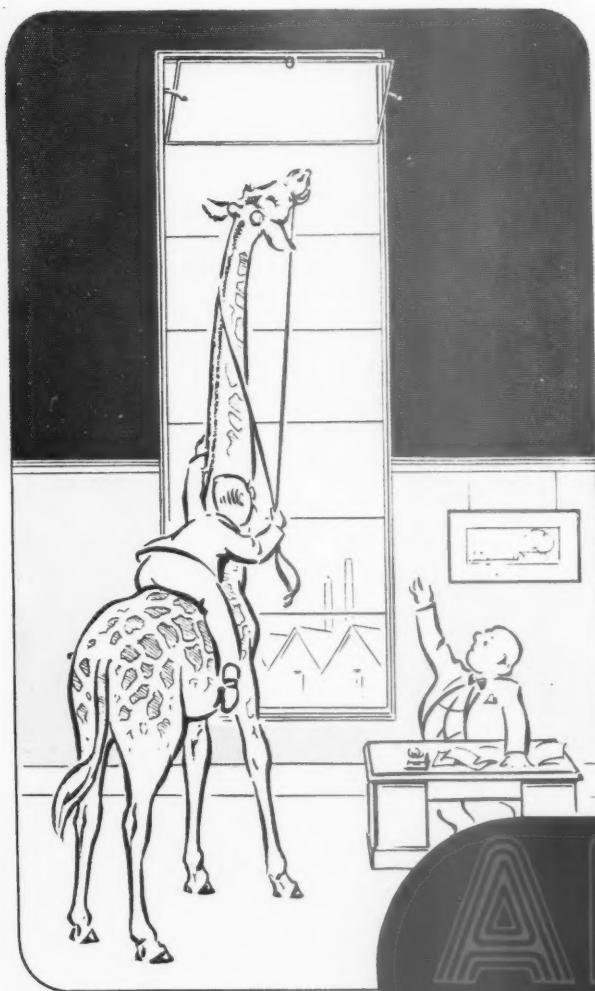
H · NEWSUM SONS & CO. LTD.
LINCOLN

WINDOWS · STAIRS · DOORS *and all types of* **MANUFACTURED WOODWORK**

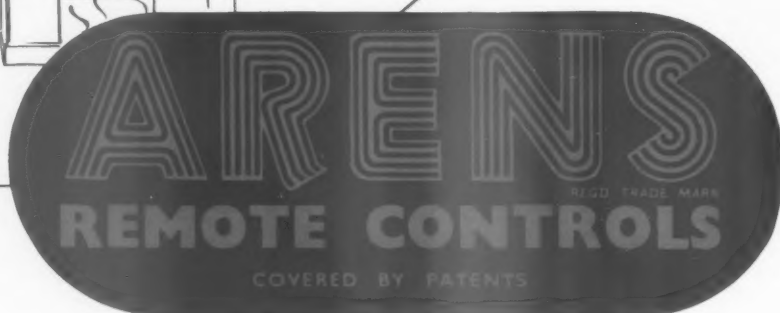
Telegrams:-
NEWSUMS - LINCOLN
Telephone:-
LINCOLN - 812 [4 LINES]



Mills also at
GAINSBOROUGH
and
SHEFFIELD



Zoological
Aid can't
suffice
like



Arens have made far-reaching advances in the art of window opening without fuss or bother and with the minimum of effort—such patience-wrecking appendages as rods, levers and cords, are relics of a bygone age.

In the modern building, windows, roof-lights and top-hung ventilators are simply, neatly, and efficiently operated by the ARENS CONTROL.

For post-war planning you will want to know the application of our control to your particular problem, so write to us **now** for Information Sheet No. 441 which describes ARENS WINDOW CONTROLS in detail and indicates some of their many applications.

JUST
SLIDE
THE
HANDLE!



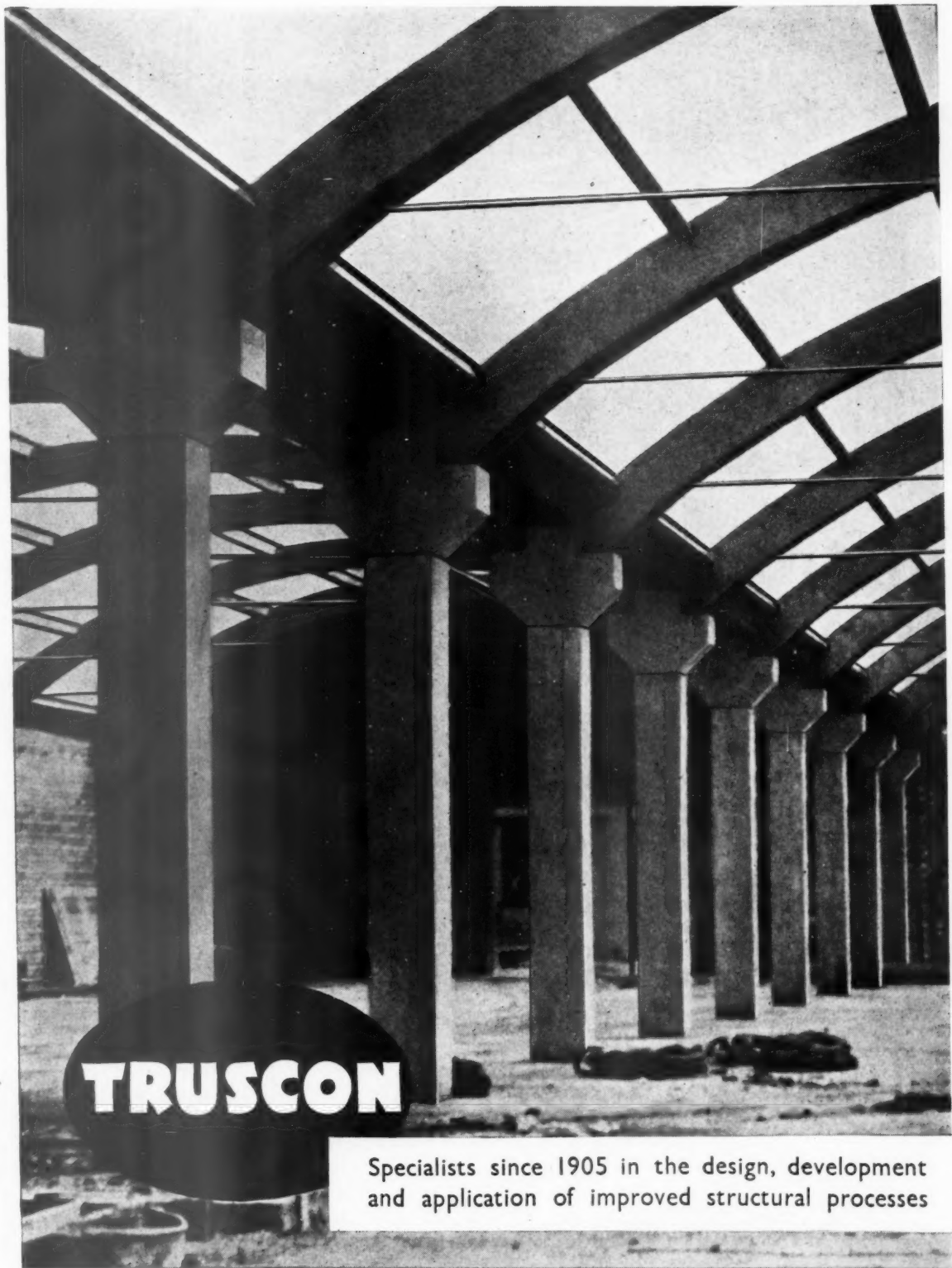
ARENS CONTROLS, LTD.

TUNSTALL ROAD
EAST CROYDON, SURREY

Telephones: ADDiscombe 3051/4

Telegrams: Unicontrol, Phone, London

831/3 WARWICK ROAD, BIRMINGHAM, 11 Telephone: Acocks Green 0786.



TRUSCON

Specialists since 1905 in the design, development
and application of improved structural processes

THE TRUSSED CONCRETE STEEL COMPANY LIMITED
Structural Engineers

6, COLLINGHAM GARDENS, EARLS COURT, LONDON, S.W.5. TELEPHONE: FROBISHER 8141

Your post-war needs in
**PLASTICS, RUBBER AND
EBONITE**

A COMPREHENSIVE SERVICE



If in your post-war plans you visualise the need for articles made from plastics, rubber and ebonite, we can offer you a comprehensive service, which not only includes manufacturing in each of these materials, but also designing, and advice based upon experience. *Your inquiries are invited.*

LORIVAL PLASTICS

UNITED EBONITE & LORIVAL LTD • LITTLE LEVER • NEAR BOLTON • LANC'S

Telephone : FARNWORTH 676 (Four Lines) • Telegrams : 'EBONITE' LITTLE LEVER

L5 44

**W. H. GAZE
& SONS LTD.**

**BUILDING & CIVIL ENGINEERING CONTRACTORS
KINGSTON-ON-THAMES
SURREY**

and at WASHINGTON HOUSE, 40, CONDUIT STREET, LONDON, W.1

Works and Head Offices:
KINGSTON HALL ROAD
KINGSTON-ON-THAMES

Branches :
SURBITON &
WALTON-ON-THAMES



NOW...
*pipes for planes
 must come first*

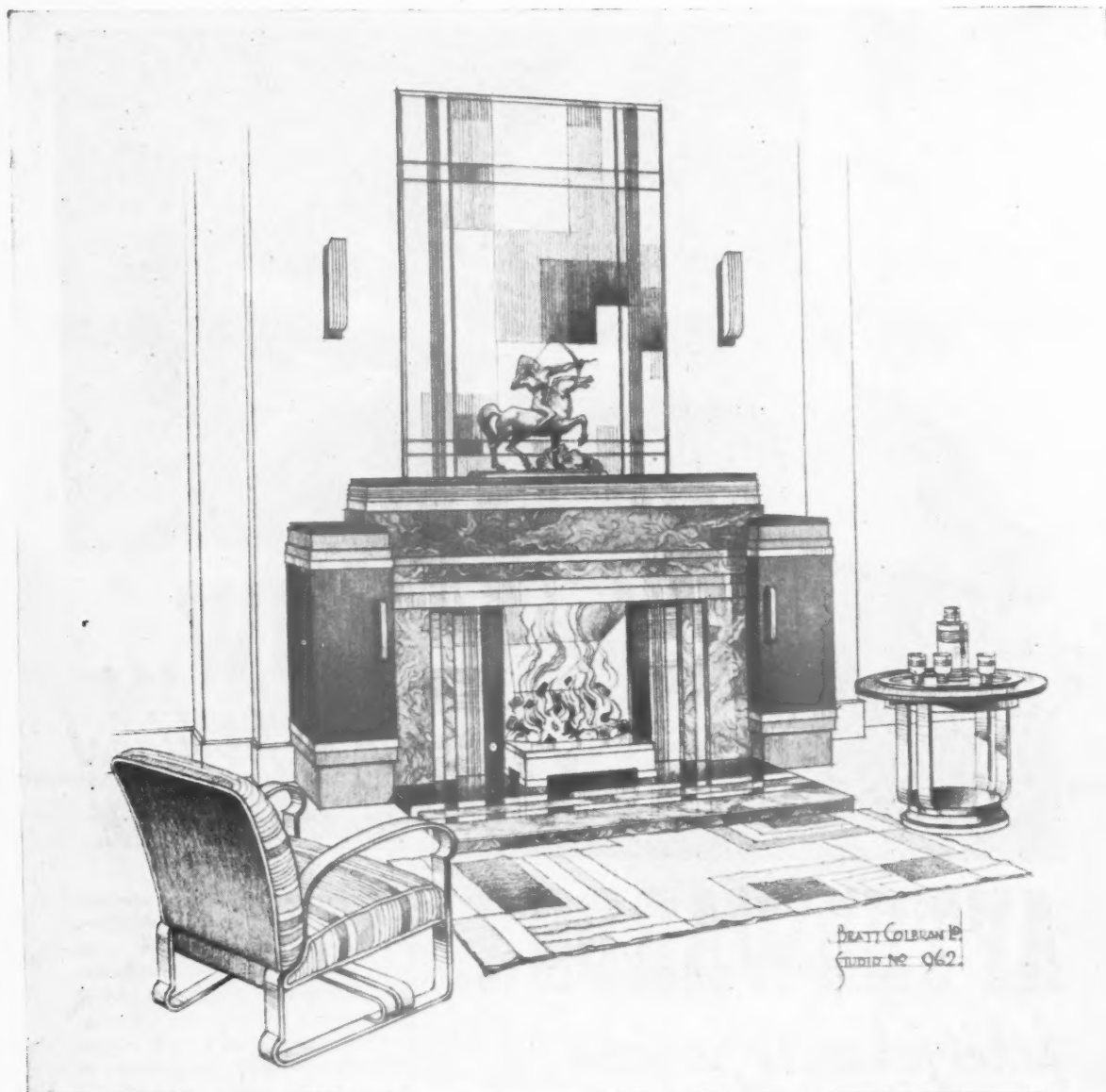
AFTERWARDS...
pipes for every purpose

In the days of post-war construction there will be many uses for pipes, and although we cannot now deviate from the greater task of war production, we are ready to discuss any of your post-war problems which may involve the use of manipulated pipes and standard or special machined fittings.



AERO PIPE & GLASS CO. LTD., KINGSLEY WORKS,
 GRANGE ROAD, WILLESDEN GREEN, LONDON, N.W.10





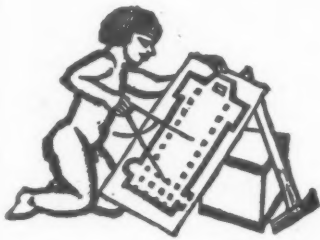
A PRE-WAR EXAMPLE OF FIREPLACE CRAFTSMANSHIP

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

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

SPECIALISTS IN SOLID FUEL, GAS AND ELECTRICAL HEATING

In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. For this reason it is virtually impossible for Newsagents to accept new orders for the JOURNAL for the time being, and the Publishers are also now unable to enter new subscriptions. Intending subscribers should, however, send in their names either to their Newsagent or direct to the Publishers to be recorded on the "waiting list" when they would be advised as soon as a vacancy occurs.



The annual post free subscription rate is £1 15s. 0d.. Single copies, 9d., postage 2d. Special numbers, price 1s. 6d. are included in the annual subscription. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage extra. Goods advertised in the JOURNAL, and made of raw materials now in short supply, are not necessarily available for export.

DIARY FOR JUNE JULY AND AUGUST

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

BRIGHOUSE. *Rebuilding Britain Exhibition.* At the Gas Showrooms. Guide lecturer, Miss Ivor Jones. (Sponsor, BIAE).

JUNE 24 to JULY 8

CHELMSFORD. *The English Town: Its Continuity and Development.* Exhibition, and *When We Build Again.* Film. (Sponsor, TCPA.)

SEPT. 1-9

GRANTHAM. *The English Town: Its Continuity and Development.* Exhibition. At the Guildhall, Grantham. (Sponsor TCPA.)

JULY 12-26

KETTERING. *The Englishman Builds Exhibition.* At the Museum and Art Gallery. Guide lecturer Miss M. McLeish. (Sponsor, BIAE).

JUNE 24 to JULY 8

LONDON. *RA Exhibition.* Weekdays 9.30 a.m. to 7 p.m. Sundays 2 to 6 p.m. Admission: One Shilling.

JUNE 15-AUG. 7

National Buildings Record Exhibition. At the National Gallery. Photographs of buildings of architectural interest throughout the country taken during the past three years for record purposes. Most parts of England, from Northumberland to Cornwall, are represented and the subjects range from the Central Tower of Durham Cathedral to Georgian wallpaper in a house at Falmouth. (Sponsor, National Buildings Record.)

10 a.m. to 12.30 p.m., 2.15 p.m. to 6 p.m.

JUNE 15-JULY 15

Rudi Mock. *American Housing.* At 13, Suffolk Street, S.W.1. (Sponsor, HC.)

1.15 p.m.

Miss Sonia Dresdel. *Towards a Real National Theatre.* At 2, Savoy Hill, Strand, W.C.2. (Sponsor, TCPA.)

1.15 p.m.

Open Meeting of artists, designers and architects practising industrial design. In the Henry Jarvis Room at the RIBA, 66, Portland Place, W.1. The meeting is convened by the Society of Industrial Artists to discuss the future professional organisation of industrial and commercial designers. The Society will submit a policy and programme which includes plans for reforming its own constitution by creating under one central authority two semi-autonomous groups respectively serving the interests of industrial designers and artists working for marketing and publishing.

2.30 p.m.

RIBA Council Election Results. To be announced at general meeting at 66, Portland Place, W.1. Followed by informal meeting at which Sir Malcolm Trustram Eve, Chairman

of the War Damage Commission, will talk on *The War Damage Act and Architects.* (Sponsor, RIBA).

6 p.m. (See page 441).

JUNE 27

R. A. Duncan, Assistant Director (Architecture and Building). British Coal Utilization Research Association. *Solid Fuel and the Modern House.* At 13, Suffolk Street, S.W.1. (Sponsor, HC.)

1.15 p.m.

JUNE 27

Ernö Goldfinger. *Housing Towns and Roads.* At 13, Suffolk Street, S.W.1. (Sponsor, HC.)

Lunch 12.45, Talk 1.15 p.m. The lunch will introduce the touring exhibition *Traffic*, which Ernő Goldfinger and Ursula Blackwell have made for the Army Bureau of Current Affairs.

JULY 4

Miss Judith Ledboer. *Post-War Housing.* At 2, Savoy Hill, Strand, W.C.2. (Sponsor, TCPA.)

1.15 p.m.

JULY 6

NEW MALDEN, SURREY. *The English Town: Its Continuity and Development.* Exhibition. At the Public Library. (Sponsor, TCPA.)

AUG. 19-26

PEMBREY. *When We Build Again.* Exhibition and Film. (Sponsor, TCPA in collaboration with Messrs. Cadbury Bros.)

AUG. 5-15

READING. *When We Build Again Exhibition.* At the Museum and Art Gallery. Models and screens show diagrams of replanned city areas, factories, shopping centres, schools and nursery schools, parks, hospitals, houses and kitchens. Other screens illustrate how congested cities may be replanned with fewer people to the acre to allow for more open spaces and gardens—the surplus population going to new and existing towns, and not to further suburbs. Two full size kitchen models by the Gas and Electricity Industries are displayed. The film *When We Build Again* (running time 20 minutes) will be shown daily at 11.0 a.m. and 2.30 p.m. (Sponsor, TCPA, in collaboration with Cadbury Bros.)

JUNE 15-24

SOUTH SHIELDS. *Design in The Home Exhibition.* At the Public Library. (Sponsor, BIAE.)

JUNE 15-17

SURBITON. *Living in Cities Exhibition.* At Harley Motor Showrooms. Guide lecturer, Miss Ivor Jones. (Sponsor, BIAE.)

JUNE 15-17

TAUNTON. *The Englishman Builds Exhibition.* At the School of Art. Guide lecturer, G. Mayer-Marton. (Sponsor, BIAE.)

JUNE 19 to JULY 1

NEWS

THURSDAY, JUNE 15, 1944
No. 2577. Vol. 99

News	441
At the NBR Exhibition	442
This Week's Leading Article ..	443
Astragal's Notes and Topics ..	444
Letters from Readers	445
Information Sheet facing page	448
Domestic Water Heating 5 (941)	
National Buildings Record, Photographs from the Exhibition now open at the National Gallery ...	449
Societies and Institutions	457

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.

A competition for designs for a New Women's Section of MANOR HOUSE HOSPITAL, Golders Green has been promoted by the Building and Estates Committee. The assessor is Sir Giles Gilbert Scott, R.A. Premiums £500, £300 and £150. In the new Women's Section, to be erected in North End Road, opposite the existing hospital, accommodation is desired for 72 beds, an out-patients' department and dispensary, and for nursing and domestic staff. Conditions from the Secretary, Manor House Hospital, Golders Green, London, N.W.11. Deposit £1. Last day for designs October 12.

Mr. Gower B. R. Pimm has been elected PRESIDENT OF THE INSTITUTION OF STRUCTURAL ENGINEERS.

Other officers elected are: Vice-Presidents: H. R. Cox, F. E. Drury, H. T. Garvie, G. McLean Gibson, J. Thomson, L. Scott White; Honorary Treasurer, F. S. Snow; Honorary Secretary, E. Granter; Honorary Librarian, Major R. A. B. Smith, M.C.; Honorary Editor, W. H. Woodcock; Honorary Curator, C. Roland Woods; Ordinary Members of Council: (Country) H. P. Budgen; (London) G. A. Gardner, S. B. Hamilton, W. A. Mitchell. Associate Members of Council: (London) F. M. Easton; (Country) A. J. Hodgkinson.



TENDING always to the ideal of 100% admission of light for every window opening Beacon Metal Windows have kept in step with the most exacting demands of modern architecture in its revolutionary achievement of more light for living and working.

Structural engineering skill, backed by years of experience, has enabled Beacon designers to produce a standard range of windows losing nothing in rigidity and strength in spite of a reduced frame to glass ratio undreamed of but a few years ago.

Simplicity of form, rightness of proportion, beauty of finish, in a variety of designs that belies the term 'standard' make the Beacon Metal Window range an inspiration for post-war needs. Although only a limited number of the designs depicted in our catalogue can be supplied for urgent priority work NOW—why not let us send you a copy in anticipation of the lifting of restrictions.

Telegrams: Windows, Wolverhampton.

JOHN THOMPSON BEACON WINDOWS LTD. BEACON WORKS, WOLVERHAMPTON
London Office: Imperial House, Kingsway, W.C.2.

Telephones: Bilston 41944/5 (3 lines).

Telephones: Temple Bar 3216 (3 lines).

from AN ARCHITECT'S Commonplace Book

FLAT ROOFS AND FASCISM. [From *New Groundwork of Architecture*, by John Summerson, in *This Changing World*. (George Routledge)]. Hitler hates flat roofs. An increasingly unimportant fact, I admit, but a fact which stands for something. It stands for the bitter hatred of perverse and unteachable men for the new pattern of life which is everywhere emerging out of the old—to our imminent peril if we do not comprehend and direct it. This queer little phobia about roofs symbolises opposition to knowledge, a blind refusal to understand. Not that flat roofs are in themselves, either new or invariably essential to a liberal view of architecture; but it is characteristic of the Hitler mind to seize on a non-essential aspect of new thought and "make an example" of it, beating it up, chasing it round the town and finally knocking it into a cocked hat—or, more accurately, in this case, a cocked roof. . . . In an age accustomed to steel, concrete and asphalt, the pitched roof is no longer essential. Flat roofs are as good or better. There is nothing in this, surely, to rouse a Nazi's ire. Certainly not. But the trouble where Hitler is concerned is that the flat roof, the continuous horizontal window, the long unpillared span all coalesce under the sanction of a new philosophy of architecture, a philosophy identified with scientific thought, which is, in its very essence, anti-fascist and which Hitler intensely dislikes.

Recent events in town and country planning especially on Merseyside have now reached A CRITICAL POINT when it is opportune to stress once again the indisputable claims of the fully trained architect in this important work.

This statement is made by six architects in a letter published in the *Liverpool Daily Post and Echo*. The letter continues: Without architectural direction planning on a large scale is bound to lead to continued chaos if left entirely in the hands of the engineer or municipal surveyor who, though competent to deal with constructional matters within their own province, cannot in the absence of long and arduous training in imaginative as well as practical design, be expected to cope with major issues of planning. The signatories to the letter are: B. A. Miller, F.R.I.B.A., F. X. Velarde, F.R.I.B.A., E. R. S. Cole, F.R.I.B.A., J. E. Marshall, F.R.I.B.A., F. J. M. Ormrod, F.R.I.B.A., A.M.T.P.I., D. Brooke, A.R.I.B.A.

★
RIBA warning to country members: DON'T COME TO LONDON on June 27.

The official warning says: "As already announced, Sir Malcolm Trustram Eve, K.C., Chairman of the War Damage Commission, will give a talk on the *War Damage Act and Architects* at the Informal Meeting on June 27. While it is hoped that there will be a good attendance of London members, country members are urged not to come to London especially for the meeting in view of the Government's advice to avoid unnecessary travel and the recent request of the Railway Executive to postpone the holding of Conferences, etc. Sir Malcolm's paper and the discussion which follows it will be published in the *RIBA Journal* for the benefit of those who are unable to hear it in person.

Gunby Hall, Lincolnshire, of which Tennyson wrote the lines A HAUNT OF ANCIENT PEACE has been given to the National Trust.

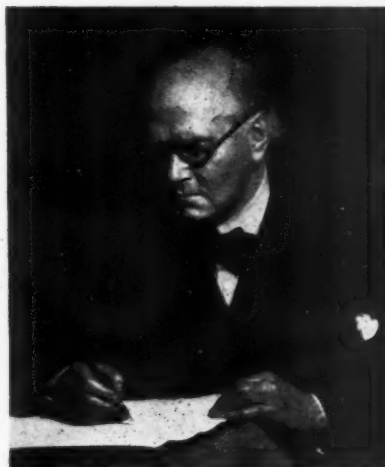
The Hall, with its contents and about 1,500 acres of land has been presented to the Trust by Lady Montgomery-Massingberd, Major Norman Leith-Hay-Clerk, and Field-Marshal Sir Archibald Montgomery-Massingberd, as trustees of the estate. Gunby is on the edge of the Lincolnshire Wolds, near Spilsby, some

eight miles from Skegness and not far from Tennyson's home at Somersby. The house is of red brick with stone quoins, and was built in 1700 by Sir William Massingberd, whose family had been settled in the neighbourhood since early in the thirteenth century. The architect is unknown. It has a fine oak staircase of twisted balusters and nearly every room is lined with contemporary wainscoting.

★
Among the Birthday Honours conferred by The King are: KNIGHT BACHELOR, Professor C. H. Reilly; O.M., Sir Giles Gilbert Scott. C.B., George L. Pepler.

Professor C. H. Reilly, Emeritus Professor of Architecture at Liverpool University, was born in 1874, the son of the late Charles Reilly, F.R.I.B.A., and was educated at Merchant Taylors' School, London, and Queens' College, Cambridge. Director of the Liverpool School from 1904-33, he is a past Vice-President, Member of Council of the RIBA, a Member of the Faculty of Architecture, British School at Rome and the Comité Permanent International des Architectes, and Vice-Chairman of the Liverpool Repertory Theatre. An architect and journalist, his publications include books on architecture, *Scaffolding in the Sky* and *A Semi-Architectural Autobiography*. For many years he has

contributed *The Year's Work* in the New Year issues of *THE ARCHITECTS' JOURNAL*. Last year he was awarded the Royal Gold Medal for Architecture. Sir Giles Gilbert Scott, R.A., was born in 1880, the son of George Gilbert Scott, and the grandson of Sir G. Gilbert Scott, and was educated at Beaumont College, near Old Windsor. President of the RIBA from 1933-35, his principal works include Liverpool Cathedral; new buildings for Clare College, Cambridge; William Booth Memorial Buildings, Denmark Hill; Whitelands Training College, Putney; new buildings and Chapel, Lady Margaret Hall, Oxford; St. Andrew's Church, Luton; St. Alban's Church, Golders Green; new Library, Cambridge University; extensions to the Bodleian Library, Oxford, and Waterloo Bridge. His scheme for the rebuilding of Coventry's bombed Cathedral was illustrated in the *JOURNAL* for February 17 this year. He was knighted in 1924. Mr. G. L. Pepler, Principal Assistant Secretary and Chief Technical Adviser to the Ministry of Town and Country Planning, was born in 1882 and educated at Bootham and Leys School, Cambridge. External Examiner Civic Design at London and Liverpool Universities and Chairman of the Town Planning Joint Examination Board, he has laid out many large estates on town planning lines. He was awarded two gold medals at the Wolverhampton Model Housing Exhibition (1908) and one gold medal at the South Wales Model Housing Exhibition (1910). In 1919 he was President of the Town Planning Institute, and from 1935-38 President of the International Federation for Housing and Town Planning. From 1919 to 1941 he was Chief Town Planning Inspector to the Ministry of Health.



In the King's Birthday Honours. Professor C. H. Reilly, Emeritus Professor of Architecture at Liverpool University (Knight Bachelor), left, and Sir Giles Gilbert Scott (Order of Merit).



At the NBR Exhibition

One of the fine photographs at the National Buildings Record Exhibition at the National Gallery on the panel of *Sculpture in Westminster Abbey*, contributed by the Warburg Institute. This is the head of Eleanor of Castile,

consort of Edward I (d. 1290), by William Torel, 1291. A number of photographs from the exhibition are shown on other pages of this issue, while this week's leading article explains the purpose and organisation of the NBR.

★ In the form of a timber mock-up a REVISED VERSION OF THE PROTOTYPE CHURCHILL HOUSE has been erected in the Tate Gallery as a result of criticisms received.

The amended accommodation, construction and planning is as follows: *Accommodation*—The area of accommodation for the living-room and bedrooms remains the same, but the usable area of the living-room is increased as the stove is now set back in the wall instead of projecting. The kitchen now has an additional working area which, in the prototype, formed the passage between the hall through the kitchen to the bedroom and living-room. The bathroom is increased in area behind the lavatory basin. The W.C. has been made larger and screened, and the hall has been increased in area consequent upon the shed being made a detached building outside. The area within the outer walls remains the same, 616 sq. ft. *General Planning*—The general planning and disposition of the rooms are approximately the same. Entrance to the living-room is now obtained directly from the hall. The passage door into the kitchen is abolished. A back door is being provided from the kitchen, in one unit, combined with a window and fan light over, to enable ventilation to be obtained at any time without having to open the door. The hot cupboard in the hall has been enlarged, and will be heated by the hot-water cylinder at the back. The inlet for the fresh air to be warmed and distributed to the bedrooms is now taken from the hall not far from the outer door. The height from the floor to the ceiling has been raised by 6 in., making it 7 ft. 6 in. *Features*—The cupboard units forming the partitions remain as in the prototype. The kitchen and bathroom unit has been rearranged, and there is an entrance from the hall to the living-room. It is now possible to incorporate the stove, with the hot water circulating system immediately behind it, as part of the unit. On the kitchen side two extra cupboards are provided with table top over them. A wash boiler is provided, to which a wringer can be fixed for use in conjunction with the sink. An additional cupboard and towel rail above the refrigerator are also included. A porch has been added outside the front door by continuing the pitch roof to the end, supported by a post on the outer angle. All the rooms are adequately lighted and the opening lights of the windows are handed. Ventilators are provided over each window. See page 446.

Mr. Dutton Briant, Mayor of Brighton, plans to build HOMES FOR WAR WIDOWS as a war memorial.

The ordinary stone memorial is no longer suitable, he told *The Star*. He said: The times demand something more practical and useful. So I have proposed that, instead of the customary collections and donations, we set aside the proceeds of a penny rate, which would give us about £6,500 a year, to build and maintain houses for war widows with families. In this way the whole town would be remembering our men—quite apart from whatever the Government does for war widows. His plan is to build perhaps 100 houses and let widows with families have them rent free. As the children grow up and begin to earn, then the widow might be asked to pay a small rent. Eventually, as houses become vacant for various reasons, they could be used for old people. Brighton's Council has the plan under consideration, and the Mayor is in a hurry. He wants arrangements made so that the memorial homes can be built immediately labour and materials are ready.

THE NBR MAKES ITS BOW

THE National Buildings Record came into existence on February 1st, 1941, and the JOURNAL welcomed it in a leader entitled *Architecture's Record Office*. The Record of those days was, however, little more than a name, with a staff of two architect-historians working in a room in the RIBA building. Three years have passed, during which not much has been heard of the NBR, though it has come into the news from time to time either as the recipient of Rockefeller, Pilgrim, or Leverhulme generosity, or because of the addition of yet another digit to its rising total of photographs and drawings. Now, however, the NBR has made its bow to the public in the National Gallery Exhibition reviewed in our pages this week.

The exhibition, supported by a descriptive catalogue and an organisational diagram, explains succinctly the shape and working of the NBR. It has arisen directly from a war-time objective—the simple one of ensuring that if fine architecture of any type or period is destroyed something of its interest and quality, its history and design, is preserved on paper. But this objective has broadened into the larger one of establishing a permanent national archive of architectural records. Up to now there has been no such institution, and though its components have crystallised here and there—in museums, in private and commercial collections—the total survey has never been envisaged in its full stature. In the NBR, with its massive co-ordinating index and collection approaching 250,000 items, it has taken concrete form.

What, more precisely, is the function of an organisation such as this? Basically it is, perhaps, as indefinable as, say, the function of any great library, of the Oxford Dictionary, or the Record Office itself. But in the short perspective of our own time one can distinguish specific duties which the NBR should be expected to perform. First, it must dovetail with the requirements of an age which cannot afford to be trammelled by the débris of its predecessors—a creative age which is bound to destroy. The NBR must sift and preserve the evidence turned over by the planner's plough-share. Second, it must have the vision to maintain all this evidence in such a way that the architectural past is intelligibly accessible to all—to the architect, the scholar, the student, the teacher and, not least, to the ordinary man or woman, of whatever trade, where experience can be enriched by history embodied in architecture.

To fulfil these functions the NBR must become, in effect, a public service. Permanently established it would be in the unique position of a museum whose "exhibits" can be multiplied and distributed indefinitely. It must be equipped to undertake such a service; avoiding not merely the obvious danger of becoming a dumb file of antiquarian material, but the less obvious and more insidious one of being a mere picture agency for architectural propagandists. It has before

it the chance of working out a policy of cultural broadcasting which the national museums, still fettered in the glass-case tradition, are in a far less favourable position to pursue.

It is understood that in due course the NBR will bring its survey up to a contemporary dead-line, bridging that curious gap which has always existed between architecture which is "history" and architecture which is "modern." Whether it is practicable to carry it objectively to this length remains to be seen, but it is certainly worth trying. The sense of continuity in English architecture has been dissipated by a hundred years of pretending that "tradition" stopped short at some given date—either, as some Victorians believed, with the Coronation of Henry VIII, or, as more recent opinion has it, with the death of George IV. It is time that this curious illusion was smashed and the NBR, which views the apse of Lichfield Cathedral and the auditorium of a 1910 music hall with almost equal dispassion, may help to smash it. The NBR has, we hope, come to stay, though on what footing it will achieve permanence we do not know.

There is no doubt of its usefulness; and its permanence as a lively component of the cultural side of reconstruction will, we hope, soon be guaranteed.



The Architects' Journal

War Address: 45, The Avenue, Cheam, Surrey

Telephone: Vigilant 0087-9

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

PORTAL'S PALACE REVISED

I hear that of the 4,000 visitors to MOW's Emergency Steel House at the Tate Gallery, 20 per cent. offered criticisms and suggestions. The chief criticisms of the prototype were: (1) The rooms were too low; (2) there was no back door; (3) clothes washing facilities were inadequate and should not be in the bathroom but in the kitchen; (4) there was no door direct from the hall into the living room; (5) more storage space and room for a pram in the hall was wanted.

In the revised version of the prototype, of which a mock-up in plywood has been erected in the Tate, all these criticisms have been met. The revision is certainly an improvement. It also looks better, at least from the front, for the awkward projecting porch with its flat roof is now contained under the main pitched roof. But the plan remains far from satisfactory.

For instance, though more space has been made in the living-room by setting the stove into the wall, there is now a door on each side of the fireplace—not a very snug arrangement. The circulation remains poor and that unattached shack at the back will look messy in the landscape when repeated *ad nauseam*.

That the Government has accepted the idea of the mass-produced house is extremely encouraging, but one feels that the job has not been tackled with enough enthusiasm, imagination or generosity. Even within the imposed financial restrictions something a good deal better could surely be produced, and something far less rigid in conception. Why, in any case, does the cost have to be kept within such

mean limits? And who dictates that it must be? After all, if this were a matter of mass-producing some highly technical and complicated engine of war, no question of financial cost would arise, but merely one of the availability of materials, skill and labour.

Let us hope that the final design for the Portal Palace has not yet been fixed. Our people deserve the best that is physically possible, and we have not yet seen *that* model. It is surely not too late to scrap the original conception entirely and start again from scratch, if needs be, from a more magnanimous approach. If this is done the suggestion put forward by the JOURNAL leader for a flexible *system* rather than a rigid *type* should certainly be adopted.

These houses, we have been told, will probably have a life limited to ten years. Having never lived in any house for longer than some sixteen seasons, I feel that any dwelling would have to be extremely attractive in every way to be tolerable for as long as ten years, especially when, as a member of the forces who visited the house remarked bitterly on being assured of its purely temporary nature, "We don't believe everything we're told."

NBR EXHIBITION

The Warburg Institute photographs by Mr. Helmut Gernsheim at the National Buildings Record Exhibition are superb. They include the first comprehensive photographic survey ever to have been made of St. Paul's Cathedral—one that must have caused the ghost of Sir Christopher to caper with delight, so subtly, with so strong a feeling for form, light and texture, and with such technical skill has Mr. Gernsheim used his camera.

Equally good are his photographs of the sculpture in Westminster Abbey, a number of which you may already have seen reproduced in the *Architectural Review*. Several of the photos would not have been possible if some of the movables had not

been evacuated to a place of safety, where, detached from their settings, they could be properly photographed in detail for the first time.

★

Incidentally I have a complaint to make against the organisers of the exhibition. Why is it closed from 12.30 to 2.15, the only time in the working day when the wage-slaves of our great democracy are free to feed their souls? Perhaps the mid-day concerts have something to do with it.

WHEN IS A HOUSE NOT A HOUSE?

I see that the Treasury has now entered further into a potential arena by elaborating its definition of which houses are eligible for War Damage Commission grants for immediate repair, and which are not. True, at the moment the Treasury is skating on fairly firm ice, but who knows how soon or how hard it may ultimately be pushed towards the icy depths of controversy.

★

The Treasury has now decreed that "houses" (as it defines the word) do not include hotels, boarding-houses or public-houses, nor a "converted railway carriage, tram-car or similar article" (I like the phrase "similar article"), nor any building which the Commission thinks unsuitable or which was wholly or mainly constructed of materials unsuitable for use in the construction of permanent buildings.

★

The last definition is one which, I think, would form the basis of an admirable series of legal actions, if only the lawyers could find some peg strong enough to support them.

★

I have seen many army huts of wooden construction, occupied for years, which not even the worst local Council would ever have accepted as suitable for permanent residence. I have seen some wooden dwelling-houses of which I have been profoundly jealous. When does wood cease to be suitable and become unsuitable for the construction of permanent buildings?

★

Speaking of wooden buildings, I have recently inspected some wooden

huts used for Garrison Schools by the Army. They are of last war vintage and depart in almost every particular from every standard advocated by the Board of Education for school buildings. But the Army Council has considered them suitable for servicemen's children for at least twenty-five years.

★

If the schools had been owned by any religious organisation, I doubt (for a variety of reasons) if they would have survived for so long. In fact, had they belonged to anything but a Government Department, the locality in which they stand would by now have collected enough money from pure charity to have replaced them. There is probably some moral in this somewhere.

DESIGN IN DERBY

One of the better things that have come out of this war is the increased number of exhibitions, more or less educational, which are being held in all parts of the country for all sorts of causes. Some of these shows—notably, of course, the Ministry of Information series—are fully design-conscious; others are not.

★

In the second category must be included a textile exhibition recently held in Derby, in which products of the textile industry of Derbyshire were shown. Some of the fabrics were exceptionally well designed and give high hopes for the future of the industry; but there was no sense of design, no sense even of showmanship, in the way they were shown, and in no case was credit given to a designer by the inclusion of his name. (The manufacturer's name—British Celanese in most cases—was freely splashed about.)

★

Is this the way to encourage good design? Back in 1812, Derby coined an Industrial Art Prize Medal, an example of which can still be seen in the museum that houses the textile exhibition. Derby's ideas on industrial design do not seem to have grown more liberal since that date.

ASTRAGAL



LETTERS

Eric Atherton, A.R.I.B.A.

Arthur G. Edwards, L.R.I.B.A.

Harry B. Ward

E. V. Penn

J. Alan Slater, F.R.I.B.A.

M. Hartland Thomas, F.R.I.B.A.

Colin Penn, A.R.I.B.A.

Bernard H. Cox, L.R.I.B.A.

The Churchill House

SIR,—Not being an MP, councillor or council official, I have been unable to obtain the necessary ticket to visit the factory-made house. My remarks are based on the full information contained in your issue for May 11.

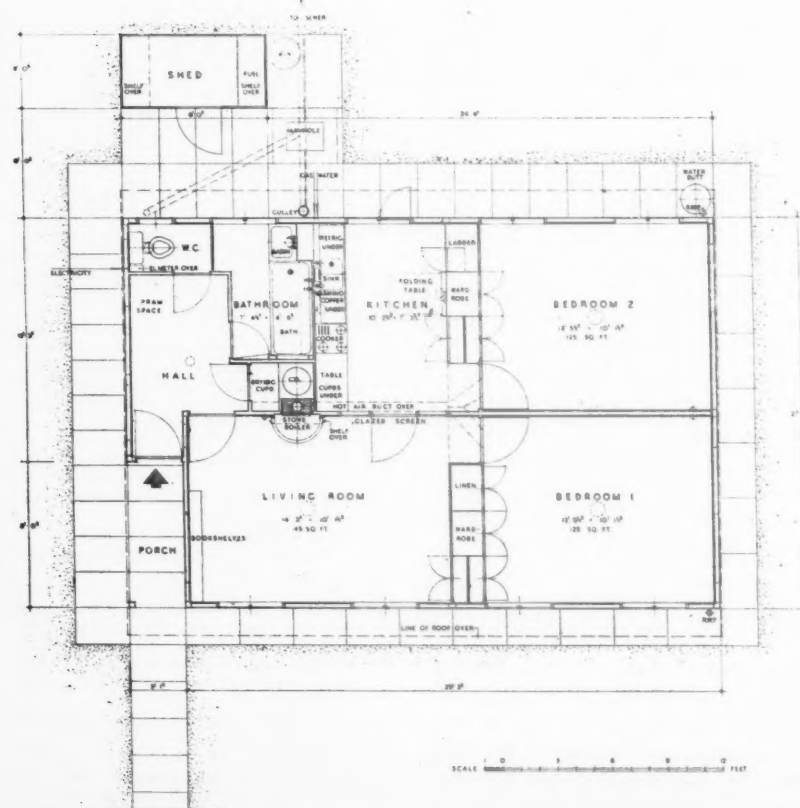
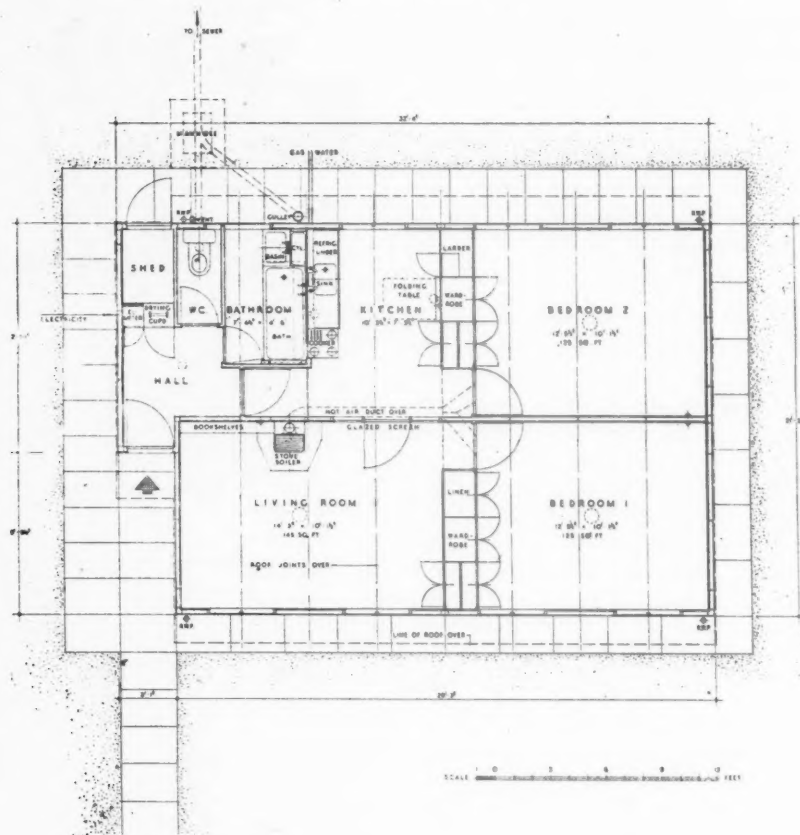
Excellent as it appears upon first observation, the Ministry of Works factory-made house has on closer examination many imperfections, the majority of which are avoidable and should be given close examination before the house is put into mass production.

From the structural and technical points of view the design appears to have been worked out in great detail and on the whole is very good. It is of course to be regretted that it is not of unit construction thereby allowing flexibility of planning to some extent.

The technical points which require further consideration are as follows:

- (a) The detail of the window construction will probably prove inefficient against moisture penetration after a short while.
- (b) A steel ceiling finish internally cannot be considered satisfactory, as it is impossible to maintain it in a perfectly flat condition.
- (c) Metal doors in metal frames cannot be considered satisfactory, unless we are prepared for the occupants to become nervous wrecks after a few months.
- (d) With large areas of hard painted surfaces there will probably be considerable trouble with condensation.

Now for the Planning. Here the position is not so good. The maxim "the key to the plan



The Churchill House, designed by the Ministry of Works. Top, the original plan and, below bottom the revised plan issued by the Ministry last week. (See page 443).

is circulation " is particularly true of the small bungalow, but in the Ministry of Works house the circulation is far from good.

A fairly spacious entrance hall is provided, which in spite of its size is of little value, as it does not assist in the internal circulation. The small kitchen is in fact the circulating space within the house, and this continual circulation through the kitchen would, I am sure, prove intolerable to the housewife endeavouring to prepare a meal. Such an arrangement cannot be considered satisfactory even for temporary occupation. A further point is that during illness and childbirth it will be necessary to carry all slops from the bedrooms through the living-room and/or kitchen.

The other objections to the plan are of lesser importance and may be summarized as follows:

- (a) The shed is inadequate.
- (b) No fuel storage space is provided.
- (c) There is no suitable space to park or store a pram.
- (d) The plan shape does not lend itself to terrace layout.
- (e) The plumbing unit should incorporate a connection for the w.c. soil pipe, so as to save additional excavation and site work.
- (f) The provision of a separate compartment for the w.c. is not in accordance with the recent medical recommendations.

Within the floor area occupied by the Ministry of Works house, and with rooms of the same size or larger, it is possible to plan a house and avoid the faults mentioned above.

This plan shows a possible solution with the following advantages (see facing page, above):

- (a) The kitchen is free of general circulation and also has a side entrance.
- (b) One bedroom has access to the bathroom without the necessity of passing through another room, and therefore is suitable for use during illness.
- (c) A larger living-room is possible.
- (d) Suitable fuel storage is provided adjacent to the living-room.
- (e) Adequate storage for cycle and pram.
- (f) Plumbing unit provides for w.c. connection.
- (g) Plan arrangement allows for terracing.
- (h) Minimum space occupied by entrance.
- (i) Glazed screen at eye-level between kitchen and living-room, combined with service hatch and two-way cupboard unit.

Once the Ministry of Works house goes into production it will be very difficult to effect any alterations in the planning, without expensive alterations to presses, jigs, etc. Therefore the best possible arrangement must be found before production is started. I feel that very serious consideration should be given to the suggested scheme shown in my plan. It would prove far more workable than the Ministry of Works house and occupies exactly the same floor area.

Harrow-on-the-Hill.

ERIC ATHERTON

SIR,—Acting on the request made in your issue for May 11, for criticisms in connection with the published plans of the proposed factory-made house, I enclose herewith a tracing which shows an alternative plan in skeleton form, and which possibly may be considered to have the following advantages over the published plan (see facing page, below):

1. A second entrance.
2. Space for a perambulator.
3. Access to all rooms without having to pass through others.
4. Slightly larger kitchen and larder.
5. The inner door of the kitchen, and living-room door, are sufficiently close together to make it unnecessary to provide direct access between these two rooms.
6. The house might be roofed-in without a break, but this would have a tendency to make it more boxlike.

I consider that the floor to ceiling height should not be less than 7 ft. 6 in.

If the kitchen and bathroom special fittings have to be the reverse way to what I have shown, i.e. as on the original plan, my plan could be set out as looked at entirely reversed. It is possible that the plan as rearranged will be rather more costly than the published one. Bradford.

ARTHUR G. EDWARDS.

SIR,—It is a pleasure to have a building so adequately illustrated in an architectural paper these days as is the MOW steel house in your issue for May 11. The JOURNAL should be congratulated for giving us the opportunity to assimilate and criticise this design about which there has been so much blurb in the daily press and on the radio.

It seems that the main considerations governing the design have been getting a decent minimum accommodation into the smallest possible space, keeping this space and its divisions simple in shape, working to a grid, and grouping services into a pre-assembled unit.

The workout has been cold and logical like that of a safe. I suppose much thought has been spent on the design and method of construction. What a pity that the result is inhuman, devoid of sensitivity and imagination?

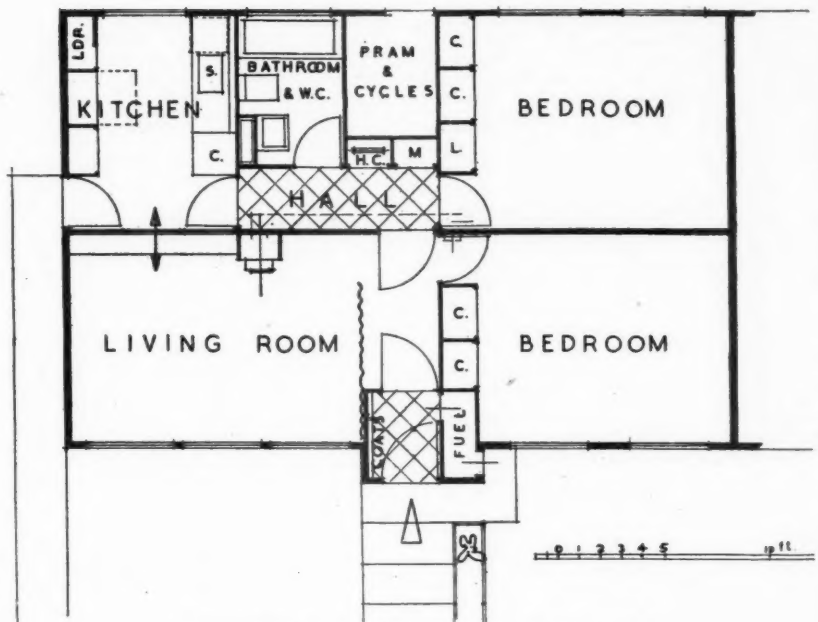
The worst point of the design is in the circulation. I heard it said on the radio that passages had been eliminated, thus saving space. But leaving out part of one wall of a passage doesn't eliminate the passage. In fact, between the hall door and the door of bedroom two in this design is a space roughly 13 ft. 6 in. by 2 ft. 6 in., which can't be used for anything except circulation. Such a passage, partly open, can help to give feeling of extra space to a room, and for this reason can often be excusable, sometimes be desirable, in a minimum plan. In the MOW house, however, this open passage off the kitchen seems to be merely an unhappy accident. It has the effect of dividing kitchen galley from living-room—two rooms that need to be together. But it also lays the kitchen galley open to the main circulation. To reach any of the three living-rooms from the hall, bathroom and w.c., one has to pass the kitchen. As bedroom 2 opens off the kitchen passage and as the all-over ceiling height is only 7 ft., it will presumably be difficult to keep cooking smells out of the bedroom. (There is no allowance for dividing one of the bedrooms for the use of two children.)

The hall is a reasonable size in proportion to the rest of the house, but it ought to serve the main living rooms direct. The design should be in two parts—bedrooms and bathroom and living-room and kitchen, divided by the hall.

The drying cupboard seems too small as does the shed (many people have bicycles, then where does the pram go?) A lot has been made of the £100 worth of equipment, but this shouldn't fool architects. Any architect worthy of the title would always include cupboards and fittings in his design, especially for a mass-produced house like this. As it is, all the cupboard space is inadequate.

I suppose that the kitchen-bathroom unit made for this demonstration house is not quite what is finally intended. That the whole thing should be designed as a complete unit, and not as a series of units fitting together, seems very important. The gas meter, for example, occupies a fair-sized cupboard under the sink, a space that would be useful for storage (e.g. cleaning and washing materials). In this position the meter would probably cause a perpetual smell of gas in the kitchen. If the unit is to be honestly prefabricated it must be designed as such and the gas meter, for example, as part of it—maybe reached for servicing purposes through an outside duct-trap and with money slots and recording dials on a kitchen dashboard.

One suspects that here in this house service units are coming against the snag that ruined every mass-produced British car, the fact that many components were chosen or adopted from designs catalogued by specialist firms. British cars were never completely the result



Suggested plan for the Churchill House. By Eric Atherton.

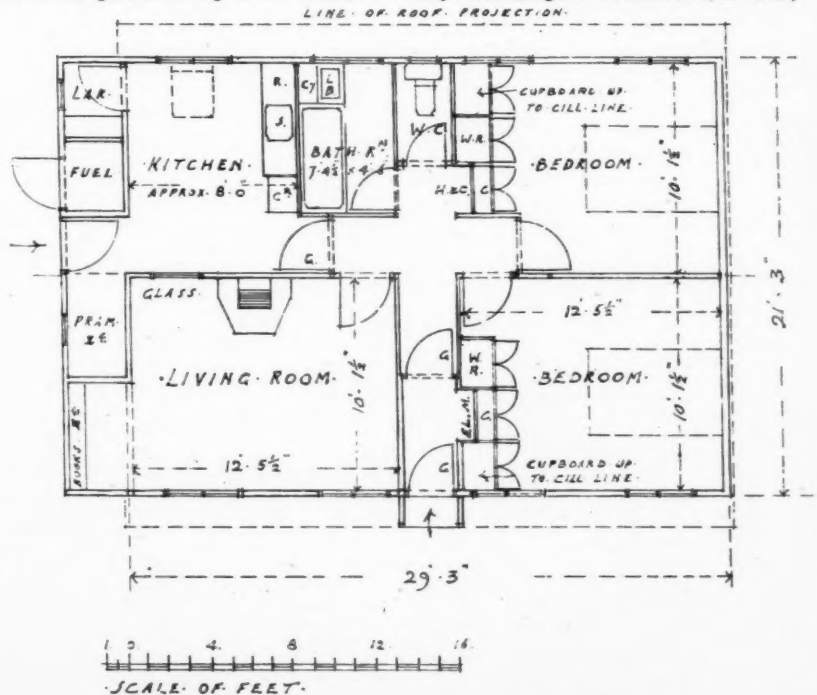
of the collaboration of engineers and designers working as a group, but always approximately designed and made up from catalogues. So it seems that our kitchen-bathroom units won't be like the Bauhaus would make or even like the smooth American stylists would mould, but will be an adaptation of this from the gas company, this from the electricity undertaking (gas's rival), that from the sanitary fitting catalogue.

I don't see why, when no indication of layout of site or garden is given, a pathway should be indicated all round the house. I suppose we'll be told it is for the window cleaner (don't they think of everything), but it does seem rather unnecessary. And where does the bin go?

As to the general feeling of the house, it

seems a pity that a single house, set in its own garden, should have the atmosphere of a tenement. Here is opportunity for pleasant garden windows and the chance for tenants to get away from cemetery-like front rock gardens and to plant with more imagination to form terraces or open-air eating places or a playground for the child. The house is as dull as an army hut.

In fact, you know, apart from the novelty of being made of steel, it's nothing more or less than an adapted army hut—just the sort of thing to turn people against the idea of prefabrication. As the JOURNAL remarks, a system of unit construction rather than a type of house should have been the aim. A system which was flexible enough to allow many varied designs to be made to it, however,



Suggested plan for the Churchill House. By Arthur G. Edwards.

would have been harder to evolve. For this reason the shortcomings of the MOW house seem less excusable. It would be interesting for comparison if the JOURNAL could publish plans and photographs of the TVA demountable house, which looks very much more charming than MOW's effort in the one photograph of it that I have seen.

Finally, I am very suspicious of Mr. Churchill's statement that these houses will also serve to help the steel industry in the hard times of peace. Are these houses just another racket? Are they steel because they're better that way, because it will be the only available material, or to please the steel lords?

Carlisle.

HARRY B. WARD.

RIBA Council Election

SIR,—My Executive Committee wishes to recommend the candidates listed below. They have not asked for our recommendation, nor are they all members of the ABT. But we believe they are all capable architects who can be relied on to support progressive policies. Each has, no doubt, his independent ideas about particular matters, but we believe that a Council composed of such people can, in the course of discussion, arrive at decisions that will help our profession to take its rightful place in the life of the nation.

E. V. PENN.

Acting General Secretary,

London. Association of Building Technicians

FELLOWS.

A. H. MOBERLY. Partner in Slater & Moberly (architects, with Prof. Reilly, for Peter Jones' Store, Sloane Square), at present in MOW. Secretary of RIBA Reconstruction Committee while some of its best work was done.

C. H. REILLY. Professor of Architecture at University of Liverpool and chiefly responsible for its fame. Always fights for every worth-while cause, and especially for younger men. Recently knighted.

J. A. SLATER. Partner in Slater & Moberly. One of the strongest supporters of campaign for holding of Council elections in wartime.

G. STEPHENSON. In Ministry of Town and Country Planning, working with Prof. Abercrombie on plan for London Region. Hon. Sec. of RIBA Committee for the Appreciation of Architecture in Schools. Commonwealth Scholar to USA.

M. HARTLAND THOMAS. Deputy Architect to United Dairies. Actively associated with work of the RIBA Architectural Science Board. Hon. Sec. of MARS Group.

F. R. S. YORKE. Well-known modern architect and author of many books on architecture. Editor of *Specification*. At present in MOW. Very capable organiser.

ASSOCIATES.

A. CALVELEY COTTON. Author of well-known book on planning Town Halls, and of articles on Group Practice, etc. At present working for the Admiralty in the West of England.

D. E. E. GIBSON. City Architect, Coventry, responsible for re-planning schemes and experimental work there. Has one of the best organised offices in England. Formerly on staff of Building Research Station.

W. G. HOLFORD. Professor of Civic Design at University of Liverpool. Rome Scholar. Now Chief Research Officer to Ministry of Town and Country Planning. Has given his entire energies to the war effort (Royal Ordnance Factories, Hostels, etc.) with brilliant success.

A. G. LING. Works for LCC, and undertook original research in preparation of County of London Plan. Authority on building in USSR.

C. T. PENN. National Organiser of ABT. A winner of *News-Chronicle* Schools Competition. Well-known speaker and writer. Author (with F. R. S. Yorke) of book on modern architecture.

LICENTIATE.

B. H. COX. Employed by MOW and earlier by MOS. Before war in private practice on own account. Member of Executive Committee of ABT, and author of their successful pamphlet *Your London has a Plan*.

SIR,—The publication of an Election Address by candidates for RIBA elections is obviously democratic procedure. It has its objections unless organised by the Institute itself, but I understand that this plan may be in force in future elections, and this would be one of the changes which I should advocate if elected. In fact it forms one item in what I regard as the two main objectives for which I desire to work. These are:—

(A) Creating democracy within the RIBA and subsequently making it work.

(B) Clarifying the function of the architect within the Body Politic.

An expansion of (A) would mean setting up techniques whereby policies set in train by the Executive may be agreeable to the main body of members, in that such policies are themselves the result of ideas and suggestions largely flowing up from below. This is democracy, and by this means alone can we become a united profession.

With regard to (B), this can be divided into two main sections:—

(i) The architect's function within the Building Industry.

(ii) His function viz-a-viz the community as a whole.

As to the first I believe that he must play his part as a co-operator on equal terms with the other sections of the industry—employers and employed—giving guidance where his knowledge is superior to theirs, and seeking advice and help, where their experience is greater than his own.

As to the second, I believe whole-heartedly that his function is first and foremost to serve the community and to become as efficient as possible in order that that service may be effective. I believe moreover that he can only further his own interests by honourably accepting the truth and implications of what I have described as his prime function.

It may be said that these are vague principles and of little practical or topical value. My reply is that if these principles had been recognised and followed in the past we should be seeing now a profession: (a) happier within its own house; (b) more respected by the industry of which it forms a part; (c) more widely acknowledged and employed by the public which it professes to serve. In other words, like the two great Commandments, within these principles lie "all the Law and the Prophets."

London.

J. ALAN SLATER.

SIR,—Under the letter in which my name appears among others as a candidate in the RIBA Election, you published, with editorial approval, another letter demanding from candidates what they stand for.

One is reluctant to comply, as canvassing in the sense of blowing one's own trumpet would be objectionable. On the other hand a statement of opinions at this time is healthy.

During the work of the recent Reconstruction Committee, and especially in helping to present the Rebuilding Britain Exhibition, which is touring the country, I was much impressed with the fundamental unity in outlook of the profession. The things about which all architects are in agreement are so much more important to architecture than the things that divide us. This should be particularly apparent during the coming years when great issues of national policy are being debated and important reforms put into effect.

It is necessary in the interests of Architecture and of the Nation that the RIBA should give a strong and progressive lead in matters within the competence of architects. In order to do this, the government of the RIBA (by which

is meant the elected representatives and the salaried officials taken together) must win the confidence of the individual member. There should be machinery by which a member can consult with his fellows in the appropriate standing committee, and having done this he should feel confident that if he takes the line agreed upon, then he will have the full support of the RIBA at his back through thick and thin.

Such consultation and mutual reliance between the Institute and its members is not intended only for major national issues, but should be the normal practice for members in all parts of the country.

London.

M. HARTLAND THOMAS.

SIR,—In my opinion these are the most important matters to which the new RIBA Council should give attention:

1. A determined campaign to raise the status of architects by bringing the profession into closer touch with the public. This would have a stimulating effect throughout the Institute, in contrast to the effect of the various Ministerial and other contacts in which so much faith has been placed hitherto.

2. A programme of really vigorous technical work related to the needs of post-war Britain, with publication of the results in such a way that they reach—and inspire—the millions who are interested in them.

3. A definite stand in controversies on the social and political aspects of such subjects as housing. Otherwise we are merely playing at planning.

4. The conditions of employment and remuneration of salaried architects must be cared for as thoroughly as those of private architects have been. All architects, whether in official, commercial, or private employment, must be given responsibility and the credit that is due to them.

5. Better liaison between the Council and the ordinary member, with special measures to ensure that the disabilities of provincial members are removed.

6. The organisation of post-war employment so that those now in the Forces have at least an equal chance of getting the best jobs.

London.

COLIN PENN.

SIR,—The challenge to candidates in the RIBA Council election to declare their platform is one which I welcome; within this, most people will vote in a haphazard way, with due regard to the imposing list of Council nominees, or, more likely, not vote at all.

Many of the younger architects are disillusioned so far as expecting any imaginative lead to the profession from Portland Place. After five years without an election, the Council certainly needs new blood. But no good will come of staying outside and complaining—that is why I want to get inside to lend a hand.

The Council's pronouncement on the status of architects, arising from the South Wales Institute's resolution, should be followed up vigorously until the implications of the Registration Act are made fully effective.

Many salaried architects find themselves, under present conditions, engaged on semi-clerical and routine work. This should not continue a day longer than necessary and those returning from the Forces must not find themselves so employed. There should be more working in small groups, with each man having a share of responsibility. My strong support would be given to a Salaries Scale which really means something and to the setting up of machinery to conduct negotiations on behalf of members.

Architects and engineers should learn more of each others' work and should collaborate at an early stage of the job, but the architect's position as co-ordinator of the various specialists should not be undermined.

Hampstead.

BERNARD H. COX.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

• DOMESTIC WATER HEATING 5: DISTRICT HEATING (B)

THE THERMO-ELECTRIC STATION :

In the normal "straight" electric generating station, heat energy is produced in the furnace by the burning of coal. A part of this heat energy is converted into potential energy in the boiler in steam under pressure.

The steam is expanded to a lower pressure in the turbine, giving up its potential or pressure energy but still retaining a considerable proportion of the heat energy

This heat is rejected from the plant via the condenser into the cooling water, at a temperature of 92°F. to 100°F.

With District Heating this wasted heat may be usefully employed, but not at so low a temperature. The turbine must not remove so much energy from the steam, but must release it at a temperature and pressure suitable for heating and hot water supply. The higher the temperature at which the heat is rejected, the higher the relative cost of the heat.

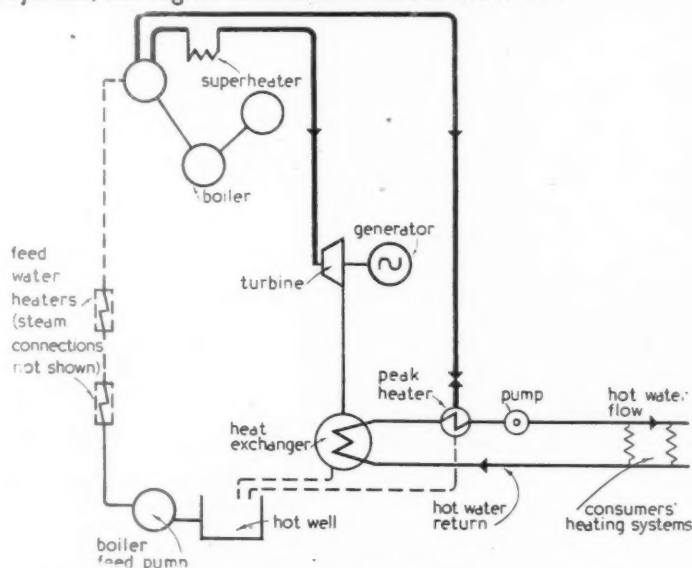


DIAGRAM OF THERMO-ELECTRIC STATION.

"STRAIGHT" HEAT AND ELECTRIC STATIONS COMPARED WITH THERMO-ELECTRIC STATIONS.

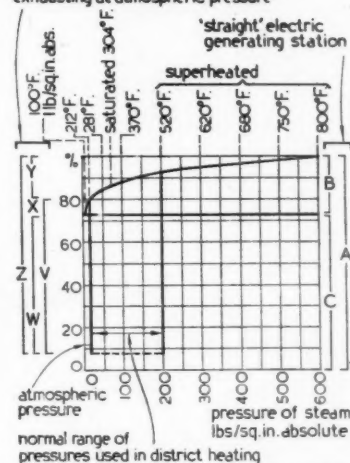
Diagrams below show the economy of the Thermo-Electric station. (Let U=any heat unit), then summarising:—

TYPE OF STATION	INPUT	OUTPUT
Combined : Thermo-Electric	100 U	Electricity 11.4 U Heat 50.8 U } 62.2 U
Separate : "straight" electric	51 U	Electricity 11.4 U
" " "straight" heat	83 U	Heat 50.8 U } 62.2 U
	134 U	

$$\frac{34}{134} \times 100 = 25 \text{ per cent. saving of coal with Combined station.}$$

The "straight" Heat Station is necessary where not possible to combine with electric generation on account of distance, etc. Advantages as compared with numerous small units: Higher efficiency, use of low-grade coal, flue gas washing.

combined thermo-electric station
exhausting at atmospheric pressure



COMPARATIVE CHARACTERISTICS OF COMBINED THERMO-ELECTRIC AND "STRAIGHT" ELECTRIC GENERATING SYSTEMS.

The per cent. values indicate the percentage of total heat in steam for "straight" electric stations.

Thermo-electric station.

- Z Total heat in steam supplied to turbine (212 F. to 600 lbs. per sq. in. 800 F.).
- Y Heat in steam as potential energy.
- X Extracted heat potentially useful.
- W Extracted heat normally rejected.
- V Total heat supplied to District Heating system.

"Straight" Generating Station.

- A Total heat in steam supplied to turbine (100 F. to 600 lbs. per sq. in. 800 F.).
- B Heat in steam as potential energy.
- C Heat in steam rejected to condenser.

TARIFFS FOR THERMO-ELECTRIC SYSTEMS :

The basis of charges for heat outlined in the previous Sheet is, in the case of the Thermo-Electric station, complicated by the electrical generation.

One of these complications is due to non-coincidence of heat and electric loads. When the electric load is high and there is a surplus of steam over heating requirements, that heat must be wasted in condenser. If the heat load is higher than the pass-out steam can supply, the excess must be made good direct from the boilers. In either case, additional costs are involved over those when a perfect balance occurs.

In summer when heat demand is small, pass-out turbine plant will have little electrical output: thus, it is usual in Thermo-Electric stations to arrange for some of the plant to operate condensing, but this naturally reduces overall efficiency. In principle, the cost of heat from a Thermo-Electric station is based on:—

Costs { fixed and running } of Thermo-Electric station.
less
Costs { fixed and running } of "straight" electric station of same electrical output.

[TURN OVER

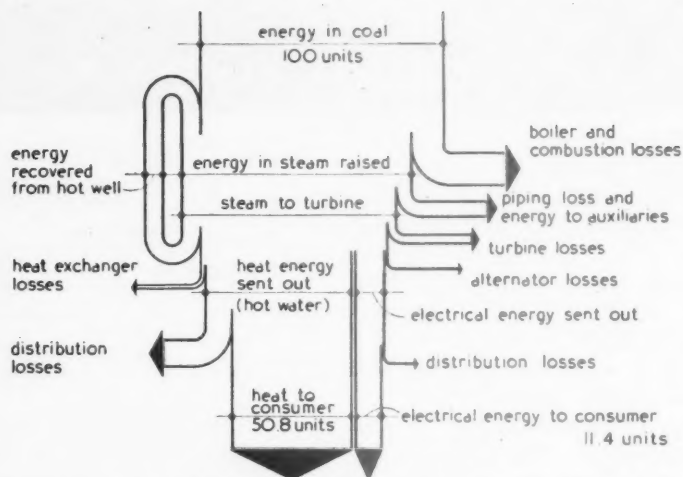


DIAGRAM OF THERMO-ELECTRIC STATION EFFICIENCY.

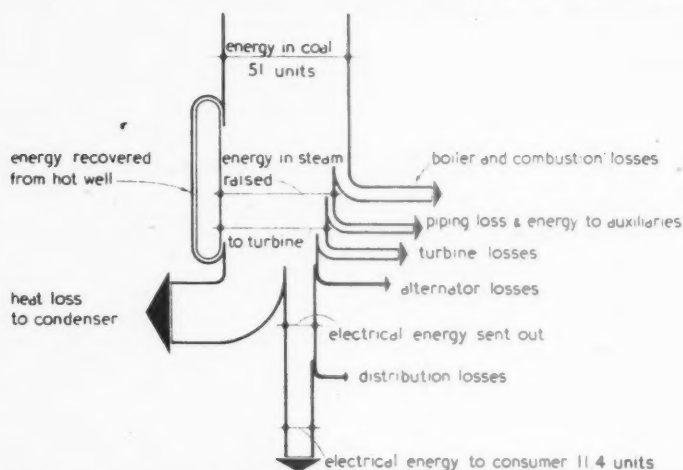


DIAGRAM OF "STRAIGHT" ELECTRIC STATION EFFICIENCY.

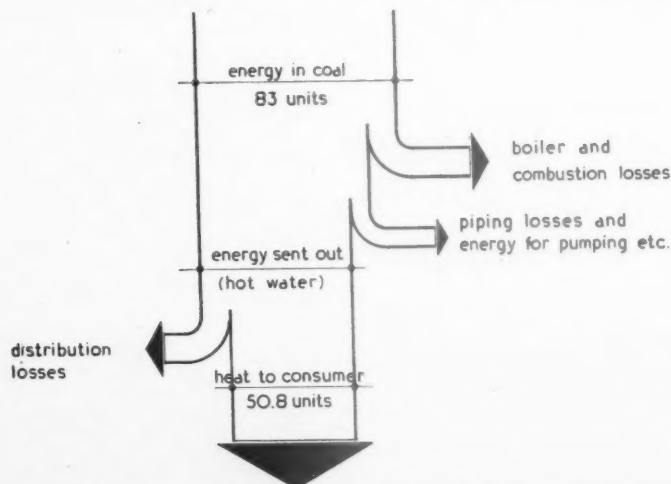


DIAGRAM OF "STRAIGHT" HEAT STATION EFFICIENCY.

The estimation of the latter costs would, in practice, be based on experience with existing stations; but relative load factors, coal costs, and value of energy transferred to "grid" would require appropriate adjustments to be made.

The tariff would be on the basis of a price per therm, as before, including interest and depreciation on mains, mains losses, and incidental expenses. The price per therm should be lower for a Thermo-Electric station than for a "straight" heating station of similar size and characteristics.

COMPARISON WITH INDIVIDUAL CENTRAL HEATING:

Example: Building, cube 300,000 cu. ft.
Maximum heat demand for 30°F. weather, 65° inside, 1,000,000 B.Th.U.'s per hour (10 therms/hour).
Load Factor 0.25.

With District Heating at 4½d. per therm (taken as an average, see Information Sheet, Domestic Water Heating 4):
Cost = 10 therms × 8760 × .25 × 4½d.
= £410 per annum.

With Central Heating Boiler, using coke or coal:

Heat supplied = 10 therms × 8760 × .25
= 21900 therms per annum

Night banking and other losses allow 10%

24090
Coke or coal calorific value 12,000 B.Th.U./lb., boiler efficiency 60%.
Consumption

$$\frac{24090 \times 10^3}{12000 \times 2240 \times 0.6} = 150 \text{ tons per annum.}$$

With coke or coal at 50/- 40/- per ton per ton

Fuel cost 150 tons	= £375	£300
Labour, one man, Insurance, etc.	= £200	£200
Interest and depreciation on boiler, 10% on £200	= £20	£20
Interest on flue and boiler-house building and fuel store 3½% on £300	= £10	£10
Per annum	£605	£530

In this case:

District Heating gives a saving of per annum £195 £120
Equivalent to 32% 23%

For larger buildings, such savings would be proportionately less, and for small buildings more, depending on the amount of labour employed. The indirect benefits have been already referred to. They are General convenience. Saving of Atmospheric Pollution. Saving of Road Wear and Congestion. National economy of Coal Resources.

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

Issued by Ascot Gas Water Heaters Ltd.

Compiled by Oscar Faber, O.B.E., D.C.L., D.Sc., M.Inst.C.E., M.I.Mech.E., Pres.I.H.V.E. and J. R. KELL, A.M.I.Mech.E., M.I.H.V.E.

INFORMATION SHEET: DOMESTIC WATER HEATING 5

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI

Right, detail of the font in the village church of Tuddenham St. Martin, Suffolk: 1443. Below, St. Bartholomew's Church, Fingest, Bucks: twelfth century and later. Both these are contained in the panel on Village Churches and their Contents. Some hundreds of village churches have been photographed by the NBR. Apart from their historic interest, these buildings contain some of the finest examples of English craftsmanship and sculpture, a fact which this panel emphasizes. Extensive recording of churches has been organized by the Central Council for the Care of Churches.



NATIONAL BUILDINGS RECORD

PHOTOGRAPHS FROM THE
EXHIBITION NOW OPEN AT
THE NATIONAL GALLERY



The exhibition is divided into 29 panels, and consists chiefly of photographs of buildings of architectural interest throughout the country taken during the past three years for record purposes. It includes records of buildings destroyed during the war, but the emphasis is chiefly on photographs of so far undamaged buildings. Most parts of England are repre-

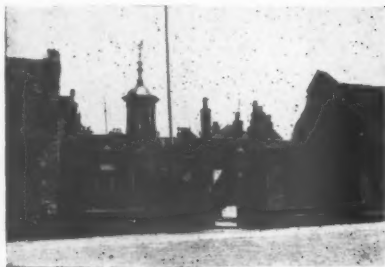
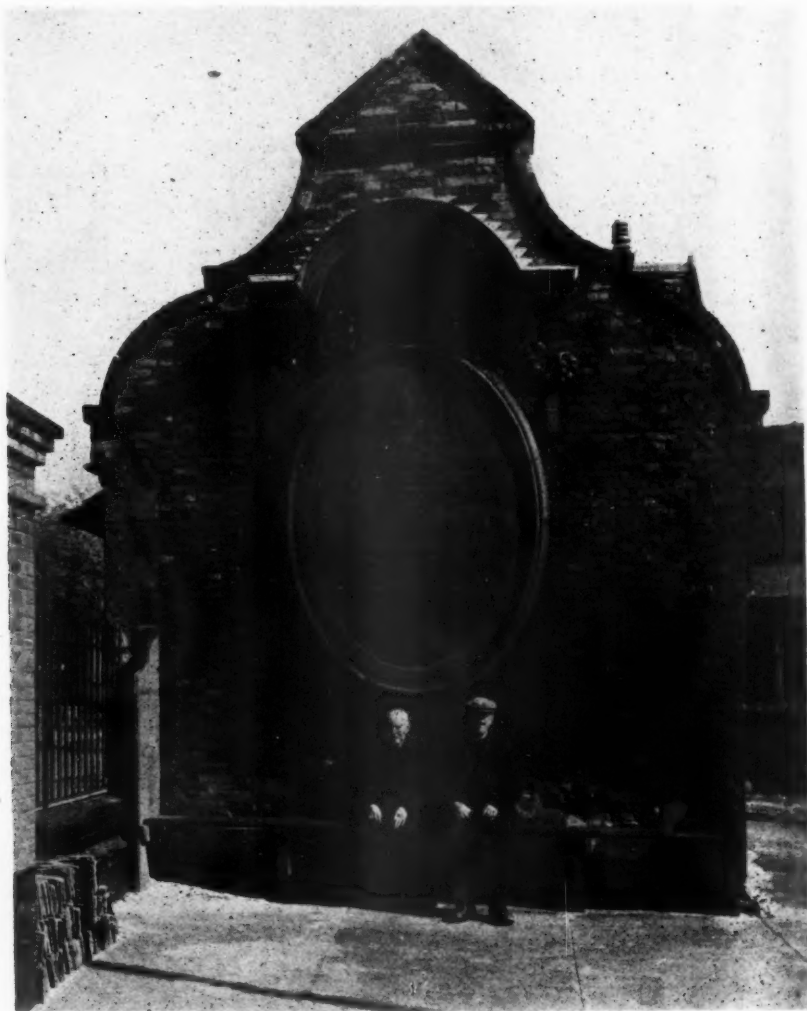
sented and the subjects range from the central tower of Durham Cathedral to Georgian wall-paper in a house at Falmouth. Typical panel titles are: Regional Types, the Village Church and its Contents, Country Towns, Georgian Interiors, London Club-houses, Theatres, Industrial Towns. See also this week's leading article and pages 442 and 457.



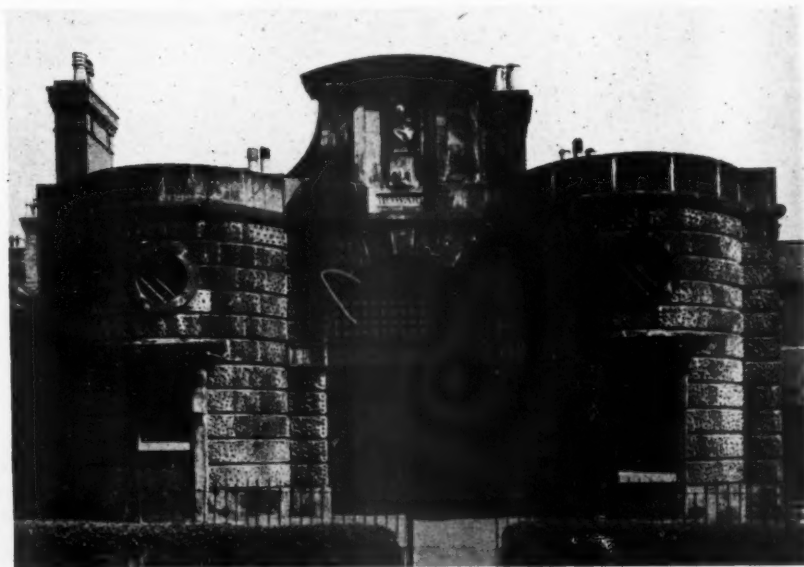
Two photographs from the panel on Regional Types. Left, timber boarded houses at Eynsford, Kent: fifteenth century and later. Below, the north side of the High Street, at Marlborough, Wilts: mediæval and later. The NBR has as yet only touched the fringe of this field, since under war conditions individual buildings of value rather than examples of widespread vernacular types are the essential subjects. Useful contributions, in the recording of traditional types, suggests the NBR, might well be made after the war by local Field and Photographic Clubs.

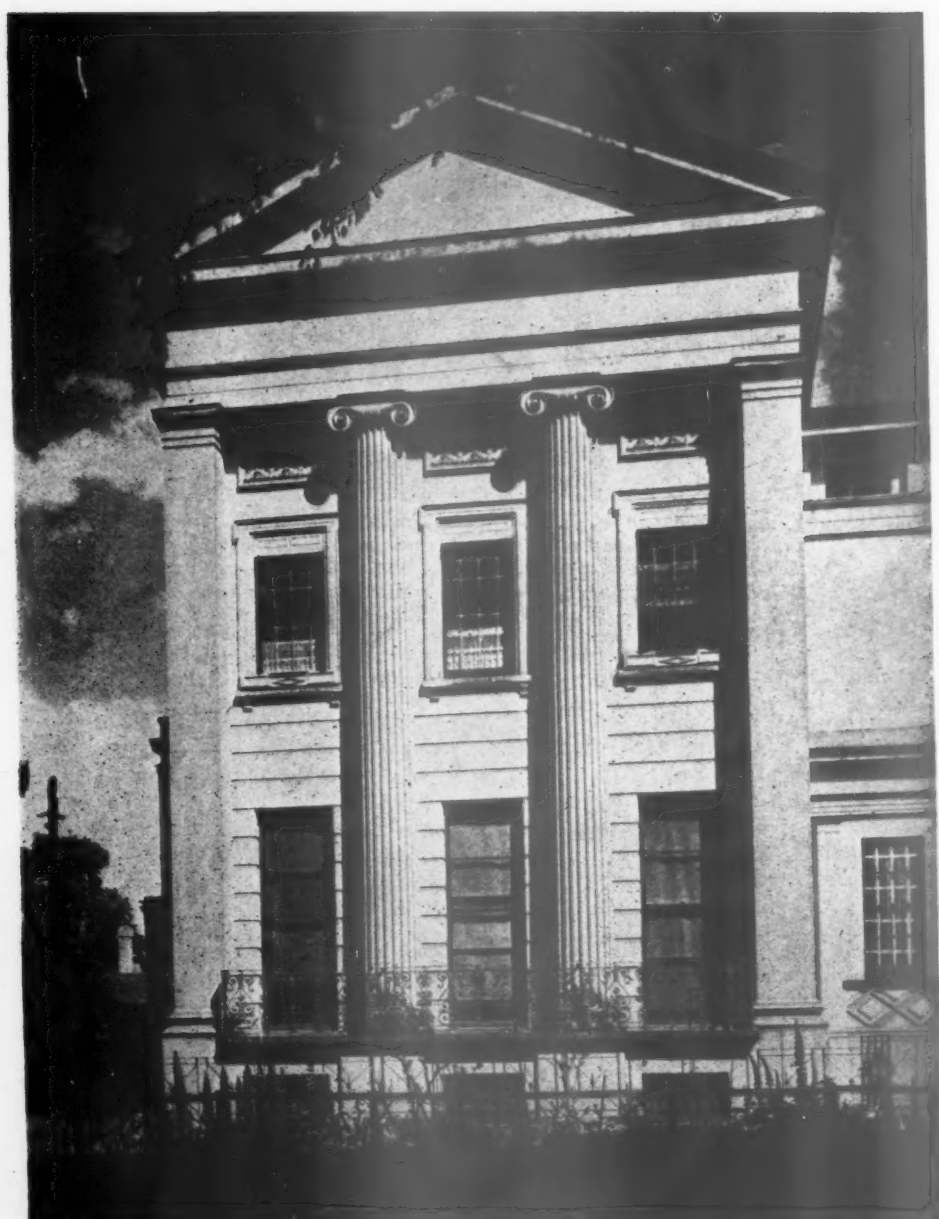
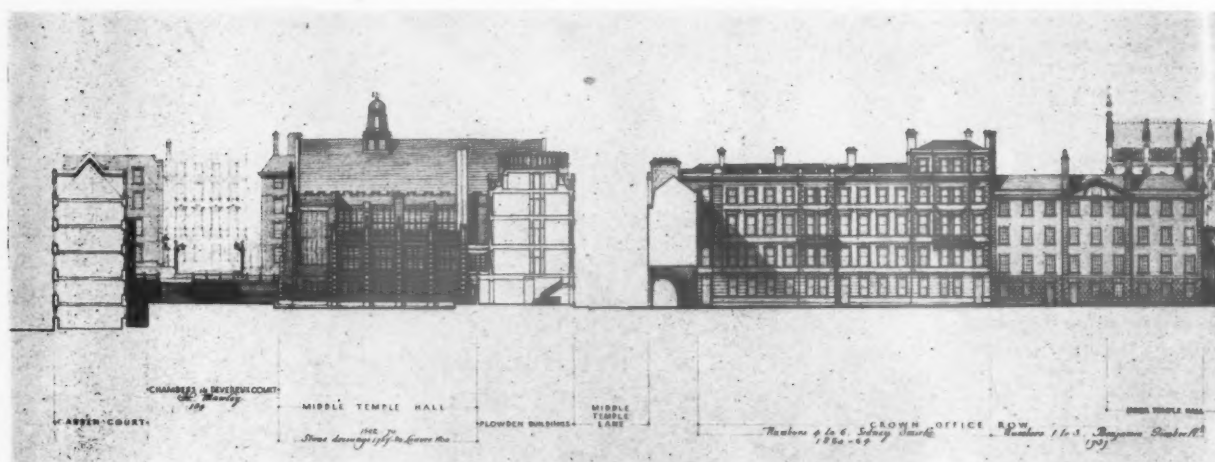


NATIONAL BUILDINGS RECORD EXHIBITION

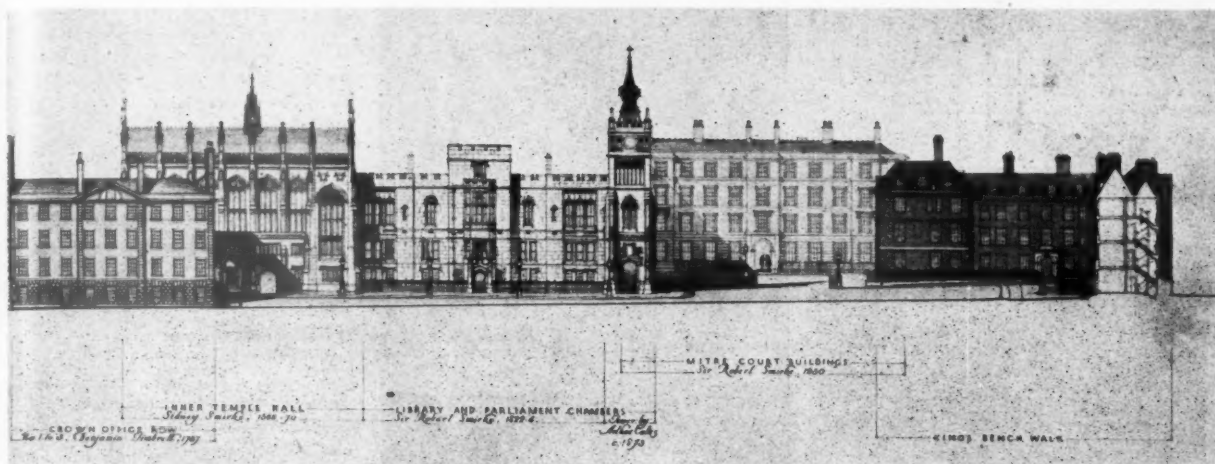


The photographs on this page are from the panel on Country Towns (Public Buildings). Left, fishermen's almshouses, Great Yarmouth, Norfolk : 1702. Above, detail of the almshouses, gable of the north wing. Below left, the Corn Exchange, Devizes, Wilts : 1857. William Hill of Leeds, architect ; Thorp of Leeds, sculptor. Below, gaol at Shrewsbury, Salop : 1787-93. Thomas Telford, architect.





To
 W
 J.
 T
 m
 in
 bu
 of
 cl
 pe
 C
 D
 eo
 B
 pe



Top, both pages, two drawings on one of the War Damage panels made in 1943 by J. D. M. Harvey of *The Temple, London*. The badly damaged Inns of Court have been made the subject of a comprehensive record in drawings and photographs, which has been built up from photographs and from surveys of damaged buildings before the debris was cleared. The three photographs on both these pages are from the panel on Terraces, Crescents and Villas. On the facing page, Dorset House, Pittville Ride East, Cheltenham: early nineteenth century. Below, the Paragon, Bristol: early nineteenth century. Right, a porch detail of the Paragon.



NATIONAL BUILDINGS RECORD EXHIBITION

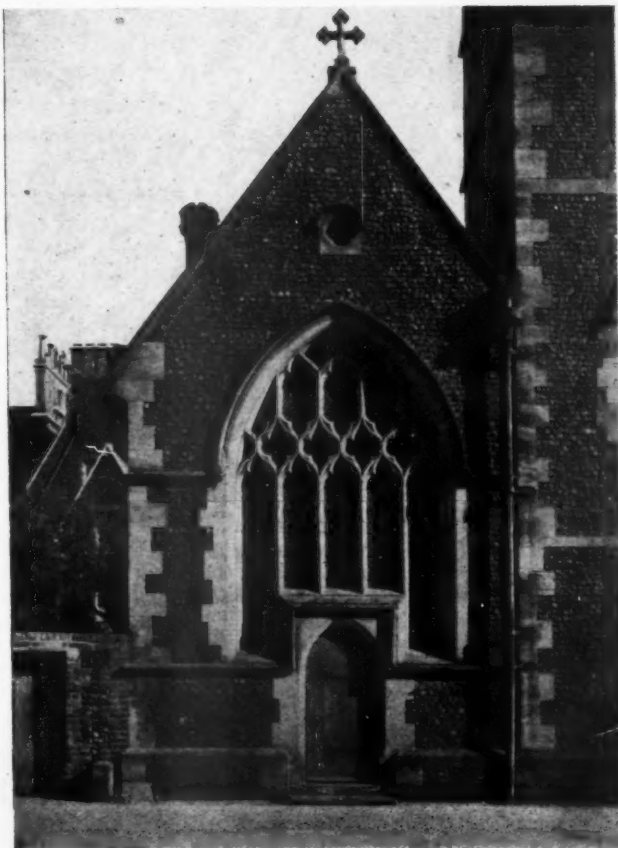


A page from the panel on Georgian Interiors. This panel is devoted to details of three important houses in towns which have been bombed. Left, a general view and a detail of the staircase at Fyde House, Boston, Lincs: 1727. Though the house has been damaged, the staircase remains unharmed. Below left, the South Room of Royal Fort House, Bristol, Glos, with its unusual Rococo plasterwork. Below, early nineteenth century French wall-paper in the dining-room at Marlborough House, Falmouth, Cornwall. Domestic interiors of architectural value are not always easy to locate. The NBR has, however, drawn upon the knowledge of local architects and antiquaries, often with unexpected and interesting results.





From the panel on Victorian Gothic. Some of the best works of the Gothic Revival (e.g., St. Alban's, Holborn, and St. Agnes's, Kennington) were destroyed in the Blitz, and the scarcity of good photographs of these buildings emphasized the existence of a serious gap in the record of English architecture. The NBR has since attempted to cover the best Victorian examples. Above, the dining-room fireplace at The Grange, Ramsgate, Kent: 1841. A. W. Pugin, architect. Right, St. Augustine's R.C. Church, Ramsgate: 1846-51. A. W. Pugin, architect.



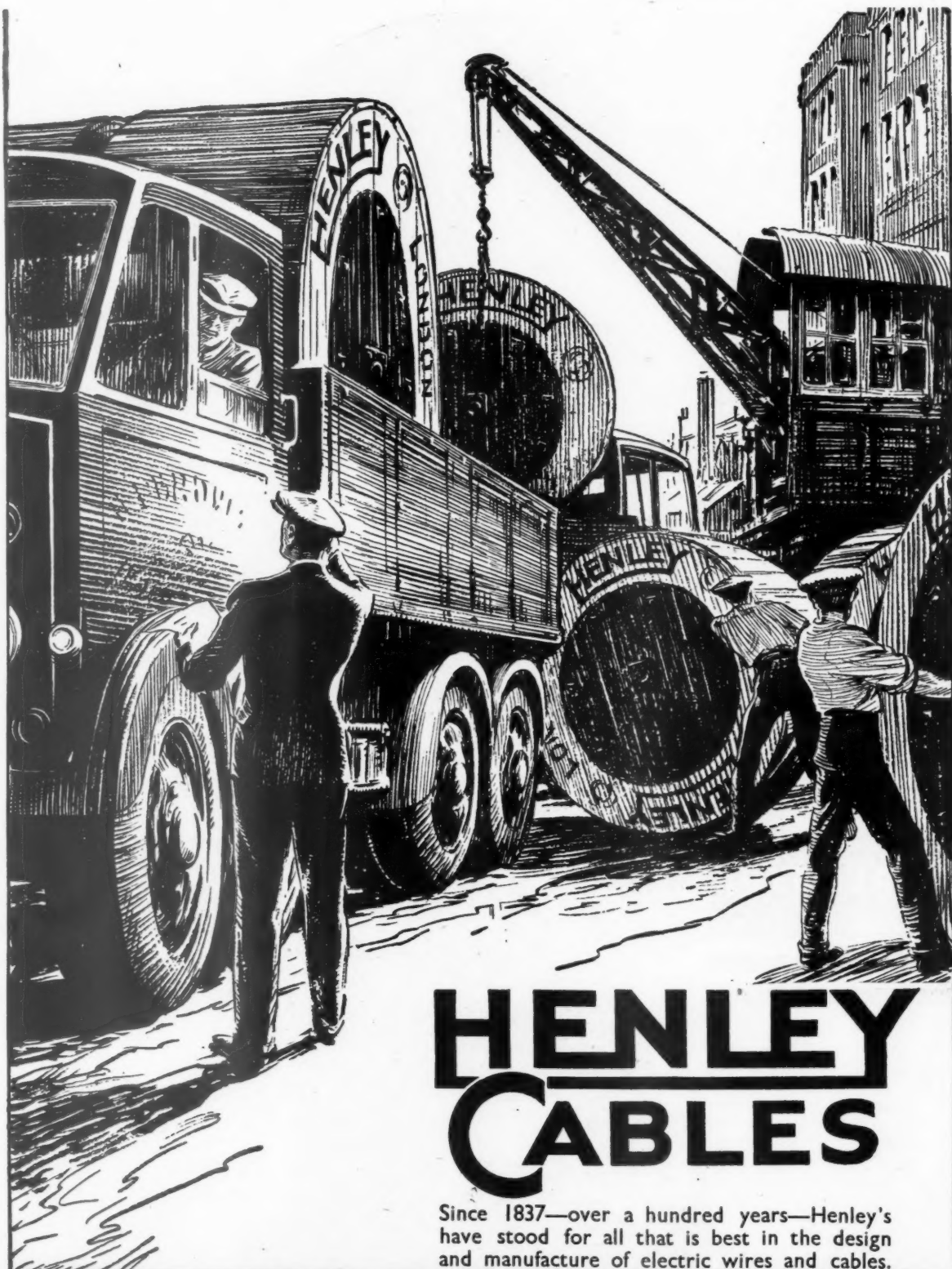
NATIONAL BUILDINGS
RECORD EXHIBITION



From the panel on Industrial Towns. The NBR gave early attention to these. The architecture they contain is often overlooked because of its unattractive setting, but much of it is both aesthetically and sociologically valuable, especially in imaginative early engineering work. Above, the roof of the Corn Exchange, Leeds: 1861. Cuthbert Brodrick, architect. Right, railway bridge over St. Nicholas Street, Newcastle-on-Tyne.



NATIONAL BUILDINGS
RECORD EXHIBITION



HENLEY CABLES

Since 1837—over a hundred years—Henley's have stood for all that is best in the design and manufacture of electric wires and cables.

W. T. HENLEY'S TELEGRAPH WORKS CO. LTD.

MILTON COURT • WESTCOTT • DORKING • SURREY

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

STEEL

WORK

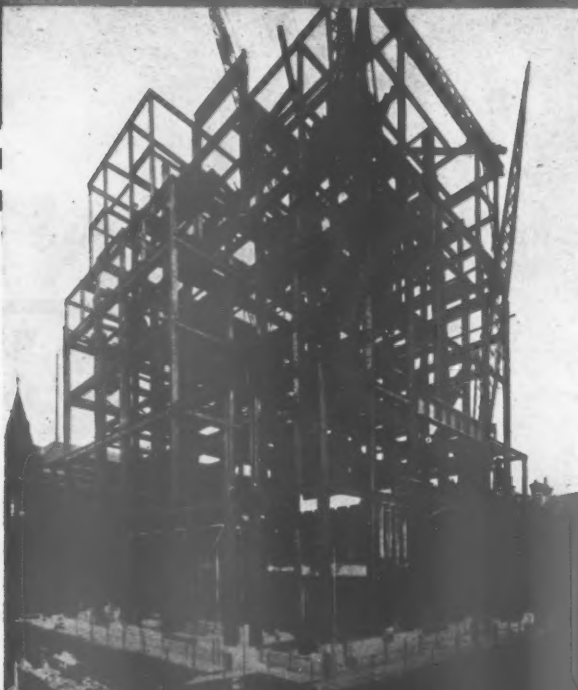


For All Constructional Needs

RUBERY-OWEN

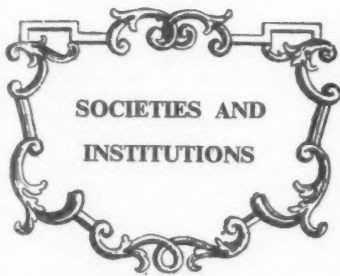
DARLSTON

S-STAFFS



LONDON: IMPERIAL BUILDINGS 56 KINGSWAY W.C.2

BIRMINGHAM 3: LOMBARD HOUSE, Gt. CHARLES ST.



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

NBR

Exhibition

June 1-July 15, at the National Gallery. Exhibition of photographs of buildings of architectural interest throughout the country taken during the past three years for record purposes. Sponsors: the National Buildings Record. The following outline of

the purpose of NBR is taken from the catalogue of the exhibition.

The National Buildings Record was set up in February, 1941, with the immediate object of assembling records of valuable buildings which had been or might be damaged in the course of the war. It was initiated at a conference convened by the Royal Institute of British Architects, and has received annually a grant from the Treasury. In addition, it has been generously supported by the Rockefeller Foundation, the Pilgrim Trust and the Leverhulme Trust. These foundations have made it possible for the NBR to develop fully the two complementary sides of its work—co-ordination and active recording.

CO-ORDINATION

It was known, at the start, that substantial parts of a record of English architecture existed in public and private hands. The most important of these was the Conway Collection of the Courtauld Institute of Art (University of London) and the Institute placed this at the disposal of the NBR for the duration of the war. The services of the Conway Librarian were also made available and the filing methods of the Conway Library adopted.

Further co-ordination has been effected principally by the maintenance of a General Index of photographs and another of drawings. These indexes, arranged topographically, cover important national collections such as that of the Victoria and Albert Museum and also local and private collections. In the case of collections of negatives situated in areas liable to attack, prints have, wherever possible, been acquired.

The current work of recording organizations has also been co-ordinated from the start. The Royal Commissions on Historical Monuments for England and Wales, whose normal work was suspended at the outbreak of war, obtained authority to collaborate with the NBR, and their diminished staffs have undertaken photography and measured drawing in various parts of the country. The Royal Commission on Historical Monuments (Scotland) has also contributed assistance in the northern counties of England.

The Central Council for the Care of Churches had, in 1941, already initiated a scheme for the photography of churches on a voluntary basis, either directly or through diocesan committees. Through this organization

amateur photographers have made a valuable contribution, the Central Council's activities being recorded on the NBR General Index.

The Warburg Institute associated itself with the aims of the NBR soon after the latter's formation and has worked in close collaboration. A member of the Institute's staff has conducted detailed photographic surveys of buildings of special artistic importance in the London area.

In addition, the work of local Archaeological and Field clubs and of individual amateur photographers throughout the country has, so far as possible, been directed into channels appropriate to the purposes of the NBR.

ACTIVE RECORDING

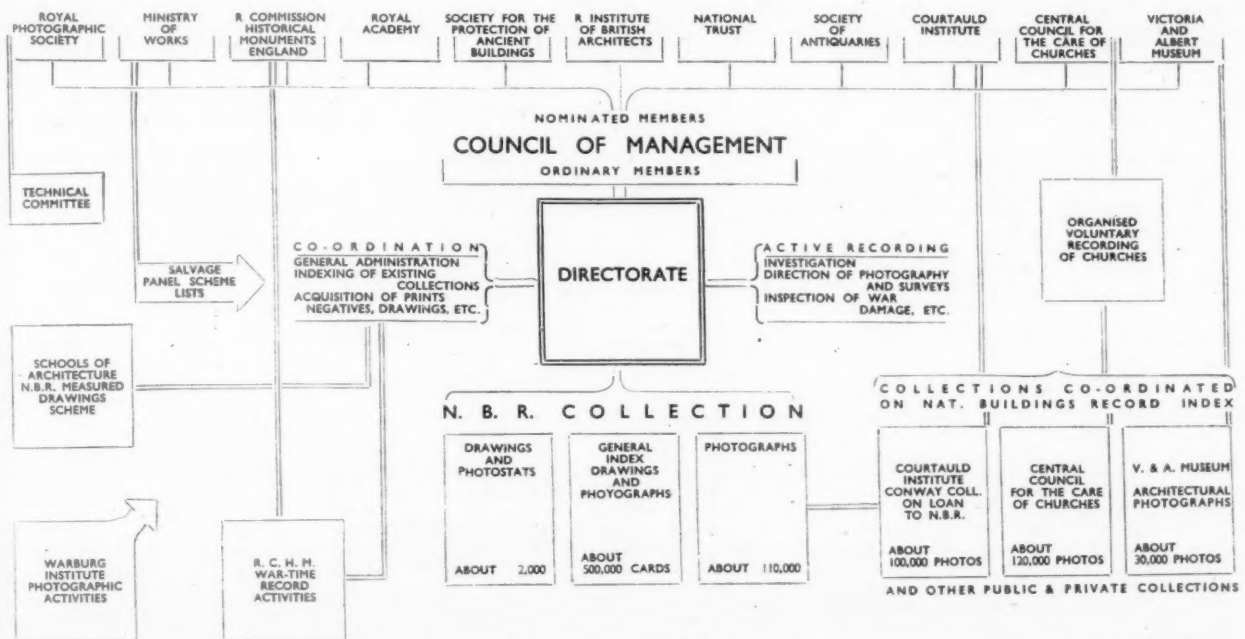
The main objective of the NBR's active recording is to obtain photographs and drawings of buildings not hitherto adequately dealt with. The first step was to draw up programmes of work—London, the industrial towns and ports being the obvious priorities. In due course the lists prepared by architects under the Ministry of Works Salvage Panel Scheme became available and these now provide a framework of information. Most of the places covered by NBR photographers have, however, been investigated by a member of the staff and instructions drafted on the spot. The knowledge of local architects and antiquaries has been an important source of information.

Damaged buildings of architectural merit receive attention whether previously photographed or not. Where the remains are likely to be cleared, a measured survey is obtained.

Measured drawings are made when urgently required, but the operation is, of course, too slow to keep pace with the photographic survey. Photostat copies of existing drawings form part of the collection, and students in the Schools of Architecture have been organized to assist the record so far as possible.

PRESENT SCOPE AND CONTENTS

At the present stage the NBR has recorded the important historic buildings in about 60 English towns and in certain coastal and other areas. About 25,000 photographs have been commissioned in the past three years. Purchases and gifts of prints or negatives, including those deposited by bodies co-ordinated with the NBR, account for over 100,000. Thus, with the Conway Collection's approximate total of 100,000, the photographic record stands at about 225,000 items. This



ORGANISATION OF THE NATIONAL BUILDINGS RECORD

does not include the totals of allied collections represented on the General Index.

THE NBR AND THE FUTURE

It is intended to proceed with the survey of English architecture, and arrangements are in hand to provide for the inclusion of architecture of the present day. No decision has yet been reached regarding the permanent establishment of the NBR. The form it has taken is directly due to the conditions under which it has come into existence; but the organization has been developed on the assumption that its work will be permanently available and useful to the public.

NBR STAFF

Director and Secretary: Walter H. Godfrey, F.S.A., F.R.I.B.A. *Deputy Director:* John Summerson, B.A.(ARCH.), A.R.I.B.A. *Conway Librarian:* Cecil Farthing, B.A.(LOND.). *Assistant:* Dorothy Stroud. ✎

NBR COUNCIL OF MANAGEMENT

Chairman: The Rt. Hon. Lord Greene, Master of the Rolls. *Vice-Chairman:* W. H. Ansell, M.C., F.P.R.I.B.A., Hon. Treasurer: Sir Charles Peers, C.B.E., F.B.A., F.S.A., etc. *Other members:* 23 in number.

HC

Churchill House

The Housing Centre published a **CRITICISM OF THE CHURCHILL HOUSE** in its Bulletin No. 95. Extracts are given below.

There is no doubt a tenancy of this house would be preferable to either a room or two in an old house coupling up with parents, or occupying partially war-damaged buildings which pressure for accommodation will necessitate, unless some rapid means of house-building is adopted.

The chief criticisms of the house have been directed against the planning. In itself this is economical of materials and closely related to the type of construction. It appears, however, to show very little knowledge of the requirements of the ordinary family, and would demand a very high standard of efficiency from the housewife. The use of the kitchen as the only means of access from the entrance, w.c. and bathroom to the living-room and bedrooms has now been altered, and a door from the hall into the living-room has been substituted for the door into the kitchen. This provides for an extended kitchen unit and improved hot-water circulation, but it ruins the comfort of the living-room by turning the space around the stove into a passage-way. The bedrooms are of a reasonable size and pleasant proportions, and are well equipped with cupboard space for clothes and linen. The living-room as it is planned at present is quite pleasantly proportioned and adequate for a very small household, though the stove projects rather awkwardly into it. The extra 6 in. in height, bringing the ceiling height to 7 ft. 6 in., will be a real improvement and remove the present feeling of oppression, besides improving ventilation. The glazing between kitchen and living-room gives a sense of space, and enables a mother to watch young children. The kitchen itself is well equipped although details are being improved. The inclusion of an outside door, leading directly into the kitchen, is an improvement asked for by many women, though in the original plan it did not seem necessary, and in exposed situations or harder climates it will need protection. The horror that many housewives express at the idea of coals or refuse being carried through the front door seems excessive, as there are many small flats which function well with only one door. It is more important that adequate storage space should be provided for the coals and dustbin.

The store and cycle shed, at present quite inadequate, is to be detached, and extra space

is to be provided for the hall, w.c. and bathroom. All these alterations obviously reflect the comments which have been received. They do not, however, produce a family house, or even a house in which a young growing family could normally be housed for ten years. The house, in fact, is far more suitable for elderly people who are not expecting an increase in family size, and whose household problems are not complicated by such items as children's washing or the provision of suitable meals for workers and for children. There is an increase in the numbers of elderly people in the population, and by housing them in separate dwellings, some relief is given to the general housing situation. On the other hand, it is families with young children who should have priority in obtaining good living conditions.

If the Government are prepared to spend more money in Exchequer grants in building 500,000 temporary houses, than they have spent between the two wars in building three times as many permanent ones, we must be satisfied that the best possible result is obtained and one which will not deflect finance or labour from the real problem. It might be more useful to make efforts to meet modern permanent housing requirements and also provide flexibility in plan types by modern methods of building, rather than wasting time and energy on a makeshift of doubtful value.

To sum up, the Ministry of Works have produced a useful experiment and their technical officers have built it to a plan which suits its own requirements of industrial design. We hope that our own, or other criticisms will not deter the Government from following the trial up, but we must now get down to questions of policy and planning, and be prepared to start again if necessary, to produce the right technical answer to the real social needs. The disadvantages of the separation of housing administration and design under one Ministry, construction under another, and sitting under a third, are shown up by this scheme. If the Ministry of Health, backed up by the public opinion now growing throughout the country, is allowed to put forward a definite and comprehensive policy on a high standard, the technicians ought to be able to accept the challenge and produce the right answer.

ABT

Churchill House

The Association of Building Technicians has submitted to the Minister of Health a 5,000-WORD REPORT ON THE CHURCHILL HOUSE (MOW's factory-produced emergency house of steel), (Price 6d.). A summary is given below.

1. We congratulate the Government on seeking new methods to help to solve the housing problem, on the building of a sample house, and the decision to act on criticisms received.
2. We believe the building of emergency houses to be justified in present circumstances and welcome the proposed State ownership.
3. For further development of prefabrication research is needed into other methods, the use of different materials and other plans, and reduction of cost. The rights of building industry trade unions must be safeguarded.
4. The house should be used for married couples only, or at most for families with one child, and no one should be allowed to occupy it for a more than a limited period.
5. The planning has several defects, the chief being the relation of bathroom and w.c. to bedrooms and the access to the living-room. A 3-bedroom house, too, is needed.
6. The main fault of the construction is that it is noisy; steps are suggested to improve this. The heat insulation should be satisfactory. Arrangements for heating water in summer must be improved. The equipment

is well planned but its quality is poor in some instances.

7. Correct siting depends on the announcement of Government policy for the siting of all new housing, as part of the planning of the whole country. This policy, if it is to be effective, must be based on the nationalization of the land.

8. Though we welcome the emergency house, we should not allow it to divert attention from the more important programme of permanent houses, the present proposals for which are totally inadequate, are much below the capacity of the building industry, and must be drastically revised.

LMBA

USA Mission Enquiry

Since the publication of the report of the Ministry of Works recent Mission to Study Building Methods in the USA, the London Master Builders' Association has had a Committee at work considering in detail to what extent, and how, American building methods could be applied to building practice in this country. The Association has now considered the report of its Committee, and has issued the following statement:

1. The architect should impress on the client the vital necessity of making up his mind with regard to the proposed structure in all its details before tenders are invited. He should be told that alterations in the drawings or work not only cause extra expense and inefficiency but delay completion of the work. The builder cannot be adequately recompensed for the loss entailed by alterations and variations from contract.
2. The architect should insist on adequate time for the preparation of all drawings, details and specifications necessary for the contract, and the client should be told that time expended on these at the start is well spent and enables the work to be organized from the start and ultimately leads to earlier completion and economy.
3. The pulling down of old buildings and new construction work should be let as one complete contract to one builder, and if the existing buildings are gainfully occupied they should not be vacated until the architect in consultation with the builder is satisfied that all the main essentials for the new building have been organized and prepared.
4. The position and duties of the quantity surveyor should be explained to the client at an early date, and he should be appointed by and paid direct by the building owner, for preparation of preliminary estimates and bills of quantities, interim valuations and adjusting the account at completion.
5. The architect should be paid a fee by the client to cover all work necessary to design the job from start to finish, so that the quantity surveyor has full information, including particulars and drawings of steelwork, reinforced concrete, heating and ventilating, electrical work and lifts, to enable him to take out all the quantities needed to enable the builder to estimate the cost and visualize the complete structure.
6. The quantity surveyor should insist on fully detailed drawings being supplied by the architect so that detailed bills of quantities, in accordance with the standard method of measurement, can be taken out, and the quantity surveyor shall certify all drawings supplied to him, and such certificates shall be on all contract drawings.
7. The growing custom of taking off "guessed" or provisional quantities for work anticipated, for which proper drawings have not been supplied, should cease.
8. All work should be in the hands and under the control of the builder, and detailed

ne
e-
all
he
be
on

ce,
m
nt
re
he
ust

y
ort
on
he
s'
at
at
ng
a-
of
he

ent
ith
its
uld
or
in-
rk.
ced
nd
ate
gs,
the
hat
vell
zed
lier

new
one
the
ney
in
hat
ing

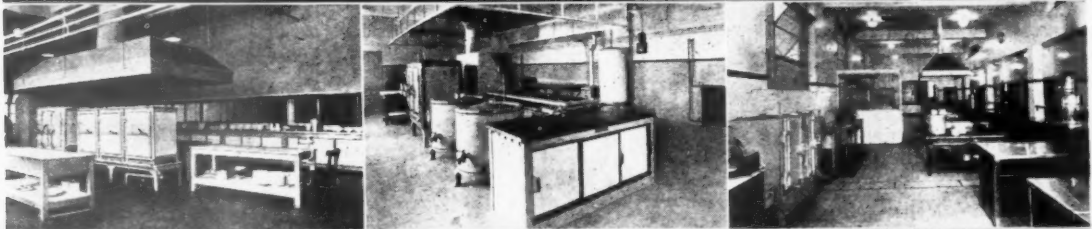
tity
at
ted
ner,
and
and

the
ign
tity
ing
re-
ing,
ake
the
the

on
the
ies,
of
the
ings
be

off
ork
ave

and
iled



"Stotts" of Oldham

drawings of all services, with full specifications, should be furnished to enable him to obtain estimates for all the work at competitive prices, and the builder should obtain all the estimates.

9. The client should make up his mind what he wants at the beginning, and once the job has started structural alterations should not be permitted. The client should be made to appreciate that he has to pay for the loss and disorganization consequent on alterations.

10. The quantity surveyor's fees for all alterations should be paid for by the client direct and not included in the variations account. The client should be made aware of the effect of alterations by the contract providing for an increasing percentage to be added to the cost of all alterations—this to pay for the disorganization caused and to discourage him from changing his mind.

11. Steps should be taken to encourage a keener interest by the operatives in their work so as to give greater output.

12. More use should be made of progress schedules by exhibiting them in prominent positions on the works so that the interest of the operatives may be aroused as to the progress of the work. Also copies should be furnished so far as applies to their particular work to all sub-contractors, and conferences of all parties concerned should be held on the job at frequent intervals.

PUBLICATIONS RECEIVED

The Missing Technician. John Gloag. (Allen and Unwin, 7s. 6d.).

Concrete Surface Finishes. Gray and Childe. (Concrete Publications).

Concrete Railway Sleepers. (British Standards Institution, 2s.).

A Residential Unit for Town and Country Planning. C. B. Fawcett. (University of London Press, 3s.).

Looking Ahead: Foundations for Housing. (Conservative Party, 3d.).

Architect's, Builder's and Contractor's Pocket Book. W. H. Fowler. (Scientific Publishing Co., 7s. 6d.).

Planning Our New Homes. (HMSO, Edinburgh, 3s.).

Architecture for Children. Jane and Maxwell Fry. (Allen and Unwin, 7s. 6d.).

Fine Building. Maxwell Fry. (Faber, 15s.).

Post-War Timber Supplies for the Building Industry. (EJMA).

A National Water Policy. (HMSO, 6d.).

The Chemical Seasoning of Timber. (TDA).

They That Build the City. Richard Evans. (Richard Evans, 1s.).

Housing and Health. Sir John Orr and Frank Wells. (Dent, 6d.).

Houses and Towns after the War. Elizabeth McAllister. (Dent, 6d.).

Ways and Means of Rebuilding. Donald Tyerman. (Faber, 8s. 6d.).

Principles of Good Lighting. (Illuminating Engineering Society, 1s.).

The Lighting of Public Buildings. (Illuminating Engineering Society, 1s.).

The Lighting of Schools. (Illuminating Engineering Society, 1s.).

House Construction: Post-War Building Studies, No. 1. (HMSO, 2s.).

Standard Construction for Schools: Post-War Building Studies, No. 2. (HMSO, 6d.).

Plastics: Post-War Building Studies, No. 3. (HMSO, 1s.).

Gas Installations: Post-War Building Studies, No. 6. (HMSO, 6d.).

Steel Structures: Post-War Building Studies, No. 7. (HMSO, 6d.).

Reinforced Concrete Structures: Post-War Building Studies, No. 8. (HMSO, 6d.).

Pre-stressed Reinforced Concrete. Kurt Billig. (Knapp, Drewett, 21s.).

Sunlight: Draft Code of Practice. MOW. (BSI, 6d.).

Ventilation: Draft Code of Practice. MOW. (BSI, 6d.).

Precaution Against Noise: Draft Code of Practice. MOW. (BSI, 2s.).

Precaution Against Fire: Draft Code of Practice. MOW. (BSI, 2s.).

The Use of Standards in Building. MOW. (HMSO, 6d.).

Reinforced Concrete Simply Explained. Oscar Faber. (Oxford University Press, 6s.).

Simple Examples of Reinforced Concrete Design. Oscar Faber. (Oxford University Press, 6s.).

Fuel Economy by Local Authorities. Domestic Fuel Memo. (Ministry of Fuel and Power).

Fuel Economy in Hospitals and Institutions. Domestic Fuel Memo. (Ministry of Fuel and Power).

Fuel Economy in Public Baths and Wash Houses. Domestic Fuel Memo. (Ministry of Fuel and Power).

Rural Housing: Third Report of the Rural Housing Sub-Committee of the Central Housing Advisory Committee. MOH. (HMSO, 1s.).

The Peak District, a National Park. (Joint Committee for the Peak District National Park, 6d.).

Reports on the Control of the Use of Land and the Administrative and Financial Problems of Town Planning. (West Midland Group on Post-War Reconstruction and Planning, 1s.).

The Price of Full Employment. B. Seebohm Rowntree. (Liberal Publication Dept., 3d.).

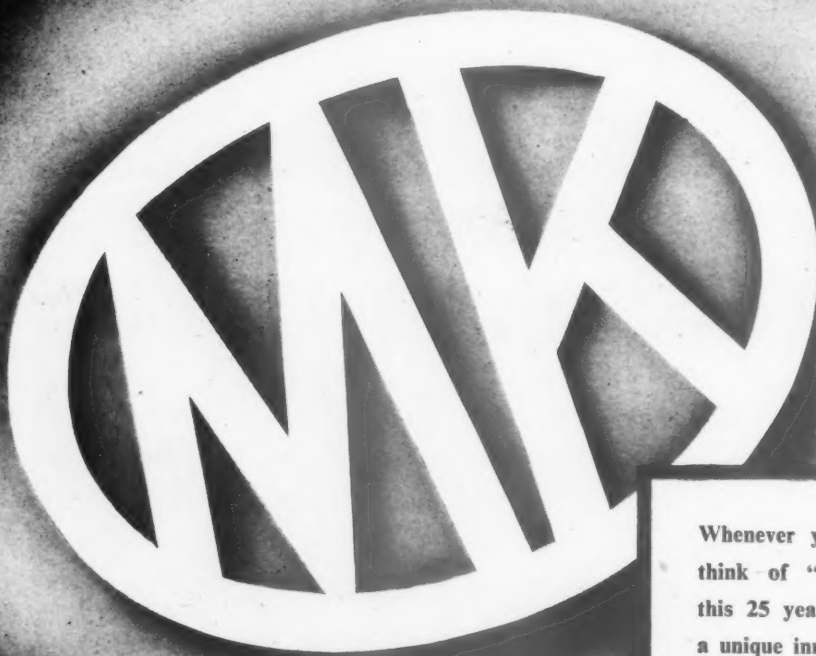
Post-War Building. Alfred C. Bossom. (J. M. Dent, Design for Britain Series, No. 27, 6d.).

Housing Societies. Reginald Browne. (J. M. Dent, Design for Britain Series, No. 35, 6d.).

A Hundred New Towns. A. Trystan Edwards. (J. M. Dent, Design for Britain Series, No. 36, 6d.).

Twelve in Search of a House: A Symposium. (J. M. Dent, Design for Britain Series, No. 37, 6d.).

Physical Reconstruction in Britain; a Memorandum on Housing after the War. (National Federation of Registered House-Builders, Report of Council to General Meeting, March).



M. K. ELECTRIC LTD.
EDMONTON N.18

Whenever you see the symbol "M.K." think of "Multi-Kontakt." For upon this 25 year old invention incorporating a unique inner construction of contacting tongues has been built the world-wide reputation for reliability which "M.K." Socket Outlets enjoy to-day.

FIRE PROTECTION AND INSULATION OF STEEL and CONCRETE BUILDINGS

—Sprayed Limpet Asbestos
gives maximum efficiency
and fire endurance

Full particulars from :

J. W. ROBERTS LTD.

MIDLAND WORKS

ARMLEY

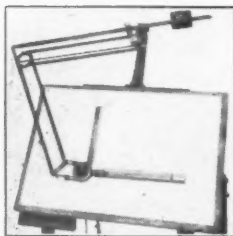
LEEDS 12

Telephone Leeds 38905

"MAVITTA"

Drafting Machines & Tables

Various types and sizes.



As supplied to large and small Drawing Offices
all over the country.

British Made.

THE MAVITTA DRAFTING MACHINES LTD.

Anchor Works, Park Road, Aston, Birmingham, 6.

Phone—East 0482.

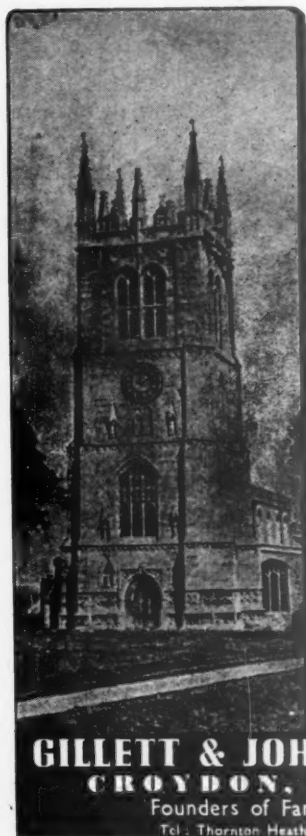
Don't Grumble too much

We don't mind your
grumbling at us. A good
grumble is an Englishman's
right; a Scotsman's de-
light; a Welshman's relief;
and an Irishman's neces-
sity; but don't grumble
too much. We are all
out to give service to the
Country and to you.

Please remember
**ESSENTIAL WAR PRODUCTS
MUST COME FIRST**



DOCKER BROTHERS, LADYWOOD, BIRMINGHAM, 16
London Office: 17, BERNERS STREET, LONDON, W.1.



TOWER CLOCKS and BELLS

CLOCKS for
COUNTY HALLS
CIVIC CENTRES
CHURCHES, Etc.

*Ringling Peals, Chimes
and Carillons*

GILLETT & JOHNSTON LTD.
CROYDON, SURREY

Founders of Famous Bells
Tel. Thornton Heath 3221 (5 lines)

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

★ **ADASTRA** ★
LIGHTING STANDARDS

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

REINFORCEMENT BY Mc CALL'S

**McCall's
MATOBAR**
WELDED FABRIC REINFORCEMENT

McCALL & CO. (SHEFFIELD) LIMITED • TEMPLEBOROUGH • SHEFFIELD and at LONDON

SRD'S

LLOYD BOARD



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

The best practice in LEAD

is fully detailed in

*44 Information sheets

Copies of sheets of special interest may be obtained free of charge by architects, housing authorities, builders, plumbers and students who will write for the list of Lead Technical Publications and indicate thereon the sheets they wish to receive. Any number of sheets is available in this way without charge. Alternatively "complete sets" are obtainable at a charge of 5/-. Lead Industries Development Council, Eagle House, 109 Jermyn Street, London, S.W.1.

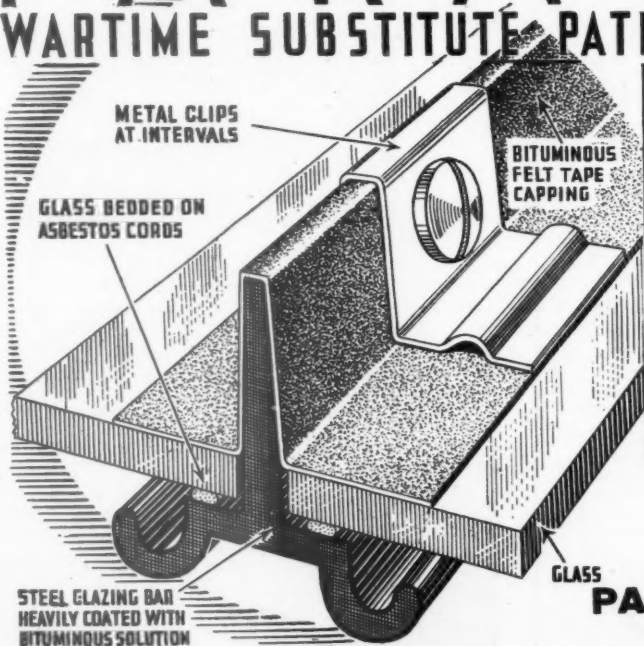
★Owing to war conditions, it is greatly regretted that considerable unexpected delay is occurring in the delivery of reprints of Information Sheets and those applying are requested to note that it may be some time before the sheets they ask for can be sent.

h

PARAGON

TRADE MARK

WARTIME SUBSTITUTE PATENT ROOF GLAZING



is officially recognised by the various Government Departments to meet war-time needs. Certain of the peace-time features of the "Paragon" System are still retained and, when fitted with mechanically operated

PARAGON

HORIZONTAL SLIDING OBSCURATION SHUTTERS

which provide complete black-out or daylight in 30 seconds, it fulfils the requirements of factories engaged on essential work without periodic maintenance.

Further particulars on application.

PARAGON GLAZING CO. LTD.

Glass Roofing Manufacturers and Contractors
1 VICTORIA STREET, WESTMINSTER, S.W.1
*Phone: ABBey 2348 (Private Br. Exch.). *Grams: "Eclairage, Sowest, London."

CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements

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

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: 75 Batson Place, London, S.W.1. Tel.: Sloane 5615 981

CITY OF LEICESTER EDUCATION COMMITTEE.

COLLEGE OF ART.

SCHOOL OF ARCHITECTURE.

Applications are invited for the post of Studio Instructor for the Certificate Course in the School of Architecture.

Salary in accordance with the Burnham Scale.

Application should be made by letter, accompanied by copies of three recent testimonials, to the Registrar, College of Art, The Newark, Leicester, not later than 21st June, 1944.

H. S. MAGNAY,
Director of Education.

Education Offices,
Newark Street,
Leicester.
4th June, 1944.

BIRMINGHAM CENTRAL TECHNICAL COLLEGE.

SUFFOLK STREET, BIRMINGHAM, 1.

Principal: DR. D. S. ANDERSON.

DEPARTMENT OF BUILDING AND STRUCTURAL ENGINEERING.

Applications invited for full-time temporary appointment as lecturer in Building Construction and Ancillary subjects to National Certificate and Diploma standard. Particulars of the appointment and form of application will be sent by the Principal on receipt of a stamped addressed envelope.

P. D. INNES, Chief Education Officer.
685

CITY OF MANCHESTER.

HOUSING COMMITTEE.

Applications are invited for the appointment under the Housing Committee of Temporary Architectural Assistants. Applicants must be registered Architects, and must be prepared to devote the whole of their time to the position.

The salary for these positions is £6 to £7 per week (plus bonus, which at present amounts to 19s. per week), according to experience, and after six months' service the successful candidates will be required to contribute to the Corporation's Superannuation Fund.

Applications, stating age and experience, together with copies of two testimonials, must be submitted to the Director of Housing not later than Saturday, 24th June, 1944, and endorsed "Temporary Architectural Assistant."

Canvassing in any form, oral or written, direct or indirect, is prohibited, and copies of applications must not be sent to any member of the City Council.

R. H. ADCOCK,
Town Clerk.

Housing Department,
Town Hall,
Manchester, 2.
June, 1944.

666

COUNTY BOROUGH OF EASTBOURNE.

APPOINTMENT OF SENIOR ASSISTANT ARCHITECT.

Applications are invited for the post of Senior Assistant Architect at a salary of £425, rising to £475 per annum, by two annual increments of £15 and one of £20.

Applicants should be Associates of the R.I.B.A., and should have had considerable experience in the design and construction of Schools, Public Buildings, and Housing Estates.

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

Applications endorsed "Senior Assistant Architect," stating age, qualifications, previous experience, and position in respect of National Service, together with copies of three recent testimonials, should reach the undersigned not later than 12 noon on Monday, July 3rd, 1944.

F. H. BUSBY,
Town Clerk.

Town Hall,
Eastbourne.
June, 1944.

673

Classified Advertisements continued on page xxxviii

APPOINTMENT VACANT

Manufacturing Company, whose building products and patented systems are extensively used in building construction, requires immediately the services of an experienced insulation technician to develop the application and sales of insulating and acoustical materials.

Progressive post for applicant with suitable technical qualifications and administrative ability.

Box No. 663

ELLISON
Electric Switchgear

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

Established over 100 years.

J.W. GRAY & SON LTD.

"FRANKLIN HOUSE," 37 RED LION ST., HIGH HOLBORN, LONDON, W.C.1.

Phone: CHANCERY 8701 (2 lines).

LIGHTNING CONDUCTORS

Manufacturers and Erectors

TURQUOISE will RETURN



While today's wartime need for Austerity has necessitated the temporary withdrawal of TURQUOISE—the preferred drawing pencil made by EAGLE—the coming of peace will demand its speedy return

Meanwhile

EAGLE

"Chemi-Sealed"

TURQUOISE

DRAWING PENCILS

Made in England by
EAGLE PENCIL CO., LONDON, N. 17

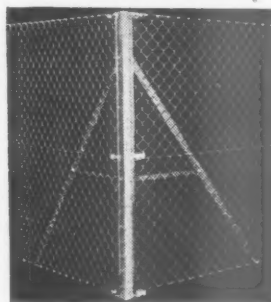
—make do with the next best thing, an unpolished EAGLE Pencil designated "WAR DRAWING" and available from your usual supplier in 7 degrees—2B to 4H

WHITE FACING BRICKS

(S. P. W. BRAND)

TELEPHONE & TELEGRAMS
BULWELL 78237-8

M. McCARTHY & SONS, LTD
BULWELL • NOTTINGHAM



Practical and Efficient

IRONWORK FENCING & GATES

for all enclosures, ensuring security and protection to property.

BOULTON & PAUL LIMITED
NORWICH



DUPLICATE YOUR STAFF!

Have them in two "places" at the same time—at their work and in your office to confer with you when necessary. How? By a Modern Loudspeaker Telephone system.

Modern Telephones can still do this for you—with speedy installation if you are on essential work. Enquiries invited.

★ Systems available from three instruments onwards, installed and maintained for a weekly rental of a few shillings.

MODERN

TELEPHONE COMPANY LTD.

(DEPT. D) 139, TOTTENHAM COURT ROAD, LONDON, W.1

Telephone: EUSton 3994/5



**THIS SEAL
IS A WARRANTY
OF A MORTGAGE
SERVICE ON
UNSURPASSED
TERMS**

**NORTHAMPTON TOWN
AND COUNTY BENEFIT
BUILDING SOCIETY**
85 ABINGTON STREET
NORTHAMPTON
H. PRESTON F.C.I.S. SECRETARY

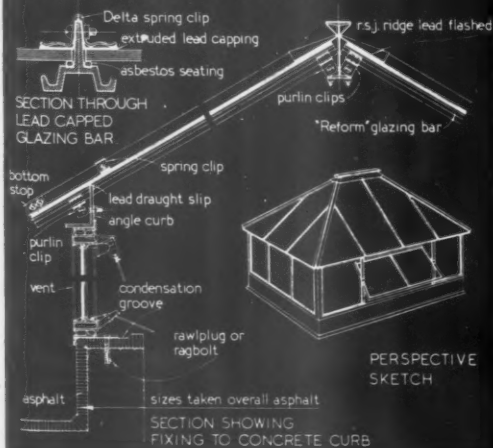
HAYWARDS

REFORM LANTERN LIGHTS ETC

Regd. Trade Mark

HAYWARDS Roof Lights include Lantern Lights, Skylights, Conical Skylights, Dome Lights, Laylights and special types to cover all architectural requirements. The "Reform" Glazing Bar is of particular merit and is generally approved throughout the industry.

HAYWARDS No 421 TYPE "REFORM" LANTERN LIGHTS

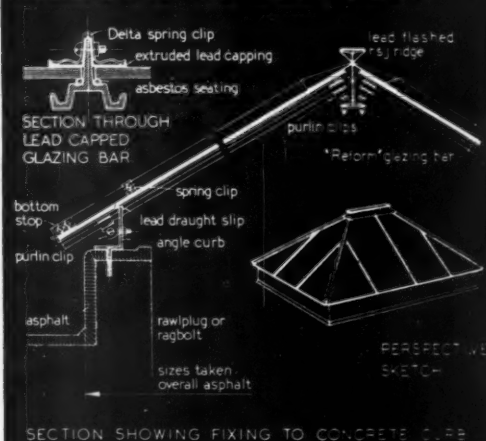


Enquiries are invited for present or post-war requirements. We shall be happy to assist you as far as possible on work in preparation.

CAN WE SERVE YOU?

HAYWARDS LTD.
UNION ST., BORO',
LONDON S.E.1
Telephone: WATerloo 6035/9

HAYWARDS No 431 TYPE "REFORM" SKYLIGHTS



Architectural Appointments Vacant

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

PROMINENT FIRM of London architects requires a Senior Assistant, capable of office control. Must have varied experience, and be first class draughtsman. Position with post-war prospects for the right man. Box 668.

JUNIOR ASSISTANT (Male) required in architects office for drawing, tracing, etc. Apply, stating age, salary and experience to Henry C. Smart & Partners, Architects and Surveyors, 251/253, Finsbury Pavement House, 120, Moorgate, E.C.2. 671

Architectural Appointments Wanted

JUNIOR DRAUGHTSMAN (aged 17), 4 years' technical college (building) training; some experience; wants position in either architect's office or drawing office in London area. Box 311.

ASSISTANCE OFFERED by A.R.I.B.A. (exempt) in Birmingham and district. Box 312.

ASSOCIATE, medically discharged from the Army and now free, with over 20 years' varied experience, since leaving public school and architectural association, desires working partnership where real prospects of post-war work exist. Advertiser is useful designer and first-class draughtsman. London or country preferred. Reply Box 313.

ARCHITECT (registered), L.R.I.B.A. quantity surveyor, desires responsible position with post-war prospects. Experienced housing, factories, licensed premises, hospitals and nurses homes, alterations to existing buildings, working drawings, details, specifications, bills of quantities, checking accounts, land surveying and levelling, etc. Salary £450 p.a. Box 314.

CHARTERED ARCHITECT, 35 (school trained), on deferred service with RAFVR, seeks position in Yorkshire. Specialist in school design and quantities. Salary by arrangement. Box 315.

TWO COMPETENT DRAUGHTSWOMEN, third year students Regent Street Polytechnic School of Architecture, want office experience with architect or town planner, during summer vacation, starting July 31, London. Box 316.

Other Appointments Vacant

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

ADVERTISER would like to contact Craftsmen and Designers able to do part-time work for metalwork of all kinds. Box 660.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 6d.

CONSULTANT available to advise on Schemes for Sanitary Services, Drainage, Plumbing, Heating, etc., for new construction or adaptations. Box 672

Planning

As originators of the Auto-Recorder System of Machine Milking we have had extensive experience of planning layouts to accommodate the new technique. The service of our Technical Department is available to any Architect planning or modifying farm buildings for this purpose. Write in confidence to:—The Planning Dept., Gascoignes (Reading) Ltd., Gascoigne House, Berkeley Avenue, Reading. 603

Competitions

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

GOLDERS GREEN, NEW HOSPITAL BUILDINGS

The Buildings and Estates Committee of the Manor House Hospital, Golders Green, London, N.W.11, invite architects to submit, in competition, designs for a Women's Section of the Hospital, to be erected on a site in North End Road, opposite the existing Hospital buildings.

Accommodation:—

(a) 72 Beds.

(b) Out-Patients' Department and Dispensary.

(c) Nursing and Domestic Staff.

Premiums: £500, £300 and £150.

Last day for submitting designs: 12th October, 1944.

Last day for questions: 12th August, 1944.

Assessor: Sir Giles Gilbert Scott, R.A.

Conditions of Competition may be obtained on application to The Secretary, The Manor House Hospital, Golders Green, London, N.W.11. Deposit £1. 670

For Sale

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

INSTRUMENTS. Presentation case by Stanley, containing very complete set of drawing instruments, scales, paints, etc., on three trays and drawer, in brass bound oak case. Pre-war price £53 10d. The contents are in new condition, only one or two of the instruments having been used. Detailed particulars upon request. What offers? Box 669.

Miscellaneous

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

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

ARCHITECTURAL METAL WORK. Advertisers are prepared to consider purchase of goodwill of an established business for post-war development. Full particulars in confidence to Managing Director, Box 659.

FENCING AND GATES of every type, supplied and erected. Specialists in chain link. Boulton & Paul, Limited, Norwich. 662

TOWN PLANNING AND ARCHITECTURAL MODELS MADE TO SCALE. Estimates given. D. T. Johnston, Wick House, Horsham Road, Dorking. 667

Educational Announcements

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

R.I.B.A. QUALIFYING EXAMINATIONS

Mr. C. W. Box, F.R.I.B.A., M.R.San.I.

Courses by Correspondence and Personal in Studio.

115, Gower St., London, W.C.1.

Telephone: Euston 3305 and 3906.

SOUND INSTRUCTION by Postal Method

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

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

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

Special Courses for the Diplomas

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

Special Terms for members of H.M. Forces.

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

INTERNATIONAL

CORRESPONDENCE SCHOOLS, LTD

Dept. 141, International Buildings

KINGSWAY, LONDON, W.C.2



WAXED KRAFT THE CHEAPEST
EFFICIENT BUILDERS' & CONCRETERS' PAPER

Sample Prices and Technical Information from
WAXED PAPERS LIMITED
NUNHEAD LANE, LONDON S.E.15

BRAITHWAITE
PRESSED STEEL TANKS
BRAITHWAITE & Co., ENGINEERS LTD.
London office, Temporary address:
35, KINGS HOUSE, HAYMARKET, S.W.1
Telephone: WHI 3993. Telegrams: Braithk-Plema

STEELWORK BY SHARMAN & SONS
SWAN WORKS, HANWORTH, MIDD.
'Phones: Feltham 3007. Sunbury 2367
'Grams: "Sherman, Feltham."

FOR WINDOWS, STAIRS & DOORS
And all Types of Manufactured Woodwork

Telegrams: "NEWSUMS, LINCOLN"
Telephone: 812 (4 lines)

NEWSUMS OF LINCOLN

H. NEWSUM SONS & CO., LTD. LINCOLN.
Mills also at GAINSBOROUGH and SHEFFIELD



TRAFFOLYTE for WALL PANELLING AND DOORS • FURNITURE AND COUNTER TOPS

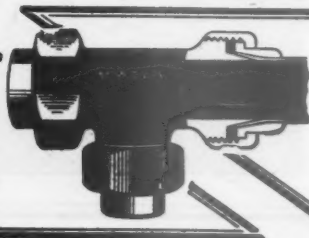
METROPOLITAN-VICKERS ELECTRICAL CO. LTD., TRAFFORD PARK, MANCHESTER, 17.

W/P201

SAMPLES AND PRICES FREE ON REQUEST

Phone: DEA. 4754

Grams: DONABROW



THE BROWNALL JOINT FOR LIGHT GAUGE COPPER PIPES

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

DONALD BROWN (Brownall) LTD. Lower Moss Lane, MANCHESTER 13

es
na
th
RS
1.15

E
KS
Ltd.

Phone

N
DX

om.

S
rk

TD

FIELD

Z.