

Before the War, Austins were known throughout the trade for their delivery of standard windows from stock. Since the War their energies have been directed to "seeing the job through" in the fulfilment of Government Contracts. For the years ahead, Austins are laying the foundations *now* to meet the imperative demands which the building industry will make upon their organisation, if those who have served are to have the homes they require. The Austin organisation will be ready to meet those demands, however great, however imperative.

AUSTINS
OF EAST HAM

LONDON, E.6

[LIMITED]

GRAngewood 3444



The announcement of the Government's proposal to set up a Boundary Commission for Local Government areas is certain to provoke sharp discussion in and out of council chambers. Whatever the final decision, government by councils of elected citizens will remain a feature of British local administration. The importance of their work calls for careful consideration of the conditions in which it is to be carried out. Dull and dingy council chambers are not conducive to enlightened discussion. Decorative schemes should be architecturally 'quiet' and pleasing. For such work "Dulux"—used extensively before the war for municipal buildings—will offer architects, builders and decorators an excellent choice when peace returns. "Dulux" is only one of the many high quality paints made by I.C.I., behind all of which are technical research and colour advisory services freely available to professional and practical men.

IMPERIAL CHEMICAL INDUSTRIES LIMITED
PAINTS DIVISION • SLOUGH, BUCKS.

(successors to Nobel Chemical Finishes Ltd.)

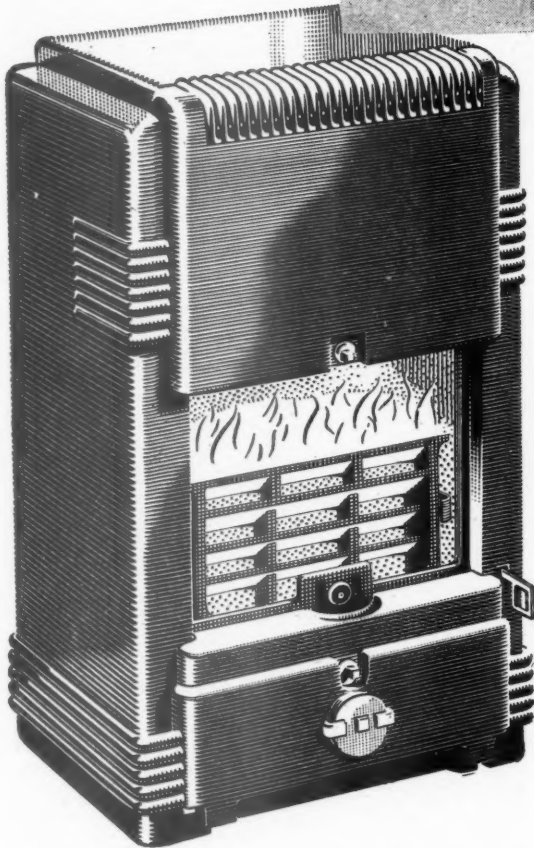
Telephone: Slough 23851



NEW-FASHIONED VISIBLE HEAT

EXAMPLE

THE OTTO HEATING STOVE

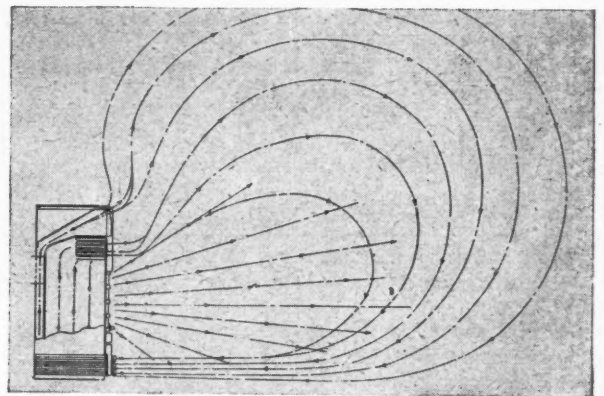


SPECIFICATION: (TWO SIZES)

FOR OTTO No. 1 - - - - -	Height 26"
	Width 17½"
	Depth 13½"
Height to top of flue outlet	18½"
Diameter of flue suitable for 4½" or 5" flue pipe - -	4½"

FOR OTTO No. 2 - - - - -	Height 30"
	Width 17½"
	Depth 13½"
Height to top of flue outlet	21½"
Diameter of flue suitable for 4½" or 5" flue pipe - -	4½"

FINISHES: Ebony black or coloured vitreous enamel, or "Alisheen" de Luxe enamel.



ADVANTAGES: Burns any kind of fuel, coal, coke, anthracite, peat or small logs. It can be a closed or open fire. It is a day-and-night stove, for the combustion is under control. It heats the air of a room. The diagram shows the air duct which runs below, behind and over the fire cavity. Cool air is drawn in underneath. This moves upward behind the fire where heat is

most intense. The heated air (still clean and pure) is then thrown forward and outward. The atmosphere is thus kept in constant circulation and the room is made really warm and comfortable even in the farthest corner. With the Otto Stove, heat which ordinarily would be absorbed by the wall at the back, comes out into the room giving 20% more warmth from every ounce of fuel used.

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

ALLIED IRONFOUNDERS LIMITED



ALLIED IRON
REGD. TRADE MARK

Proprietors of: AGA HEAT LIMITED; ALLIED IRON (E.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.; R. 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.; H. E. HOOLE & CO. LTD. McDOWALL STEVEN & CO. LTD.; PLANET FOUNDRY CO. LTD.; SINCLAIR IRON CO. LTD.; THE WELWYN FOUNDRY CO. LTD.

KETLEY • WELLINGTON • SHROPSHIRE



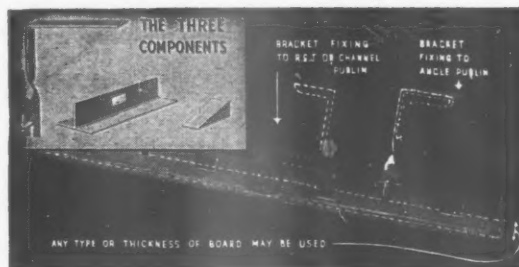
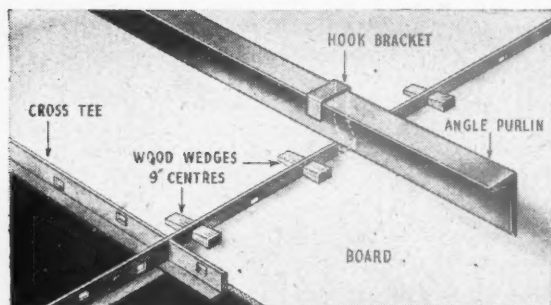
Patent No. 519406

FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

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



Escalator Tunnel of St. John's Wood Underground Station. Architect: S. A. Heaps.



8 POINTS TO BE NOTED

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

The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

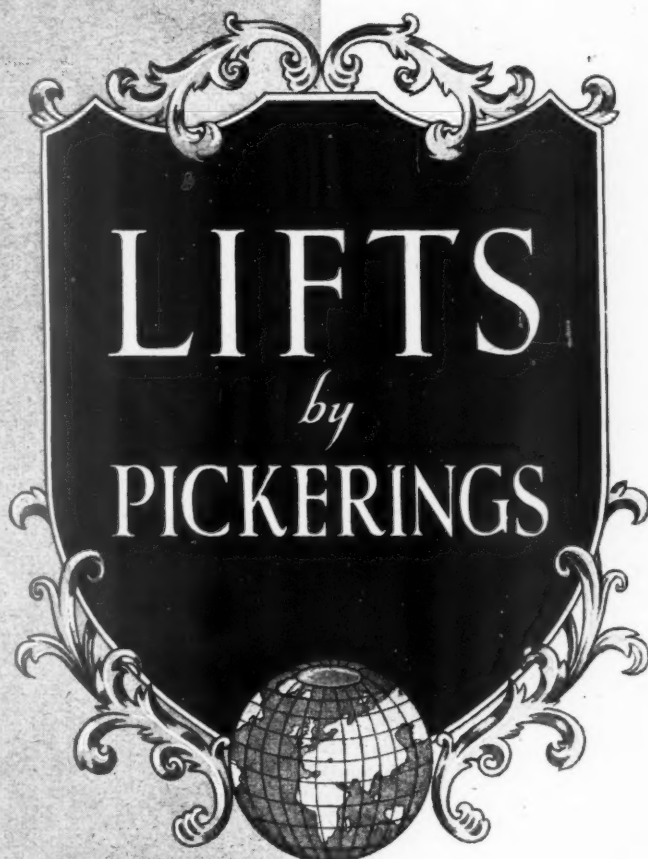
Full particulars, specification and a typical layout will be sent on request

C. F. ANDERSON & SON, LTD.

Wallboards for Government Work

HARRIS WHARF, GRAHAM STREET, LONDON, N.1.

TELEPHONE: CLERKENWELL 4582

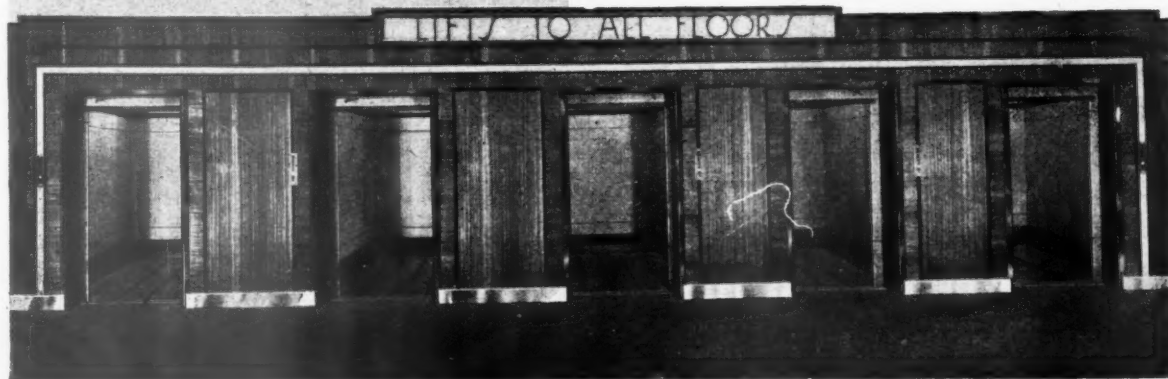


PICKERINGS LIMITED

ELECTRIC LIFT, HOIST and CRANE MANUFACTURERS
GLOBE ELEVATOR WORKS, STOCKTON-ON-TEES

London Office 116, VICTORIA STREET, S.W.1

Telephone to Victoria 9860



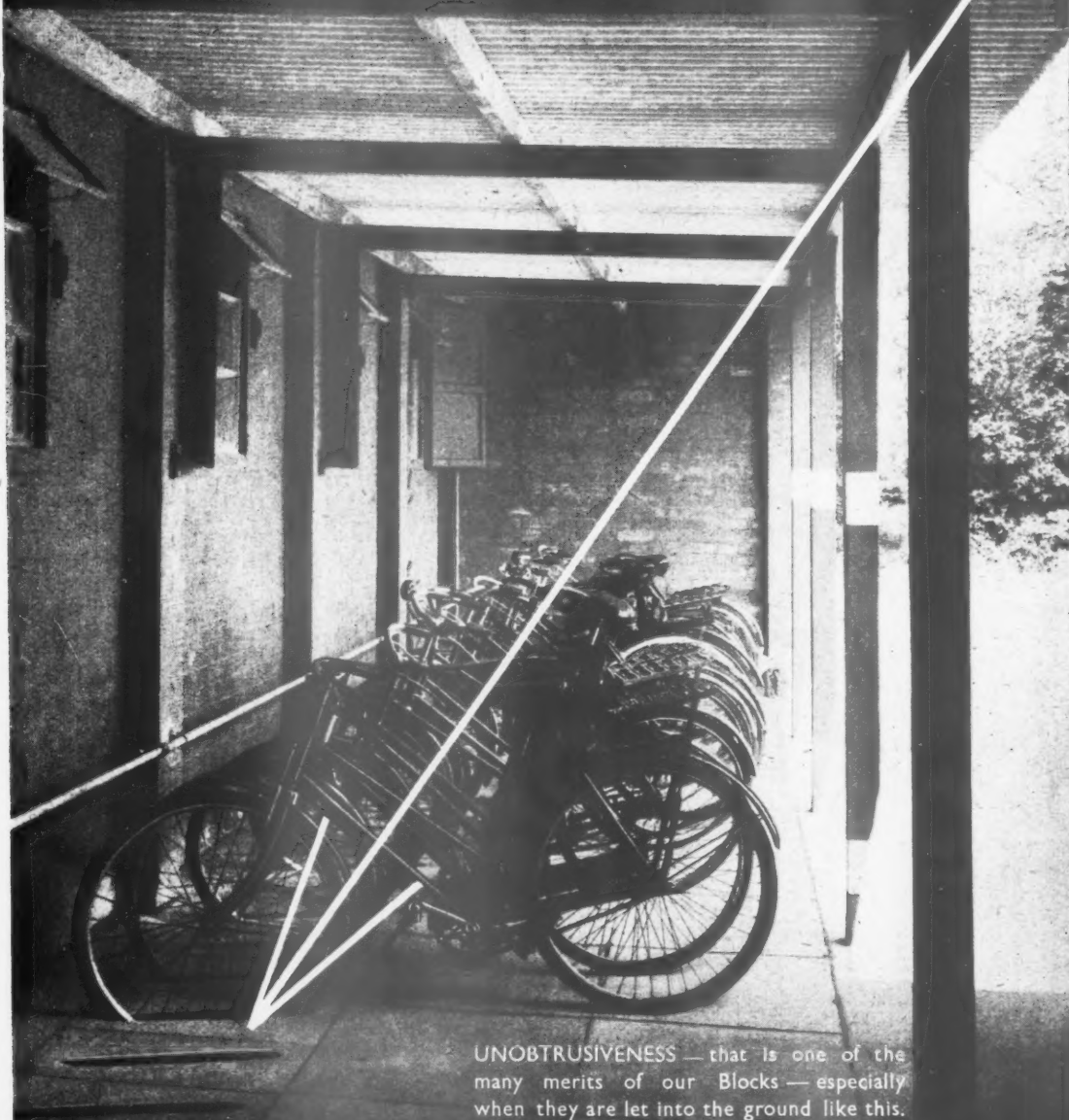
Stelcon

BICYCLE

PARKING

BLOCKS

British Patent No. 425265



UNOBTRUSIVENESS — that is one of the many merits of our Blocks — especially when they are let into the ground like this.

STELCON (INDUSTRIAL FLOORS) LIMITED

CLIFFORDS INN

LONDON, E.C.4

Telephone: HOLBORN 2916



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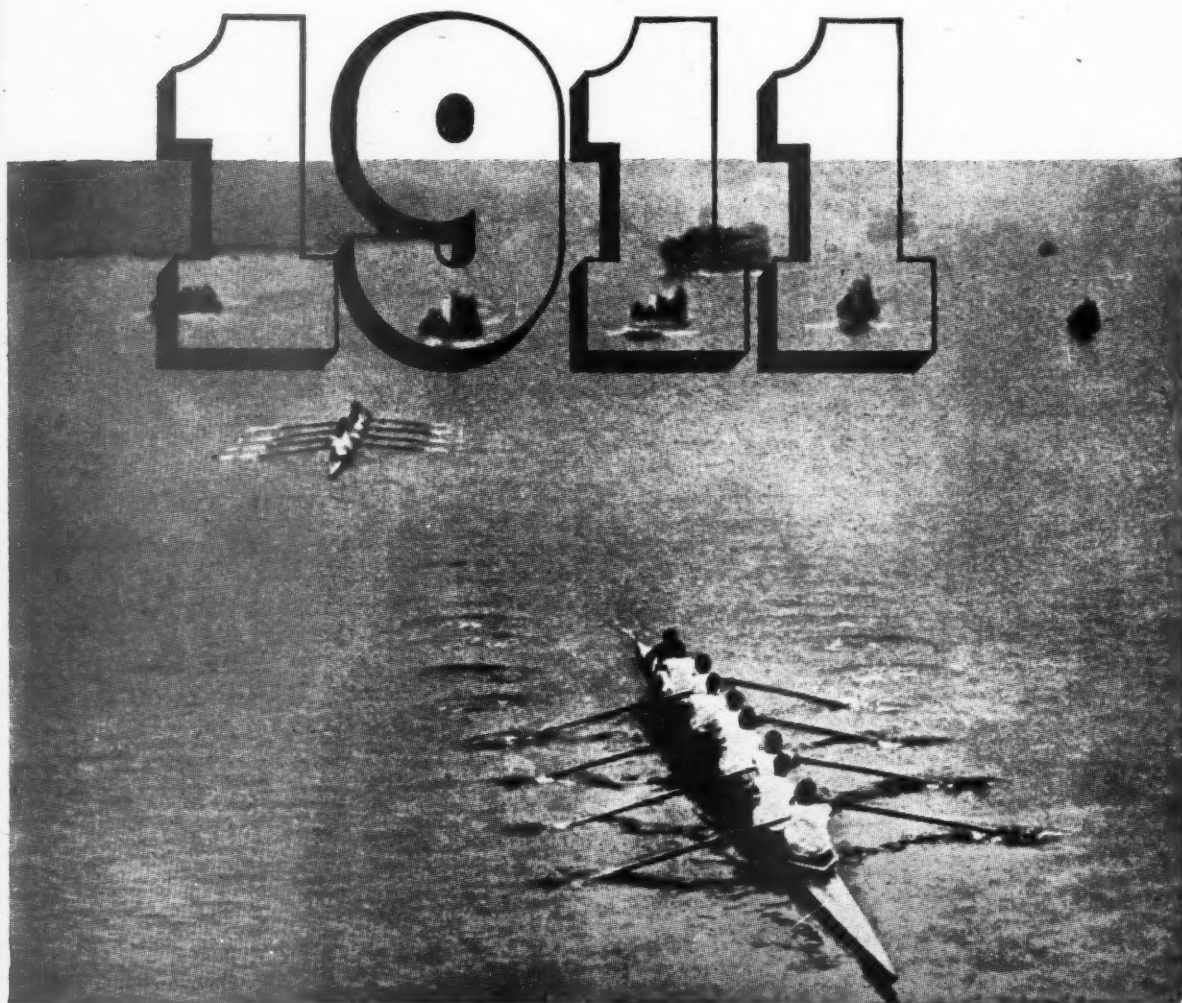
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2



Oxford wins the University Boat Race by $2\frac{3}{4}$ lengths in record time (to date) of 18 minutes, 29 seconds. April 18, 1911.

WHEN WE WERE YOUNG

Most photographs of the event show that the spectators were more interested in an aeroplane flying over the course for the first time, than in the race itself. No doubt there were many who deprecated the intrusion of the new-fangled contraption ('if it had been intended that we should fly, we would have wings'), and there could have been few who foresaw the mighty future

in the air, that is common understanding now. No public notice was focused on another event of 1911 — the foundation of the firm Cellon, but, amongst other matters, our eyes were fixed on the aeroplane with more than casual interest. The progress of Cellon has been parallel to the progress of aviation and we can look back on thirty odd years of effort with justifiable satisfaction.

CELLON
CERRIC CERRUX

CELLON

THE PERFECT FINISH

CELLON LTD., KINGSTON-ON-THAMES.

TELEPHONE: KINGSTON 1234 (5 lines)

Thorp-Hambrook Co., Ltd., Montreal, Canada. Cellon Corporation Pty. Ltd., Sydney, Australia

CVS-534

There is no peace for the bricks in an industrial

No other type of structure imposes such severe and fluctuating loads upon the bricks. From footings to cap they must maintain a standard of performance far in excess of that which any other type of building demands . . . For many years the leading firms of Industrial Chimney specialists have preferred PHORPRES Bricks. One firm alone—Chimneys Limited—have built 259 industrial chimneys using PHORPRES bricks.

**The foundations of a house
are child's play by comparison.**



LONDON BRICK COMPANY LIMITED

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BIRMINGHAM OFFICE: PRUDENTIAL BUILDINGS, ST. PHILIP'S PLACE, BIRMINGHAM, 3

BRISTOL DEPOT: ASHLEY HILL GOODS DEPOT (G.W.R.) ASHLEY HILL.

Telephone: KEMPSTON 3131

Telephone: COLMORE 4141

Telephone: BRISTOL 46572

P O W E R

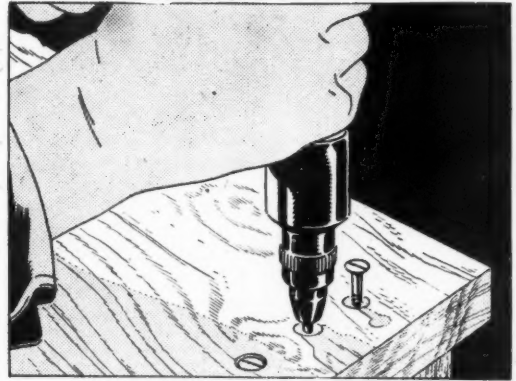
MORE



TO YOUR ELBOW!

... and faster, effortless screwdriving with a Van Dorn Positive Clutch Screwdriver. This compact, light, easy-to-handle tool will save hours of time and labour on the many laborious screwdriving jobs in modern house construction.

The 8" Screwdriver is one of the wide range of Van Dorn Portable Electric Tools ready to speed up Building reconstruction and maintenance work.



For repetition screwdriving the Van Dorn Electric Screwdriver will solve your labour problems.

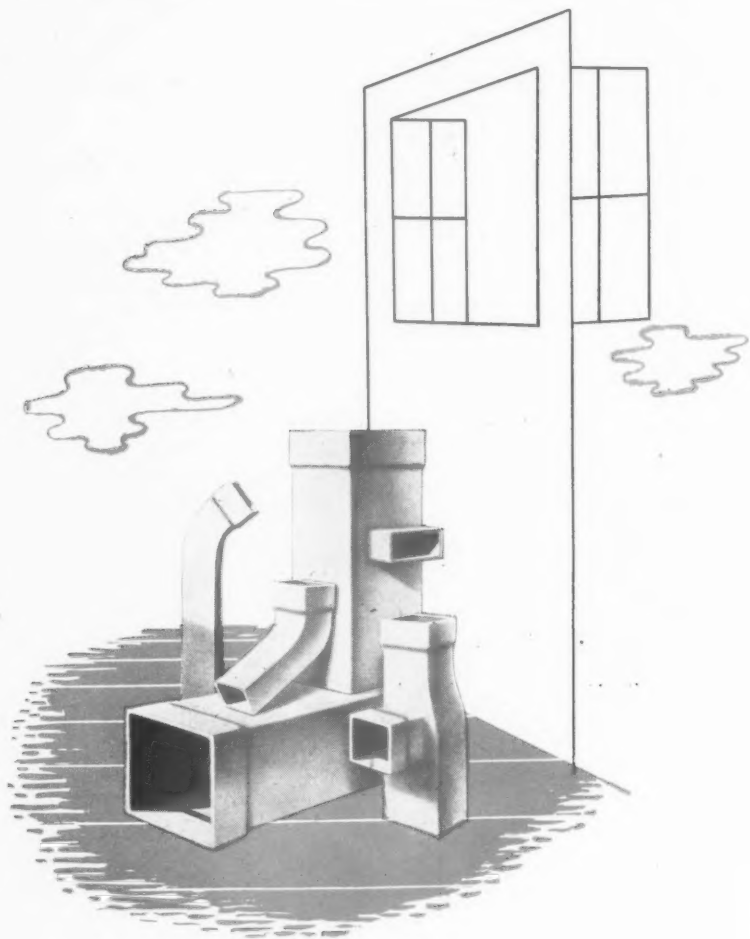
Van Dorn

PORTABLE ELECTRIC **TOOLS**

VAN DORN ELECTRIC TOOLS • HARMONDSWORTH • MIDDLESEX

PHONE : WEST DRAYTON 2681/6

BRANCH SERVICE STATIONS : LONDON, BIRMINGHAM, BRISTOL, GLASGOW, LEEDS, MANCHESTER, NOTTINGHAM



LET THE PEOPLE BREATHE

After the war we think that many buildings instead of few will have scientific ventilation and air conditioning as a matter of course.

If we are right, we must plan for a bigger output than ever of incorrosible URASTONE—the material for ducting that has given such a good account of itself in the war factories and service buildings of every sort.

Remember the name—URASTONE. Note it down as the ideal ducting and flue material for all plans. At present it is available only under Control by the M.O.W. Reference details for your files gladly sent on request.

★ YOU'RE RIGHT FOR THE FUTURE WITH

INCORROSIBLE **URASTONE**

CELLACTITE & BRITISH URALITE LIMITED

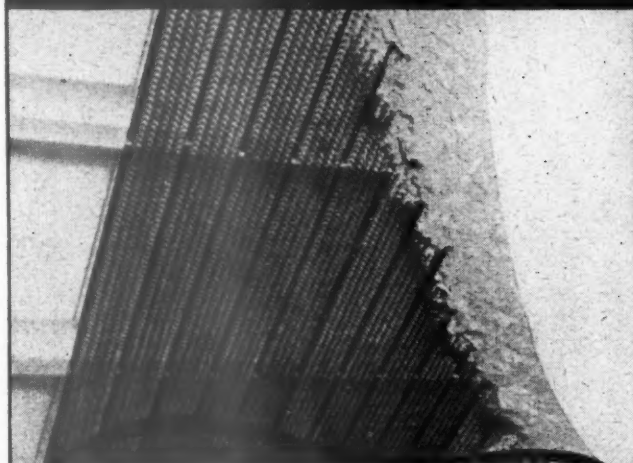
TERMINAL HOUSE, 52, GROSVENOR GARDENS, LONDON, S.W.1.
Works: HIGHAM, KENT.

*Phone: SLOane 5127 (4 lines).

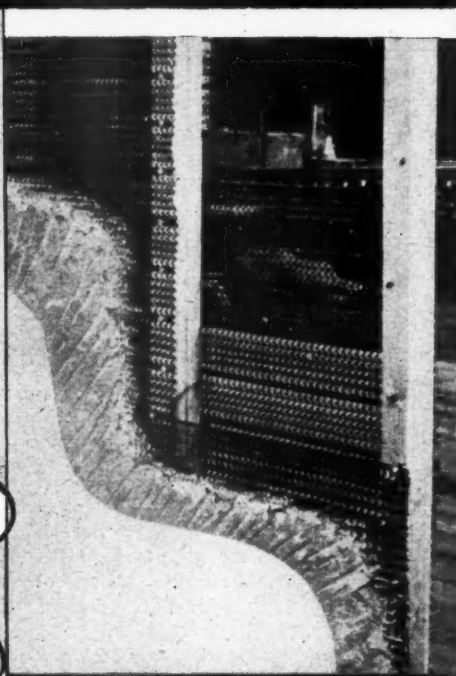
*Grams: "Cellactite, Sowest, London."



FOR CEILINGS and PARTITIONS



*Ensures speedy and
permanent repairs
to damaged buildings*



- The lathing can be easily handled and quickly fixed.
- The rigidity provided by the ribs ensures a true surface.
- The "keyed" mesh assists the plastering operation.
- The lathing will span 24" between studding or joists without additional "furring" or supports.

STOCKS IMMEDIATELY AVAILABLE

**$\frac{1}{2}$ " Hy-Rib Lathing is supplied in
standard sheets 8' 2" long by 1' 6" wide
Packed in bundles containing 8 sheets**

HY-RIB SALES

6 · COLLINGHAM GARDENS · EARLS COURT · LONDON · S.W.5

Telephone: Frobisher 8141

AN ADVERTISEMENT OF THE TRUSSED CONCRETE STEEL CO. LTD.

London, Manchester, Newcastle-on-Tyne, Birmingham, Glasgow, Cardiff, Taunton.



English Electric

DOMESTIC
APPLIANCE
DEPARTMENT



The **ENGLISH ELECTRIC COMPANY LIMITED**

MESSAGE FOR APRIL

SINCE 1940, the resources of 'English Electric' have been devoted mainly to the manufacture of heavy-duty electrical equipment for Industrial Canteens, British Restaurants and other communal centres.

These war-time activities have provided our engineers with a wealth of practical experience which is now being utilised in the development of new-type domestic appliances, including Cookers, Fires, Water-heating systems, Washing Machines and other units for the post-war home.

Whilst your plans are still fluid it will be an advantage to discuss them with one of our Development Engineers. In the first instance, you are invited to write to the Domestic Appliance Dept., Queen's House, Kingsway, W.C.2.

ENLIST THE EXPERIENCE OF ENGLISH ELECTRIC

PIPES

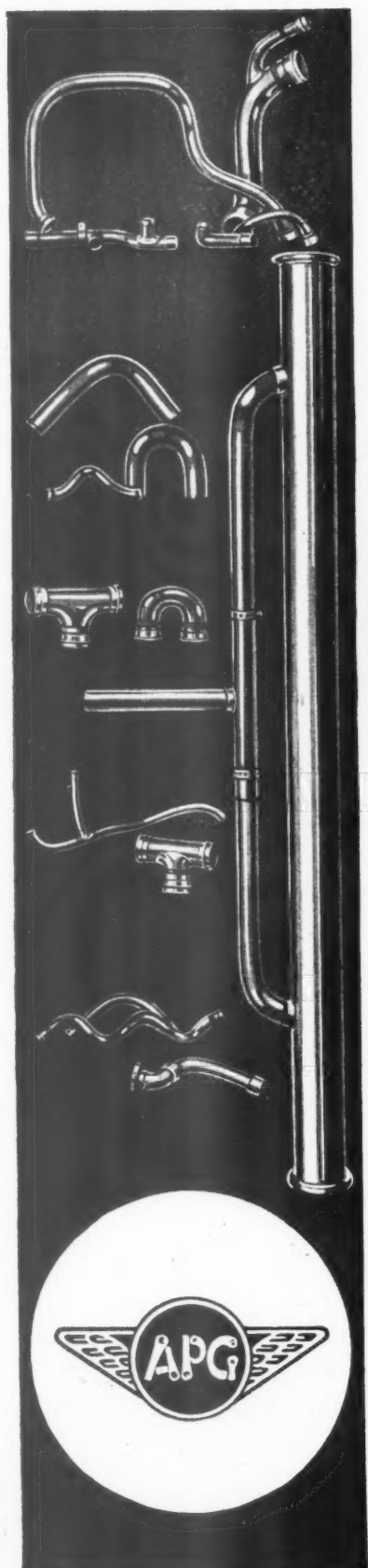
for every purpose



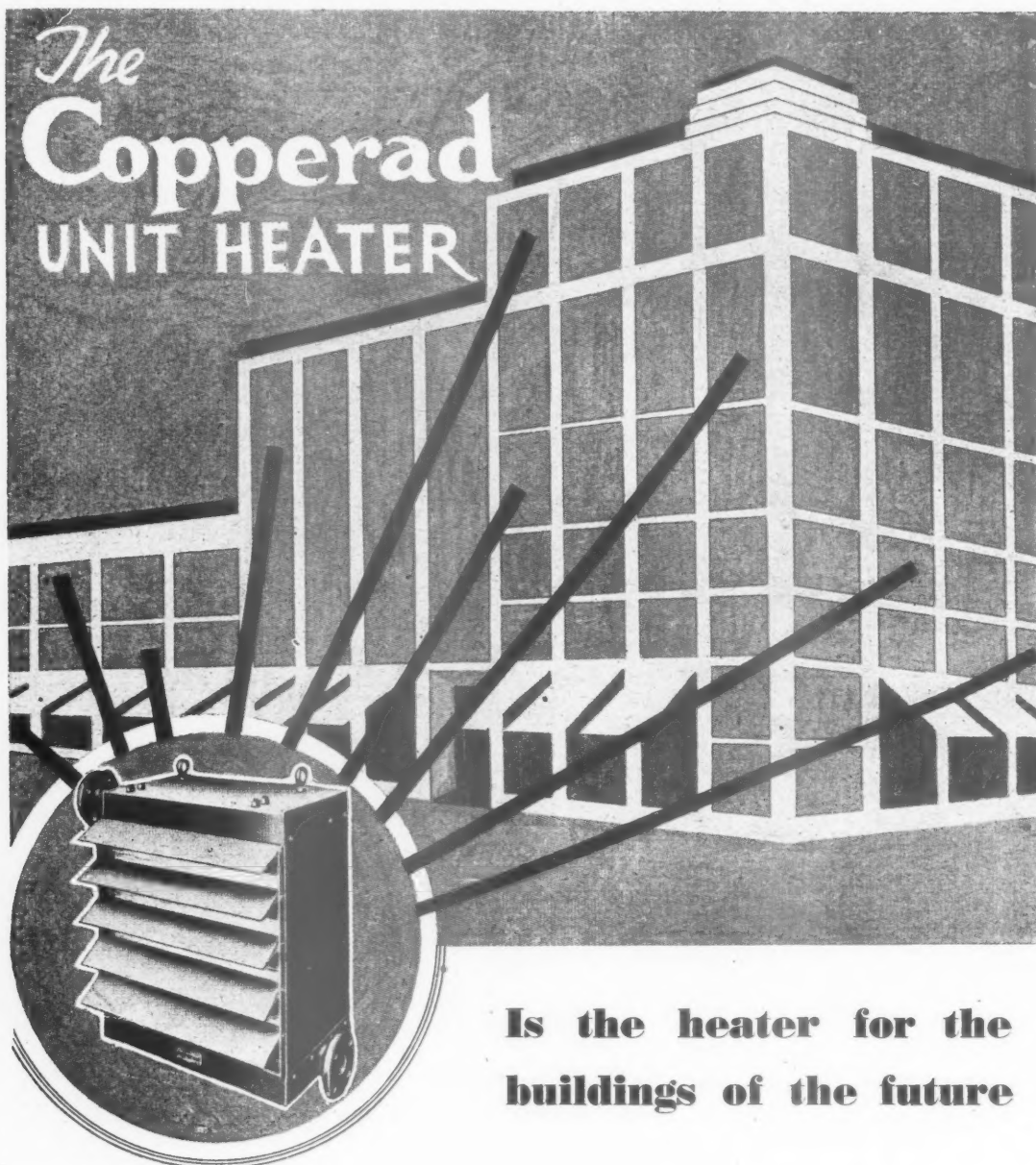
Experimental Prefabricated Plumbing Units have already been prepared by us in copper for Heating and Sanitary Engineers who appreciate the necessity for preparing and obtaining approval to their post-war specifications now. Our priority programme at the moment requires first consideration, but we shall be happy to discuss your post-war needs which may involve the use of manipulated pipes and standard or machined fittings.

AERO PIPE & GLASS CO. LTD.

KINGSLEY WORKS, GRANGE ROAD
WILLESDEN GREEN, LONDON, N.W.10



The
Copperad
UNIT HEATER



Is the heater for the
buildings of the future

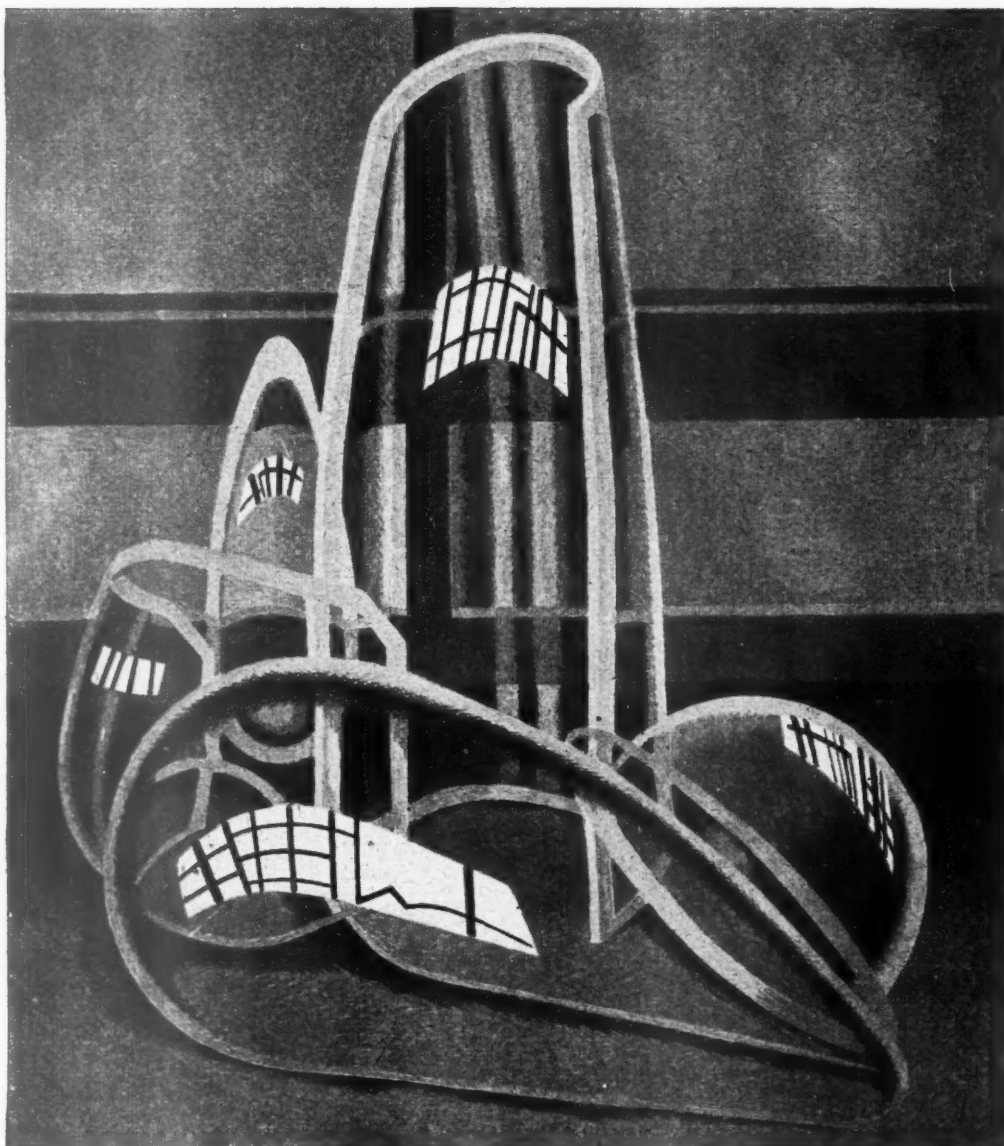
Copperad for all specifications

Copperad Ltd.

39-45 ST. PANCRAS WAY, N.W.1

PROPRIETORS: THE BRITISH UNIT HEATER CO. LTD.

PHONE: EUSTON 5671 (4 LINES). WIRES: COPPERADIA, NORWEST, LONDON



Drawn specially for I.C.I. by Edward Wadsworth, A.R.A.

"Perspex"

'Revolution is simplification—an assertion which describes perhaps the peculiar experience of the painter. The design of every-day objects and the new substances of which they are made are at once a revolution which presents the artist with new problems. Gone are the visual certainties which he has for so long taken for granted: the inter-relationships of planes, the reflections of light and the odd accidents of surfaces in association with these can no longer be relied upon as visual raw material. "Perspex", more than any other substance, defies the traditions of appearance as hitherto known by the artist. "Perspex" reflects nothing except high-lights and, unlike glass, it distorts nothing; its cast shadows are vague, its transparency is misleading, giving only hints to its volume. "Perspex" is delicate and robust, exotic and indigenous, visible and invisible: such are its visual qualities—a new medium which opens the eye of the artist a little wider. Revolution is simplification.' E.W.

For information on any type of plastics write to:—

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



WIMPEYS AT WORK

The use of plant in planned building construction



PLANT IS PART OF THE PLAN

The progress chart which is the invariable groundwork of every Wimpey job is passed for action only when the needs and resources of all departments interlock. The chart must obviously cover not only men, materials and transport . . . but also plant.

When Wimpeys start a job on site, the job is already in chart form, detailed and complete. And among the main factors which enable staff on site to work to exact schedule is their certain knowledge that the right plant will reach them. That

whenever and wherever the job demands this type of crane or that size of excavator — it will be there on time.

The smooth working of this system is ensured by two other important advantages of Wimpeys' organisation. Wimpeys have a huge pool of up-to-date plant on which to draw. And the plant is kept in first-class order by a network of Wimpey maintenance depots: 7 acres near London, 10 acres at Glasgow, large depots at Cardiff, Birming-

ham, Manchester, Nottingham and Newcastle, and mechanical engineers all over the country.

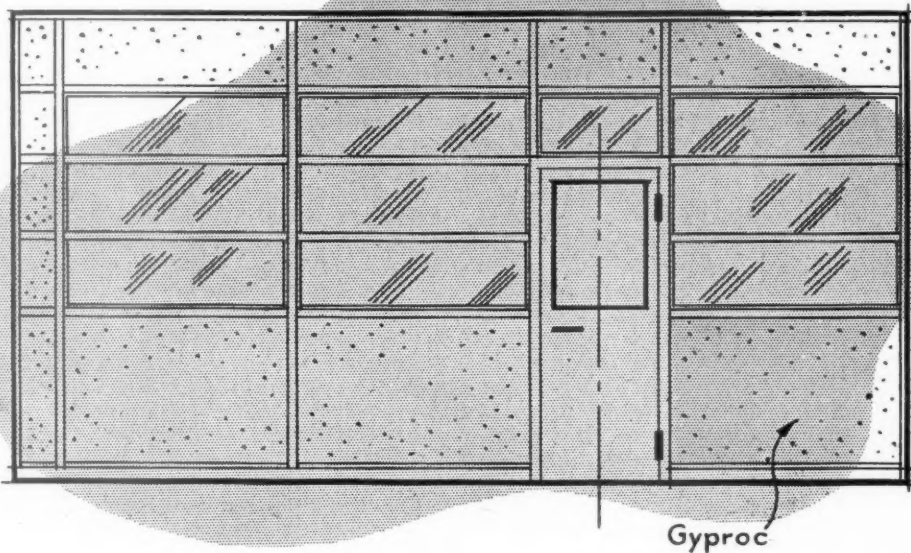
This planned use of a vast range of modern plant is built on Wimpeys' experience during sixty years of steady growth.

WIMPEY

GEORGE WIMPEY AND COMPANY LIMITED
TILERHOUSE LANE DENHAM MIDDLESEX

UNIT CONSTRUCTION

Partitions



The sketch shows a typical elevation of a GYPSTELE partition, incorporating GYPROC fire-resisting plaster board as panels, with patented rustproofed metal structural members, panel strips and fittings. This type of lightweight partition is structurally strong, can be erected without damage to existing floors, walls or ceilings, gives good sound resistance, and because of the unit construction has 100% salvage value if dismantled or moved.

Further information from Information Sheet 834, and "Facts About Bundled Wall and Ceiling Board," copies of which are freely available.

GYPSTELE

UNIT CONSTRUCTION

PARTITIONS

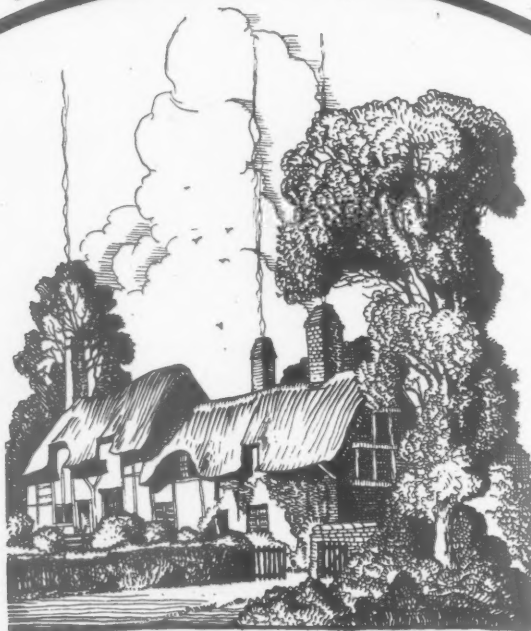
GYPROC PRODUCTS LIMITED

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

GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.1
Telephone: Govan 614. Telegrams: Gyproc, Glasgow.

REGISTERED OFFICE: 21 St. James's Square, London, S.W.1.
Telephone: Whitehall 8021.

ROOFS OF THE NATIONS



Ann Hathaway's Cottage

Stratford-on-Avon
England

This charming little thatch-roofed cottage still stands in substantially the same condition as when Shakespeare came here to woo his future wife, and one wonders if it were here he wrote the following lines (which are attributed to him)

"To melt the sad, make blithe the gay,
To charm all hearts, Anne hath-a-way;
She hath-a-way,
Anne Hathaway,
To breathe delight, Anne hath-a-way."

Many famous British buildings are protected by BRIGGS ROOFING — in all instances our trained specialists co-operated closely in the construction of the roof. And, they will co-operate just as closely in the re-roofing of bomb-scoured Britain — using to advantage their war-time experience and research in the reconstruction of the peace.

BRIGGS

R O O F I N G

WILLIAM BRIGGS & SONS LIMITED, DUNDEE. LONDON :

VAUXHALL GROVE, S.W.8. ALSO AT GLASGOW,

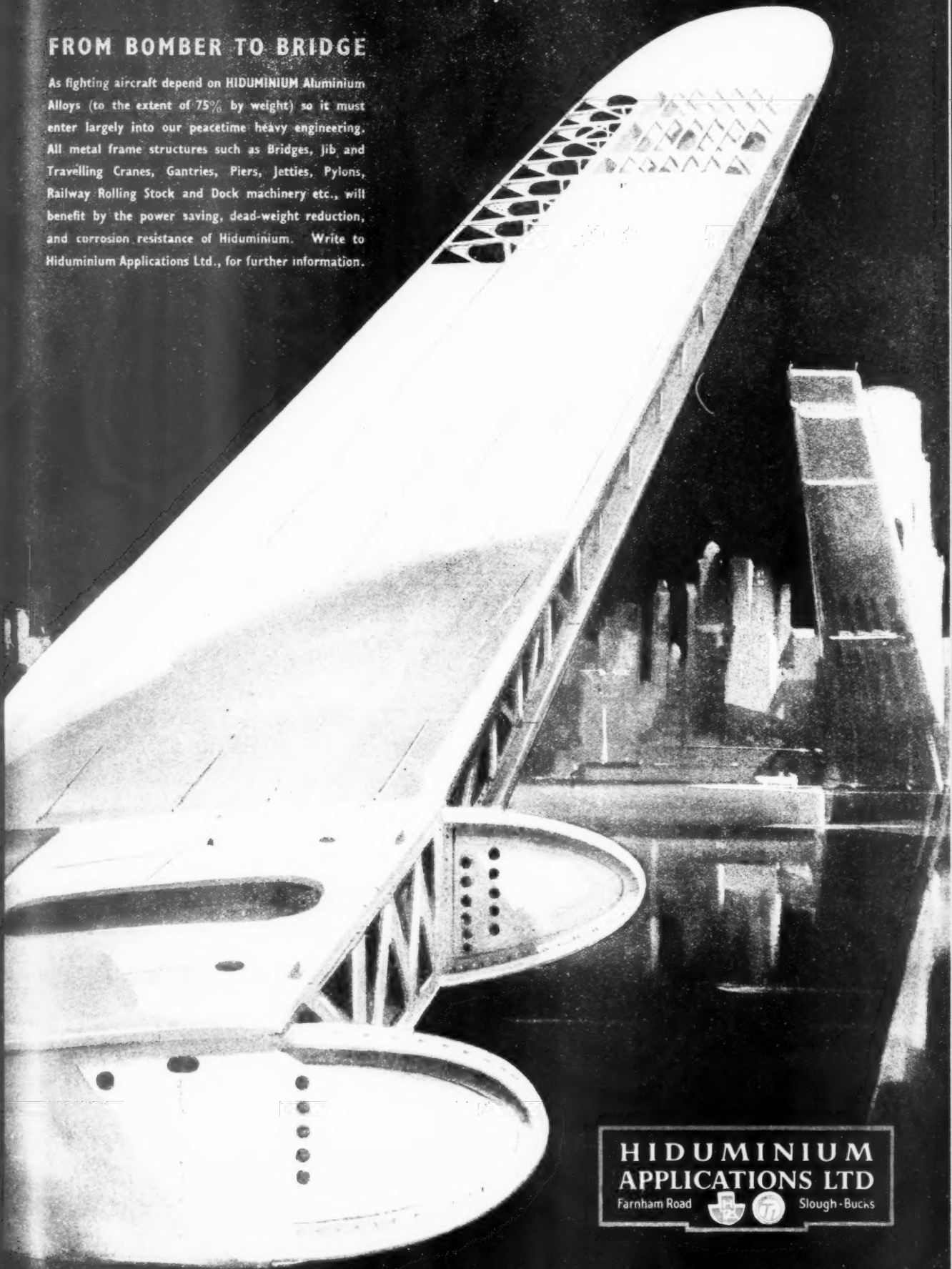
EDINBURGH, LIVERPOOL, BRISTOL, ABERDEEN, NORWICH

THE NATION'S ROOF

Structural Lessons of War & Peace

FROM BOMBER TO BRIDGE

As fighting aircraft depend on **HIDUMINIUM** Aluminium Alloys (to the extent of 75% by weight) so it must enter largely into our peacetime heavy engineering. All metal frame structures such as Bridges, Jib and Travelling Cranes, Gantries, Piers, Jetties, Pylons, Railway Rolling Stock and Dock machinery etc., will benefit by the power saving, dead-weight reduction, and corrosion resistance of Hiduminium. Write to Hiduminium Applications Ltd., for further information.



**HIDUMINIUM
APPLICATIONS LTD**

Farnham Road



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KEX PRODUCTS

DECKEX Pigmented, Stable, Silica Solutions

Deckex is a Stable Silica Solution—derived from a Silicic Ester—to which has been added a pigment and/or filler to form a decorative medium. It is applicable in all situations where normal paints, with organic binders, are subjected to destroying influences. For external decoration, for instance, of concrete buildings and structures—particularly where exposed to sea air or the corrosive atmosphere and soot of Industrial Towns—it is of particular importance. Deckex has an additional hygienic value for use on the interior surfaces of Hospitals, Public Buildings and Schools. Full information will be gladly sent.



Kautex Plastics Ltd
Elstree, Herts. Elstree 1777

Sink Units for Post-War Housing that are really Competitive

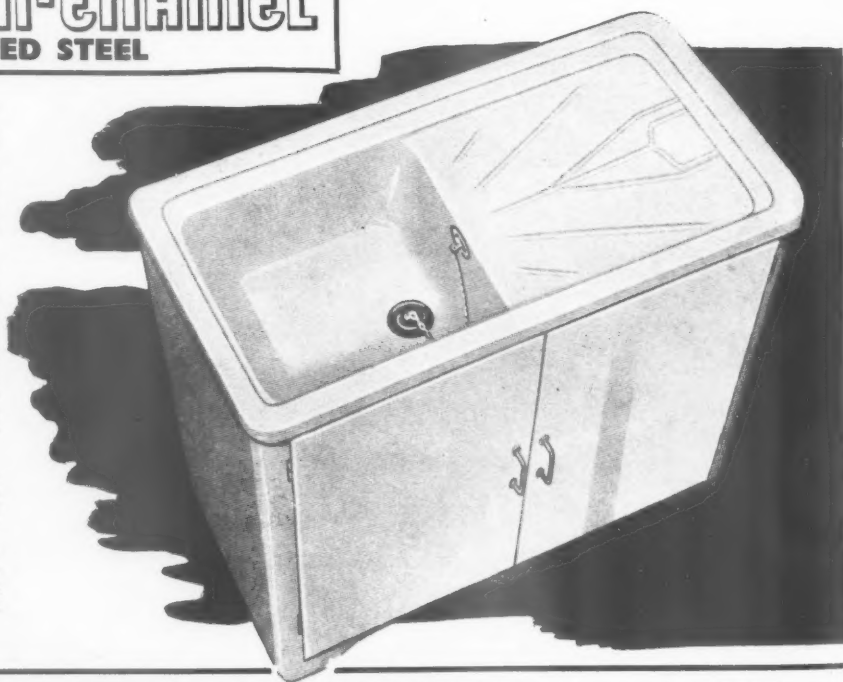
in PORCELAIN-ENAMEL ON PRESSED STEEL

The absence of sharp corners in this integral streamlined designed sink unit cuts down crockery casualties as well as cleaning. The deep rolled edges serve a twofold purpose, for they enable the drainer to afford twice the normal draining capacity and they eliminate splashing.

Manufactured in Porcelain Enamel on pressed steel in attractive pastel shades in different types and sizes to standards laid down by the British Standards Institution and M.O.W., the porcelain enamel needs only the occasional use of a damp cloth for it to maintain its shining surface. Space is saved by the provision of a large and useful cupboard enabling kitchen utensils to be stored away from steam and dust.

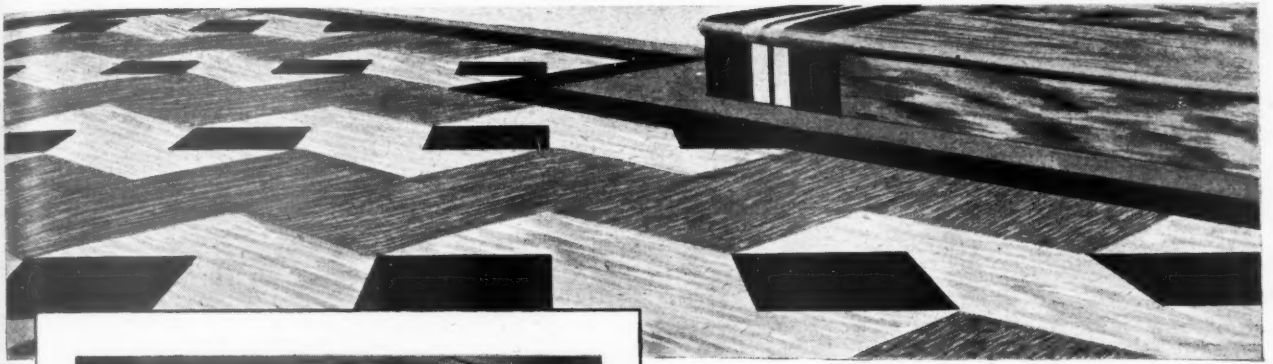
The mass production and simple design of Easiclene Sink Units makes them competitive in price for all types of housing schemes.

Write now for further information and details and prices of Easiclene Sink Units with double drainers and double sink and drainers. Address your enquiries to Dept. (A.9) at the address below.



EASICLENE PORCELAIN ENAMEL (1938) LTD.

PALACE OF ENGINEERING, WEMBLEY, MIDDX. Phone: WEMbley 3363/4



NORTH BRITISH RUBBER FLOORING

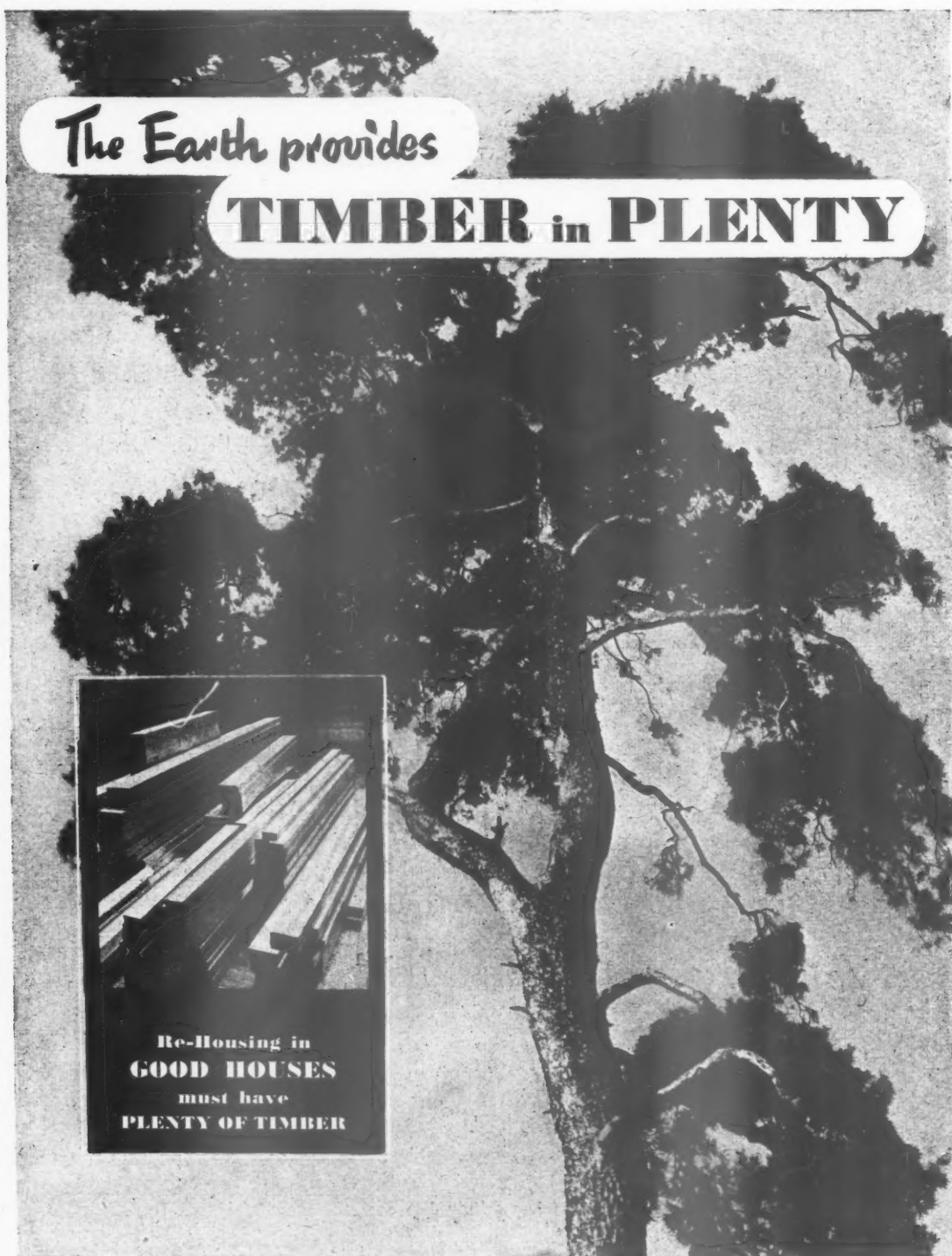
gives the architect full scope for the development of decorative idea. The range includes continuous permanent coverings for wide floor areas; removable runners for passage ways; treads, nosings and risers for stairways; loose mats and matting.

Architects engaged on plans for future development are invited to write for particulars, colour schemes, etc.



THE NORTH BRITISH RUBBER COMPANY LTD. EDINBURGH AND LONDON

RW/F 5A



The Earth provides

TIMBER in PLENTY

Re-Housing in
GOOD HOUSES
must have
PLENTY OF TIMBER

JOHN SADD & SONS LTD.

HIGH-CLASS JOINERY

Windows, Doors, Mouldings, Staircases, Dressers, Kitchen Units

MALDON

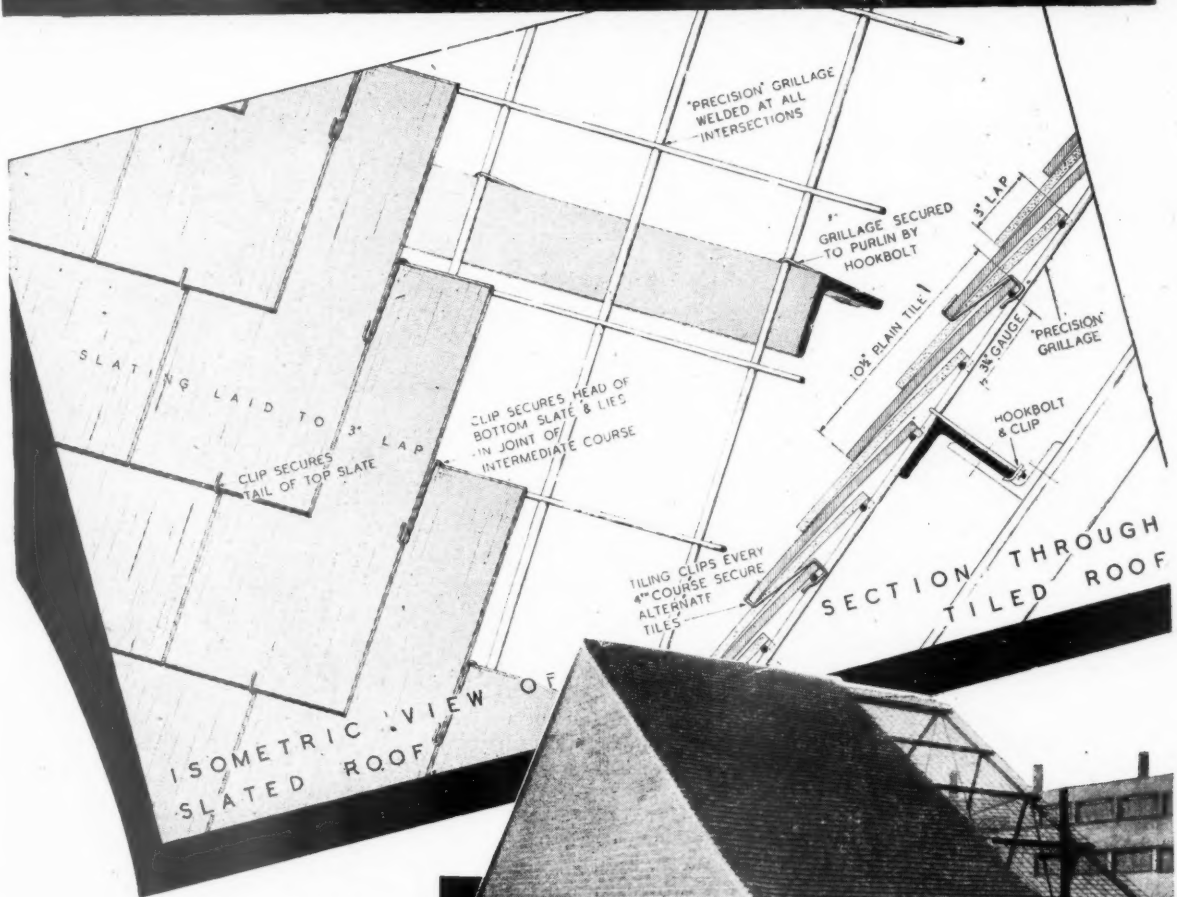
ESSEX

Telephone: Maldon 131

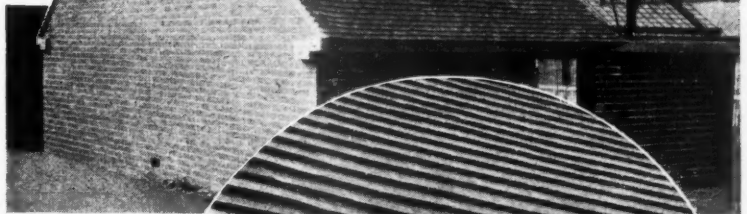
London Office: Aldwych House, W.C.2. Telephone: Holborn 7225

Stoneham & Kirk

PRECISION ROOFING



Tiled roof under construction.



WORKS-CONSTRUCTED TO CONFORM TO MODERN BUILDING METHODS

Here is a new form of roofing which can be speedily erected with a minimum of labour.

The roofing is works-produced in the form of a standardised steel grillage, spaced according to the type of covering to be used. Slates or tiles are secured to the horizontal bars of the grillage by specially designed rustless steel clips.

Precision[®] Roofing is light, easily erected with a minimum of labour, and adapted to any type of span roof. Send for a booklet.



Close up of roof tiling.



PRECISION ROOFS LIMITED · TEMPLEBOROUGH SHEFFIELD

Telephone: ROTHERHAM 1517.

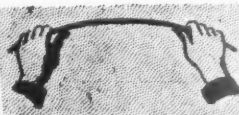
Associated with McCALL & CO. (SHEFFIELD) LTD., TEMPLEBOROUGH, SHEFFIELD.

London Office: 10 Grosvenor Gardens, S.W.1



SMUGGLING AN INDUSTRY

In 1873 the Marquis of Salisbury, wishing to establish a new native industry in India, planned to obtain rubber seeds from Brazil. It is said that 70,000 seeds were smuggled out of that country, with which were started plantations that have been yielding 1,000,000 tons of rubber yearly—a raw material which is used for many purposes.



THIS IS EBONITE

Contrary to the general idea, Ebonite can be made flexible and elastic. It is one of the most useful of industrial materials. Hand-made articles, metal coverings and linings, composite mouldings incorporating soft rubber portions—these are sufficient to indicate the versatility of ebonite.



WRONG
DESIGN



RIGHT
DESIGN

HINTS FOR THE DESIGNER

Plastic components are light in weight due to the low specific gravity of the materials. They can be kept light by using a hollow form instead of a solid section. This not only saves material but avoids manufacturing difficulties. Unequal sections cause strains to be set up in the component. These may lead to distortion.

U E L

Present PLASTICS News Reel

No. 3

DESIGN

The manufacture of plastics is a mass production business but is nevertheless a craft. The skill of the craftsman who once patiently shaped and carved and polished each product of his hands has been replaced by the skill of the tool-designer and the toolmaker, creating the beauty, accuracy and finish of modern plastics.

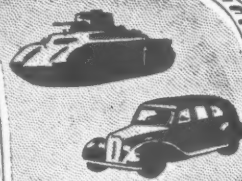
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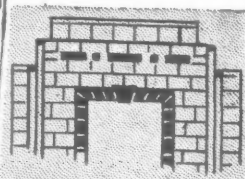
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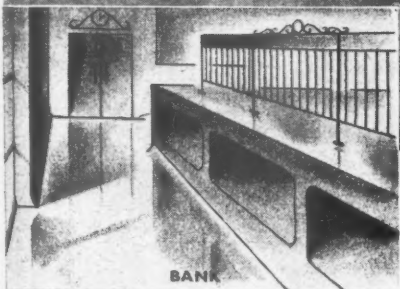
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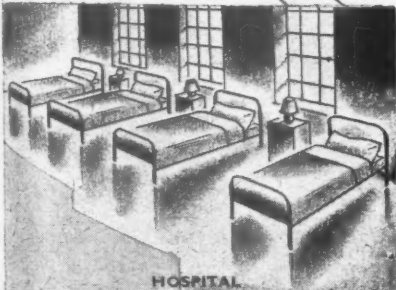
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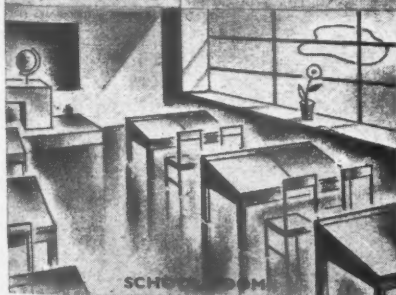
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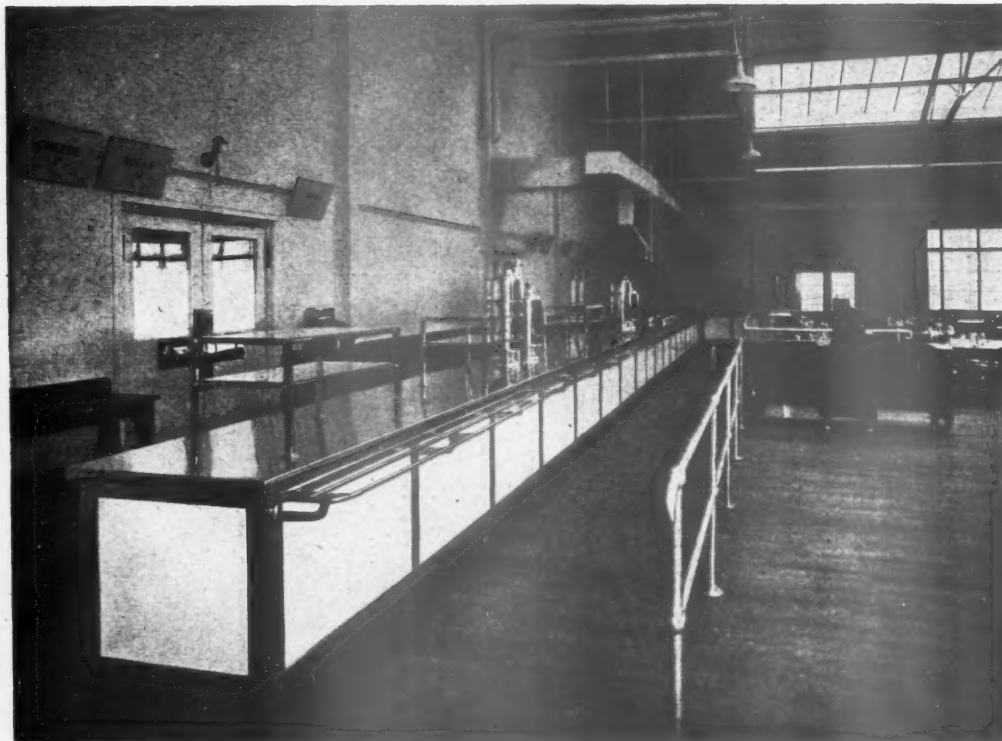
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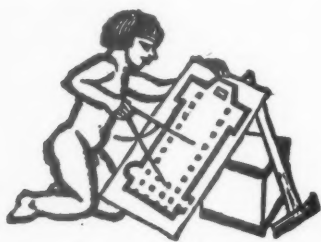
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THE BRITISH STEELWORK ASSOCIATION, WESTMINSTER, LONDON, S.W.1

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



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DIARY FOR APRIL MAY AND JUNE

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.

BIRMINGHAM. *The English Town: Its Continuity and Development.* At the George Dixon Grammar School, Edgbaston, Birmingham. (Sponsor, TCPA.) MAY 17-31

BUXTON. *The English Town: Its Continuity and Development.* Exhibition. At the Pavilion Gardens. (Sponsor, TCPA.) MAY 1-14

CHESTERFIELD. *When We Build Again.* Exhibition and film. At the Public Library. (Sponsor, TCPA in collaboration with Cadbury Bros.) AP. 26-MAY 9.

Town and Country Planning Association Conference. At the Co-operative Hall, Eldel Way, Chesterfield. Speaker, R. I. Reiss and W. Dobson Chapman. (Sponsor, TCPA.) 10.45 a.m. to 4.15 p.m. AP. 28

LONDON. *Post-War House Building.* Exhibition. At the Housing Centre, 13, Suffolk Street, Haymarket, S.W.1. (Sponsor, HC.) Weekdays, 9.30 a.m. to 5.30, Saturdays 9.30 to 12 noon. AP. 19-30

Planning Our New Schools. Conference arranged by the RIBA, the National Union of Teachers and the Association of Building Technicians. At the RIBA, 66, Portland Place, W.1. Programme:—Session I, April 27, 10 a.m. to 12 noon. *The 1944 Act and the New Building Regulations.* President RIBA to welcome members. Chairman, Sir Robert Wood, K.B.E., C.B. (Deputy Secretary, Ministry of Education), to explain the problems which will arise under the new Act and how they are to be met under the regulations. Speakers: W. G. Newton, Sir Frederick Mander, General Secretary, NUT, Dr. F. Hall, MOH, Lancashire. Session II, April 27, 2 p.m. to 4.30 p.m. *Nurse and Primary Schools.* Chairman, Alderman Sir James Aitken, J.P., Chairman of the Lancashire Education Committee. Speaker, Mrs. E. V. Parker, Past-President NUT. Discussion: C. G. Stillman, F.R.I.B.A., County Architect, West Sussex County Council; T. R. North, A.M.I.M.E.C.H.E., Educational Supply Association (Member of the School Furniture Manufacturers' Association). Session III, April 28, 10 p.m. to 12 noon. *Secondary Schools.* Chairman, Miss I. Haswell, President NUT. Speaker, W. F. Herbert, Director of Education, Berkshire County Council. Discussion: O. P. Milne; G. C. T. Giles, Past-President NUT. Session IV, April 28, 2 p.m. to 4.30 p.m. *Buildings for Further Education.* Chairman, Dr. W. P. Alexander, M.A., B.Sc., Secretary, Association of

Education Committees. Speaker, Henry Morris, M.A., C.B.E., Chief Education Officer, Cambridgeshire County Council. Discussion: F. E. Drury (late Principal, LCC School of Building, Brixton); Gordon Stephenson, F.R.I.B.A. AP. 27-28

Mrs. Muriel Gee, Director, Liverpool Property Investment Co. and Cavendish Property Investment Co. *House Conversion.* At the Housing Centre, 13, Suffolk Street, Haymarket, London, S.W.1. (Sponsor, HC.) 1.15 p.m. MAY 1

RIBA Annual General Meeting. At the RIBA, 66, Portland Place, W.1. 6 p.m. MAY 1

Architects' Benevolent Society, Annual Meeting. At the RIBA, 66, Portland Place, W.1. Chairman, Percy E. Thomas, President of the Society. 12 noon. MAY 2

H. Conolly. *Planning for Individuals.* At 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m. MAY 3

Professor J. D. Bernal. *The Social Relations of Science.* Trueman Wood Lecture. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA.) 1.45 p.m. MAY 16

T. Alwyn Lloyd. *Preservation of Coastal Amenities in Wales.* At Caxton Hall, Caxton Street, Westminster, S.W.1. (Sponsor, TPI.) 6 p.m. MAY 17

Donald Barber. *Shopping Centres and Town Planning.* At 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m. MAY 31

Christian Barman. *Design in Modern Transport.* At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. The lecture will be illustrated by lantern slides. Chairman, T. E. Thomas, General Manager, London Passenger Transport Board. (Sponsor, RSA.) 1.45 p.m. JUNE 6

Dr. J. M. Mackintosh. *Social Medicine and Town Planning.* At 28, King Street, W.C.2. Chairman, Dr. Norman Macfadyen. (Sponsor, TCPA.) 1.15 p.m. JUNE 14

MACHYNLLETH. *Country Life and Country Needs.* Exhibition. At the Town Hall. (Sponsor, BIAE.) AP. 26-30

NORTHAMPTON. *Country Life and Country Needs.* Exhibition. (Sponsor, BIAE.) AP. 26-MAY 7

WALLASEY. *The English Town: Its Continuity and Development.* Exhibition. At the Education Department, Wallasey, Cheshire. (Sponsor, TCPA.) AP. 26-28

NEWS

THURSDAY,
No. 2622.

APRIL 26, 1945
VOL. 101

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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.

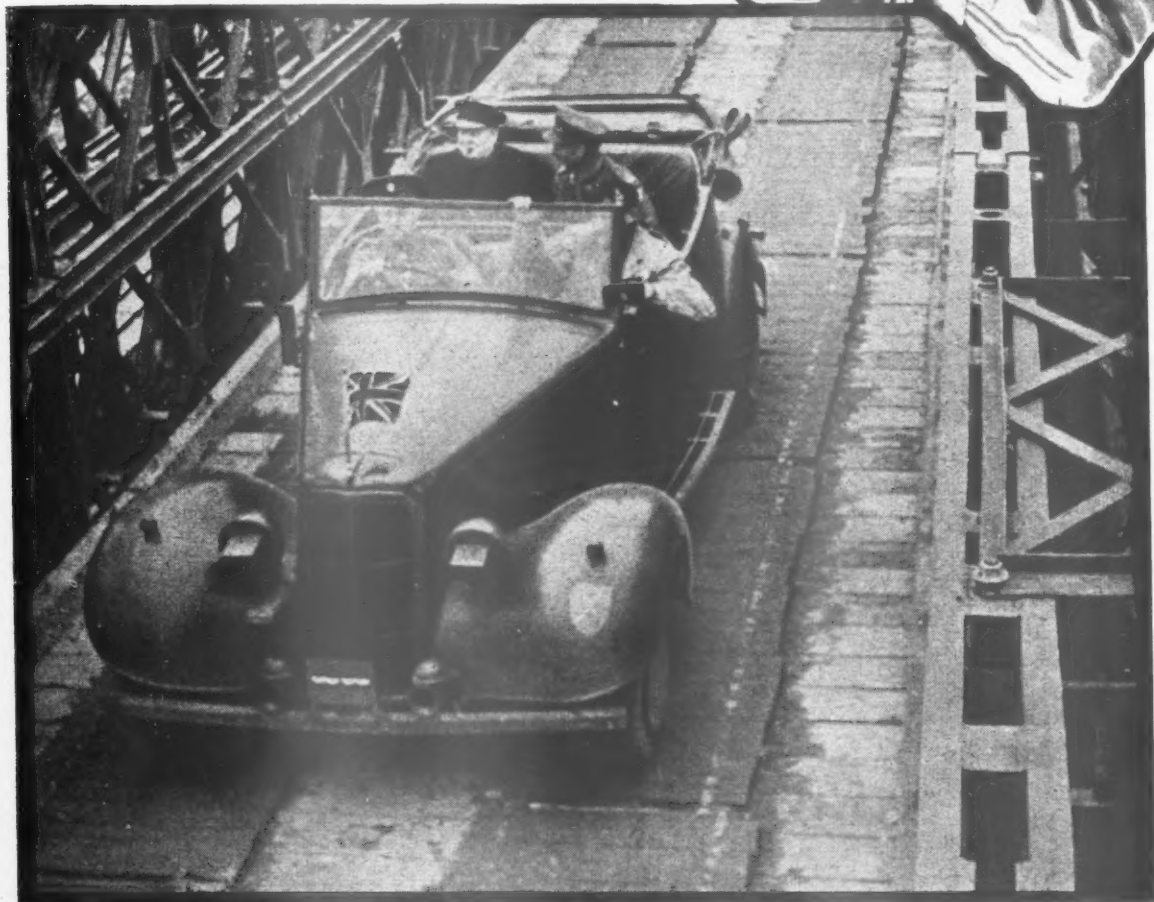
★★ means important news, for reasons which may or may not be obvious.

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

The Joint Select Committee on Accommodation in the Palace of Westminster: Sir Charles BARRY'S PLAN SHOULD BE COMPLETED.

The report of a Joint Select Committee of the House of Lords and the House of Commons appointed to inquire into the accommodation in the Palace of Westminster has been issued. One of the proposals is the completion of the plans for the Palace as prepared by Sir Charles Barry by a building in the same architectural style as the rest of the Palace extending from St. Stephen's Porch along the edge of the roadway outside Westminster Hall and New Palace Yard to the corner opposite Whitehall and thence eastwards to join up with the Clock Tower. Such a building would provide an additional 237 rooms at a cost of approximately £2,100,000. In the meantime, the Committee recommends that premises in Abingdon Street and Bridge Street should be acquired. It states that there is soon likely to be a serious shortage of committee rooms. There is practically no accommodation where a peer or MP can hold an interview. It has been found impossible within the limits of the Palace to meet many of the requests for new or better accommodation. It is recommended that the Lord Chancellor should be provided with an official residence in some such position as Abingdon Street, and that it would be for the convenience of Parliament if the Clerk of the Parliaments, the Clerk of the House of Commons, and the Deputy Serjeant at Arms were provided with official residences, possibly in the form of flats, outside but near the Palace of Westminster.

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From AN ARCHITECT'S Commonplace Book

A YANKEE ON ENGLAND: HAMPTON COURT. [From A Passionate Pilgrim, by Henry James]. To the searching American eye there is no tint of association with which the great grimy face of London doesn't flush. As the afternoon approached, however, I began to yearn for some site more gracefully classic than that which surrounded me and decided to take the train to Hampton Court. The day was the more propitious that it yielded just that dim subaqueous light which sleeps so fondly upon the English landscape. At the end of an hour I found myself wandering through the apartments of the great palace. They follow each other in infinite succession, with no great variety of interest or aspect, but with persistent pomp and a fine specific effect. They are exactly of their various times. You pass from painted and panelled bedchambers and closets, anterooms, drawing-rooms, council-rooms, through king's suite, queen's suite, prince's suite, until you feel yourself move through the appointed hours and stages of some rigid monarchical day. On one side are the old monumental upholsteries, the big cold tarnished beds and canopies, with the circumference of disapparelled royalty symbolised by a gilded balustrade, and the great carved and yawning chimney-places where dukes-in-waiting may have warmed their weary heels; on the other, in deep recesses, rise the immense windows, the framed and draped embrasures where the sovereign whispered and favourites smiled, looking out on terraced gardens and misty park. . . . The whole tone of this processional interior is singularly stale and sad.

The Kitchen Planning Exhibition was seen BY A HUNDRED THOUSAND PEOPLE.

A hundred thousand people attended the Kitchen Planning Exhibition at Dorland Hall, arranged by the Gas Industry in consultation with Miss Jane Drew, F.R.I.B.A. Over a hundred different manufacturers co-operated in the erection of the ten full-scale kitchens and package kitchens shown fully equipped and furnished to suit all tastes and income groups. In addition, there were a number of independent exhibits. Among the visitors to the exhibition were The Queen, Mrs. Winston Churchill, prominent architects and builders, and the Housing Committees of many local authorities. From the export point of view, there were many enquirers from Australia, Poland, Holland and Czechoslovakia and South America. The Icelandic Trade Delegation paid a special visit headed by their Prime Minister. The Minister of Reconstruction, Lord Woolton, opened the Exhibition, accompanied by Lady Woolton, and the Minister of Fuel and Power. Later, the Minister of Health and Mrs. Willink paid a visit. The Exhibition will probably be seen either in whole or in part in many places in England and Scotland during the year.

least agree to buy through a national land commission all the land needed for the local authorities for public purposes, and then let the land to them on long leases at a rent related to the purposes for which the land is to be used.

In the city of London boulevards and WIDE VISTAS ARE IMPRACTICABLE: Chartered Surveyors' Institution.

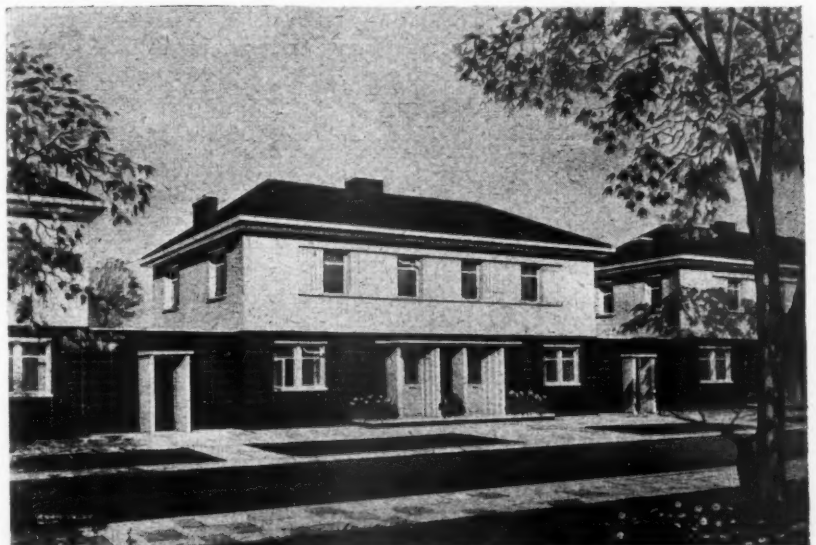
The Chartered Surveyors' Institution, in a memorandum on the City of London rebuilding plan, states the plan should be for a city founded and dependent on commerce. Boulevards and wide vistas are impracticable and destructive of historical associations. The memorandum emphasises the importance of early decisions by the committee. Business firms are already looking for sites and accommodation elsewhere. It is suggested that the trade markets should be re-established as soon as possible. It is thought questionable whether the food markets need be retained as anything more than metropolitan markets.

A pair of houses will shortly be built within easy reach of London, in A NEW TYPE OF PREFABRICATED PERMANENT CONSTRUCTION.

The system intended for the erection of permanent and not temporary buildings, is presented by Messrs. Unity Structures, Ltd. It has been developed by the firm's architect, Mr. Geo. K. Findlay. Based on the framed principle, the construction consists of pre-cast reinforced concrete columns of storey height at 3-ft. centres, and pressed steel plate beams up to 24-ft. span. The cladding is assembled dry and is of standard hollow CEMSTONE slab units, mass-produced by extrusion. These units are of rectilinear form and are adapted for assembly on the outer and inner sides of the columns. The wall units may be of any extrudeable profile and can be produced in a range of colours by the use of coloured Portland cement. Being of dry construction, it is claimed that speedy erection is ensured, and that a maximum of unskilled or semi-skilled labour can be employed whilst delays due to adverse weather conditions can be reduced to a minimum.

If the Government will not nationalize the land, let it at least agree to BUY THROUGH A NATIONAL LAND COMMISSION, says Mr. C. W. Gibson.

Speaking at Dover, Mr. C. W. Gibson, chairman of the LCC Housing Committee, said: The Government has refused to implement the Uthwatt, Scott, and Barlow reports, and has so far made no pronouncement of policy on the land question. The vitally important question of compensation and betterment has been shelved. In the meantime land owners are reaping huge prices for land which the local authorities must have for the urgent public good. Even the clamant need for land for temporary houses is exploited to the full. Prices up to £900 a plot are being extorted for land on which temporary houses are to be built. In London land costing £25,000 to £30,000 an acre must be used for providing permanent homes for the people. This question of the land is fundamental to any progress in housing. If the Government will not nationalize the land, let them at



Prefabricated permanent houses, shortly to be exhibited on a site near London. From a perspective by Peter Shephard. The architect is Geo. K. Findlay. See news item above.



The Camera Helps the Planner

A small exhibition is now being held at the Ministry of Town and Country Planning, at 32, St. James's Square, S.W.1, which has been prepared by the active Modelling Unit of the Ministry. Its purpose is to emphasize the additional values which photography can lend to original models—how it can pick out and throw into relief separately points of special interest within the model, how it can sharpen the sense of reality which the model creates by releasing it from dwarfing and irrelevant surroundings,

how it can record with precision the incidence of light and shadow at different hours and seasons, and how it can multiply the audience to which any single model can appeal. Above are two of the photographs exhibited: top, part of a large model of Bermondsey reconstructed according to the County of London Plan, showing the proposed Commercial Centre with large blocks of offices and wharfs; above, the proposed Civic Centre at Bermondsey. The exhibition closes tomorrow. (See also p. 312.)

A report has been presented to the Board of Trade on the employment of the
DISABLED IN THE SCHOOL FURNITURE INDUSTRY.

The Post-War Reconstruction Committee of the School Furniture Industry has presented its Second Interim Report to the Board of Trade. It deals principally with the opportunities offered by the industry for the employment of disabled people. The Committee has made a detailed survey of all the processes and occupations likely to be found in the industry and assessed the suitability of each of these for the various kinds of disablement. The report recommends the formation of a standing joint committee to advise on the rehabilitation and employment of disabled people in the school furniture industry. It also proposes that each firm should set up its own rehabilitation committee composed of representatives of the employers and the trade unions concerned. The committee believe that the aim should be to make each disabled person at least as efficient in his job as an able-bodied man and that this can only be done by a careful allocation of tasks and by individual study and encouragement in each case. The committee refer to an enquiry which they are making into the post-war demand for school furniture and also to the appointment of a sub-committee to examine the reconstruction problems of the makers of gymnastic equipment.

Mr. Ernest Bevin, Minister of Labour, will open an
EXHIBITION OF HISTORICAL AND BRITISH WALLPAPERS
to be shown at the Suffolk Galleries, London, from May 8 to 29.

It is the first of the industries suspended by the war to come to life, said Mr. T. A. Fenimore, director of the Central Institute of Art and Design, under whose auspices the exhibition is being held. He said: Wallpaper decoration was killed four years ago by the world's most notorious housepainter. It now returns to give attractiveness to the prefabricated houses. The idea of prefabricated decoration has never occurred to anybody: with most prefabrication there is a danger of too much standardization but wallpaper, apart from its variety of designs, can be put up in a score of different ways. It will materially help to turn the new houses into homes.

The Aluminium industry in Britain announces the formation of
A NEW DEVELOPMENT ASSOCIATION.

The main objective of the new association which is called the Aluminium Development Association, is to develop new and extended uses for aluminium alloys by initiating or assisting in the production of prototypes, encouraging research of all kinds, and by undertaking propaganda designed better to inform the public of the many uses to which this versatile metal should be put. The members of the first Council of the association are: The Hon. Geoffrey Cunliffe, *President*; Mr. Horace W. Clarke, *Vice-President* and Messrs. D. Cannon Brookes; W. C. Devereux, H. E. Jackson, E. Player, Austyn Reynolds, and G. A. Woodruffe. The Association's offices are at Union Chambers, 63, Temple Row, Birmingham, 2, the Public Relations Dept. at Granville House, Arundel Street, London, W.C.2.

INDUSTRY AND ITS NEIGHBOURS

IT is now a widely-accepted view, that the architect and the town-planner must co-operate more closely than has been the case in the past with the industrialist, the farmer and the man of business. *Vice versa*, the practical man of the world must achieve a wider and a deeper understanding of the principles for which the architect and his colleagues stand. Hitherto there has been a minimum of co-operation between the two, except only in a few outstanding cases. Existing trading estates are a case in point—neither Team Valley nor Treforest give any evidence of intelligent industrial planning of a comprehensive kind, although both display some attempt at architectural expression.

The war has taught us that even heavy industry can be moved, whilst many light industries can be moved easily; both the war and the peace before it have stressed again and again the difficulty of moving people, other than by the more subtle methods of inducement. Outstanding examples of these truths have been the dispersal of the British aircraft industry in 1940/1941, the removal of Russian and German industry to the East (for defensive reasons), and the failure of the English Land Settlement Schemes.

The Association for Planning and Regional Reconstruction, an independent body whose work is becoming increasingly well-known, has done a good job of work in its report *Adapting Wartime Sites to Post-War Uses* prepared for Slough Estates. (See pages 313-316.) The report is of importance to town and country planners for three or four reasons. First of all a commercial undertaking, with wide interests and resources, has sponsored the production of this entirely original piece of work, in order to prevent the repetition of the same planning, social and aesthetic mistakes that were made in the past (not so much in perpetrating Slough but in perpetuating it, the Government being originally responsible). At least, such an attitude shows progress and open mindedness.

Secondly, a typical, vast, ill-sited, ill-planned military dump was chosen as the object of the investigation, just such a dump as might have been Gretna Green or any other after the last war, or as many more will be after this. The site has been studied not as a site alone but in relation to its wider environment, the soil beneath it, the countryside, the towns and villages around it, the rivers, road and railways of the neighbourhood, and so on. A sincere effort has been made to show how such a site (lost probably for ever to agriculture because of the elaboration of heavy works upon it) could be converted to peacetime uses. A high standard of industrial layout and social endeavour has been shown.

Thirdly, the study has been based on a detailed survey of the somewhat limited resources of the area, both natural and man-made. The technique of this survey was developed and is described, so that others may do likewise.

Lastly, the plans that were prepared (on the basis of the Survey) are intended to represent a step towards that more intelligent link between industry and agriculture, between man and his working environment, that it is possible to achieve even in this twentieth century.

What matters is this—that local planning should be considered as a whole as well as in parts, and that those who consider should be experienced severally in many relevant fields of human activity and yet should be prepared to work together with others, as a group with many talents, as an open and a composite mind. The architect, the engineer or the planner who is not ready to work in this way is wasting his time and other people's money.



The Architects' Journal

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

REHOUSING

It is clear that the gravity of the housing situation is still underestimated—both inside the House of Commons, and out of it. This remark is prompted by the debate in the House on March 22 and 23, and by *The Rehousing of Britain*, by John Madge, just published by The Pilot Press (4s. 6d.). As soon as the war with Germany is over and demobilization and the drift back to the towns start in earnest, this problem will become too hot to hold.

In the Commons debate every speaker seemed to realize the difficulties of labour and material shortage which

faced the Government, and were prepared to make allowances, while fulminating in a general way about the housing shortage. MPs were concerned to put themselves right with the electorate on paper, and the various Ministers who spoke got away with it again by referring to their labour difficulties and by promising military palliatives in the form of General Sir Frederick Pile and scientific ones like Sir Reginald Stradling.

But no one seemed to realize that the situation will be beyond the resources of the building industry or of any other industry in the first few years; it is now too late, and we face a housing Dunkerque when we must give up the idea that houses can be put up in sufficient numbers to meet the situation, and look for any methods of shelter that are available.

John Madge's book is a corrective to the debate, for it gives a complete picture of the situation—the shortage, and the means and the methods of meeting it. It is what is called a popular book—that is to say, it has a message which is clearly presented; the pictures are apposite and their moral obvious. Some of them are new and all well chosen, and there is one on the last page which might be given away in a frame with the temporary houses. It is a photograph of some temporary bungalows erected at Welling in the last war and still occupied. Underneath is the caption "Last war houses—this war's children."

But the book has the same weakness as the debate. It considers housing in general terms and as a political matter—which, of course, it is in the long run—but loses the opportunity of presenting the catastrophic pass to which we shall be brought in the next years. The housing situation is now so desperate that those of us who have a house begin to think it will be necessary to defend it against all comers, and those who have not will consider the civil risks involved in forcible seizure. It may not turn out to be as bad as this—and housing conditions have never yet created a revolution—but we may be brought very near one unless we cease to think of housing in terms of pre-war programmes and standards.

Mr. Madge quotes representative speeches from Conservative and Labour politicians to show the attitude of these parties to housing. This is the worst part of the book, for while this game of capping quotations may be of political use, it gets us nowhere in housing. The quotations seem to show that Tory legislation will be aimed at keeping house building in the hands of private enterprise, while the Socialists will have the differential rent system and a central housing fund.

In the last part of this book, under the heading of Target, Mr. Madge points out that there must be a long gap of some five years during which the provision of houses will be far short of the demand. He does not seem to think this disparity can be reduced, and that all the houses which can be produced, temporary, permanent, and prefabricated, will only succeed in keeping pace with the deficit.

Other methods must be found. We must give up the idea that our housing shortage in the emergency period can be met by providing houses. Anything which can shelter beds and tables must be used in the first 2 or 3 years. We must build all the houses we can, of good standard, but the immediate problem of shelter must be met by unorthodox means. The local authorities must commandeer all large houses—and there are plenty in the

centres and fringes of our towns. Conversion is an important job, but can only be carried out satisfactorily if taken over by the authorities and organized in a big way. Many large houses will no doubt have to remain as they are for the time being and be shared among families, for conversion of old property more often than not uses a disproportionate amount of labour. Hostels, emergency hospitals, and army camps must be used as well, and we might consider the use of obsolete railway carriages, military caravans, decked-in naval craft.

*

Surprisingly enough, Mr. Madge does not mention the establishment of a Central Purchasing Board. This operated after the last war, and, properly handled, it could be used to force standardization upon building manufacturers and ensure adequate supplies of equipment and appliances. It could cut out the profiteering and price rings, and subject all manufacturers to costing and ensure that they concentrated on the types most essential for housing.

*

The Rest Centres and other apparatus of Civil Defence should be continued after the war to act as community centres, where advice and guidance can be given. These centres might also assist the temporary occupants of commandeered and requisitioned buildings to carry out their own alterations. They could also act as letting agency for the local authorities. These are just a few of the methods by which we might succeed in getting by the first few years and acquiring homes of a sort.

REQUISITIONED LAND

The 94th Report of that industrious body, the Select Committee on National Expenditure, is most timely. It deals with the release of requisitioned land and buildings and sets out in detail the land and buildings requisitioned by each Department, with the numbers (or proportions) released to date.

*

One aspect of Government occupation of land on the temporary basis of requisition is of interest to planners. It is the apparent lack of co-ordination

which results from the watertight methods adopted by each department. One can understand that, in periods of crisis, it is essential that Departments should be free to act at once and not wait while their demands are "co-ordinated" for months by the passage of inter-departmental files, but it is equally extraordinary that, even now, it seems to have been no one's responsibility to tidy up the situation that resulted.

*

It is significant that the first report on the state of affairs comes from a Select Committee on expenditure, not from any of the Departments concerned primarily with the use that is made of land. In a more logical world such a task would surely be one for the Ministry of Town and Country Planning.

NOTE FROM PLYMOUTH

We have received a sharp note from Plymouth. Mr. Miller has burst into flames. Readers may recall my paragraph *Incoherent Trio*, in which I cited his thesis *The Architecture of the Fire Service*, together with two pamphlets by the BBC and the Georgian Group, as evidence of lack of liaison between different units in the Army of Reconstructionists.

*

Far from suggesting, however, that Mr. Miller's painstaking and timely work was not of obvious value in itself, I complimented the thesis as being "excellent, informative, informal, readable, and thoroughly useful." The point of my paragraph, which Mr. Miller seems to have missed, was that in these days, when coherence in all aspects of building and planning is vital, viewpoints such as his, and that of the BBC and the Georgian Group, which examine some corner of planning in great detail, should step back for a moment and view the picture as a whole, showing us how their individual work fits into the grand pattern. It can be done by only a comprehensive paragraph in a preface or in a conclusion, but somehow, somewhere, the link must be made, if this sort of specialist work is to be of maximum use at the present critical time.

ASTRAGAL



LETTERS

E. V. Penn

P. J. Lucas

Salaries

SIR,—Mr. H. A. Furness, in his letter, refers to the disgraceful salaries being offered to architects and engineers. Additional point has been given to his letter in the last few days by several advertisements inserted in the technical press by the Appointments Department of the Ministry of Labour and National Service. The worst of them concerned an offer, by the Burgh of Motherwell and Wishaw, to architectural and engineering assistants. Details of the offer and of the opinion of the Association of Building Technicians are given in the letters of protest—given below—which we have written to the Burgh and to the Ministry of Labour and National Service.

Success in the architectural and engineering professions has in the past depended very largely on individual ability, but this is becoming less true. Large offices are increasing in number and they tend to place assistants on salary scales which regulate the speed of their advancement. Obviously it is in the interest of the whole profession that these scales should be reasonable ones, but they can be won only by concerted action through a technicians' organization. Non-technical organizations, though admitting technicians to membership, have not succeeded in safeguarding their status.

The ABT has recently had considerable success in securing improved pay, overtime rates, etc., for some classes of building technicians. Architects and engineers have tended to lag behind because of their low degree of organization. Progress will be more rapid if technicians of all types concert their demands, and when architects and engineers learn the lesson and organize accordingly there will be plenty of opportunities to get things done.

E. V. PENN,

General Secretary,

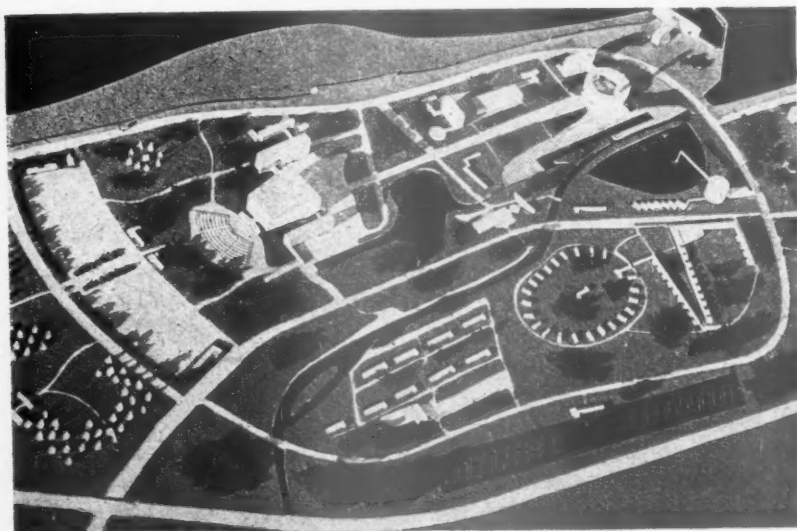
Association of Building Technicians.

The Town Clerk,
Burgh of Motherwell and Wishaw,
Lanarkshire, Scotland. 17th April, 1945.

SIR,—I write to make the strongest possible protest against the salaries offered by you to Technical Assistants, through the Ministry of Labour and National Service, in current advertisements in the technical press.

You require assistants of considerable qualifications, experience and ability, able to prepare independent designs. Yet at the salaries you are offering—£250 per annum plus war bonus for an Engineering Assistant and £200 per annum plus war bonus for an Architectural Assistant—

MODELS BY MOTCP



Three photographs of models from the exhibition at the Ministry of Town and Country Planning produced for planning purposes. Its object is to show how photography can increase the value of original models. Top, a Holiday Centre containing an entertainment centre, bathing and boating pools, tennis courts, residential quarters and camping sites, and a harbour. Centre, a plaster model showing the central re-development of the City of Durham according to the plan prepared by Mr. Thomas Sharp; the concentric rings on the right indicate the site of the Castle; existing buildings are omitted. Above, part of a large model of Bermondsey reconstructed according to the County of London Plan showing the proposed re-development of the South Bank east of Tower Bridge. Other illustrations are shown on page 308.

it is completely impossible that your requirements will be satisfied.

The positions advertised are worth a salary of at least £400 plus war bonus, and even if you offered this amount I feel very doubtful whether the requirements of the citizens of your Burgh would be properly met. I mean by this that it is worth paying for a really high standard of technical assistance, and though you may secure men willing to accept poor pay the money you will save will be small compared with the losses you will incur through the quality of their work.

I shall be obliged if you will put this letter before your Council, or the appropriate Committee, and I sincerely hope that they will agree to the reasonableness of my remarks and amend their advertisements accordingly.

E. V. PENN

Rt. Hon. Ernest Bevin, M.P.
Ministry of Labour and National Service,
8, St. James's Square, S.W.1.

17th April, 1945.

DEAR SIR,—I write to protest strongly against the action of your Appointments Department advertising in the technical press for technical assistants for the Burgh of Motherwell and Wishaw (Appointments Dept. references: E.1493XA and EA.1346XA). Assistants with very considerable experience are asked for and it is stated that "preference will be given to those who are A.M.I.C.E., A.M.I.M. & Cy.E., A.R.I.B.A., or equivalent." The salaries offered are £250 plus war bonus for engineering assistants and £200 plus war bonus for architectural assistants.

In my opinion the Appointments Department should not be allowed to lend its authority to such offers, which have a definite tendency to debase standards in the architectural and engineering professions. Nor should the time of the Department be wasted in the correspondence, etc. relative to such advertisements, which are almost certain to be completely without result. Finally, the Department should know sufficient about its job to realize that the filling of these situations, at the salaries offered, would be an ill service to the citizens of Motherwell and Wishaw because it would give them incompetent and badly trained officers. It would have been very simple for the Department to have informed the Burgh of these facts and to have refused to advertise the vacancy.

This particular case is the worst of a number which I have noticed recently. This Association, as a trade union, is pledged to do all in its power to protect its members from such employers, and we feel sure it is not your wish that your Ministry should appear to favour them.

E. V. PENN

The Flueless Heater in the Gas House

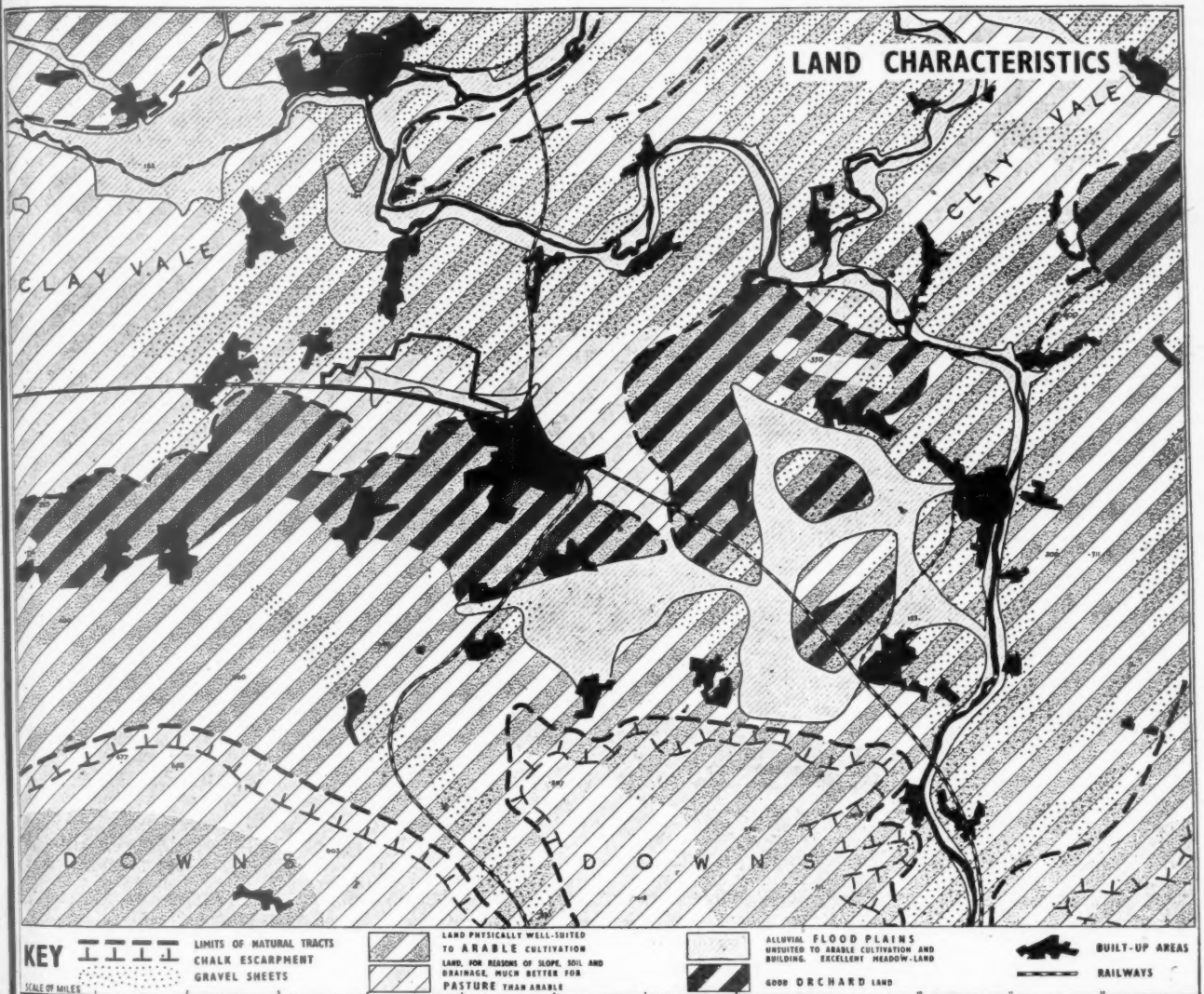
SIR,—In reviewing our booklet, *Comfort and Economy in the Northolt Demonstration Houses*, you call attention to the small flueless heater installed in the gas house for airing the linen cupboard, and ask what becomes of the water vapour produced by combustion of the gas. (Information Centre No. 1861, April 5).

The gas rate of a heater capable of airing a linen cupboard adequately is very low—approximately 2 cu. ft. per hour—and the cupboard door is ventilated at top and bottom to give free circulation of air. There is, therefore, no possibility of condensation, a statement which is borne out by the fact that heaters of this type were in use before the war and have worked satisfactorily. Indeed, the water vapour arising from the clothes or bedding in any heated airing cupboard, whatever the means used to heat it, is much more than that produced by the combustion of gas in this little heater.

P. J. LUCAS,
Secretary, British Commercial Gas
Association

London

PHYSICAL PLANNING SUPPLEMENT



The Association for Planning and Regional Reconstruction has prepared a book for private circulation, called *Adapting Wartime Sites to Post-War Uses*. By taking a typical wartime site, it shows both a proposed treatment of sites chosen for industrial purposes and a method of survey for the selection of industrial sites. Unless the problem is taken in hand in some such way as this, wartime sites may become distressed areas after the war, and pre-war distressed areas may revert to that state. The following article and illustrations are condensed by the Association from the book, specially for publication in the *Architects' Journal*. The map above shows the general land characteristics of the district surrounding the site; the area enclosed by a black line is the war site.

CONVERSION of war sites

The typical wartime site is an actual site in an area which is conditioned by nature and to some extent already fashioned by man.

Workers on the site are drawn partly from civilians living in all the villages shown on the map above. Some travel in by bicycle and some are collected by special buses.

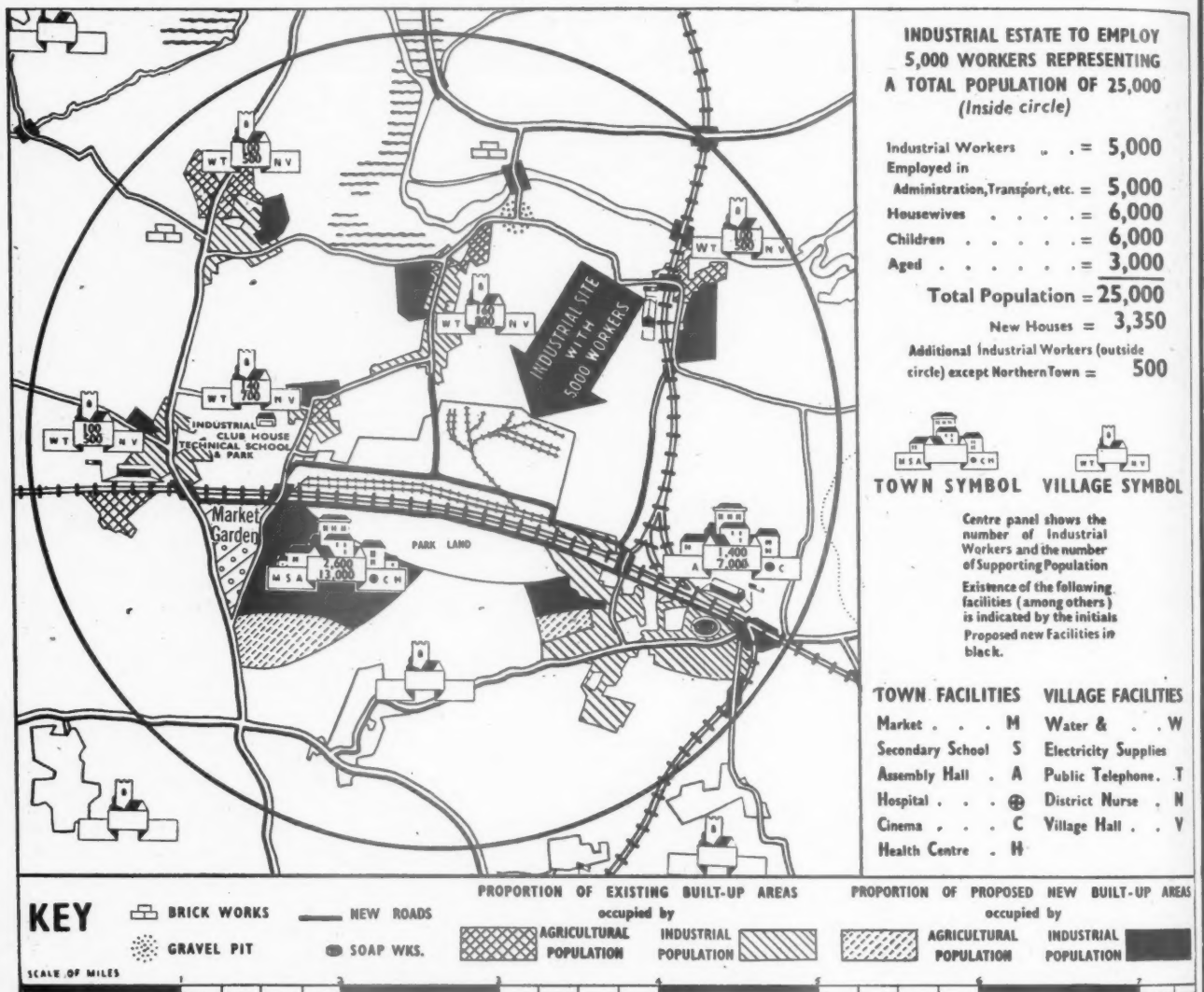
The central town near the site (enclosed by black line) shot up rapidly to 5,000 inhabitants shortly before the war. It grew haphazardly and is both inconvenient and unpleasing.

The choice of the site was doubtless due to the strategic importance of the railway junction and its position in relation to the ports and the great centres of population. These factors are equally favourable for the establishment and development of light industries after the war, as the excellent transport facilities offer easy access to supplies of raw materials as well as to the great consuming centres. The existence of an industrial site which is already partly prepared and

equipped renders it particularly attractive for post-war industrial development, though in the particular case shown opposite the existing buildings themselves are not very suitable for this purpose and the water supply and sewage disposal leave something to be desired.

Any such development would drastically affect the lives of all living in the area and, if left to grow unaided and unhindered, would almost certainly enlarge and intensify the inconveniences from which the inhabitants of the central town already suffer. It is important, therefore, that an endeavour should be made to control and direct the development as part of an integrated scheme of economic and social planning, which would take into account both the needs of industry and the probable repercussions upon the life of the surrounding rural areas.

Naturally, the conditions for the housing, daily needs, education and recreation of the new industrial workers and their



INDUSTRY: The map above shows the proposed industrial estate to house 5,000 workers; this represents a population of some 25,000. The industrial area is clearly separated from the residential quarters.

families must not be overlooked.

It is common knowledge (and evidence is quoted in both the Barlow and Scott Reports) that an unsatisfactory position may be created in a town when there is dominance of a single industry or of a single firm, even with many different kinds of employment. In time of slump the first type of town suffers unduly and recovers slowly; the second type is affected by social difficulties, not least of which is the over-development of a single outlet for patronage and for antagonism.

The Government is thought to be predisposed to decentralization and to the grouping together of differing industries. Many wartime sites exist that appear at first sight well suited to become new industrial centres. How are these to be selected? How are the new workers to be attracted to them? How is co-operation to be developed with the existing habits and work of the locality? In fact, how is the pre-war life of over-congested towns that are divorced from a decaying countryside to become harmonized in a progressive post-war world? These are some of the problems discussed here.

industry

In all cases it is necessary to take into account not only the detailed development of the site, in a way likely to attract manufacturers of differing products, but also the question of accommodation for the workers.

Suggestions for the accommodation of workers are shown above. It will be seen that housing for a potential 5,000 workers is located in several different centres within a radius

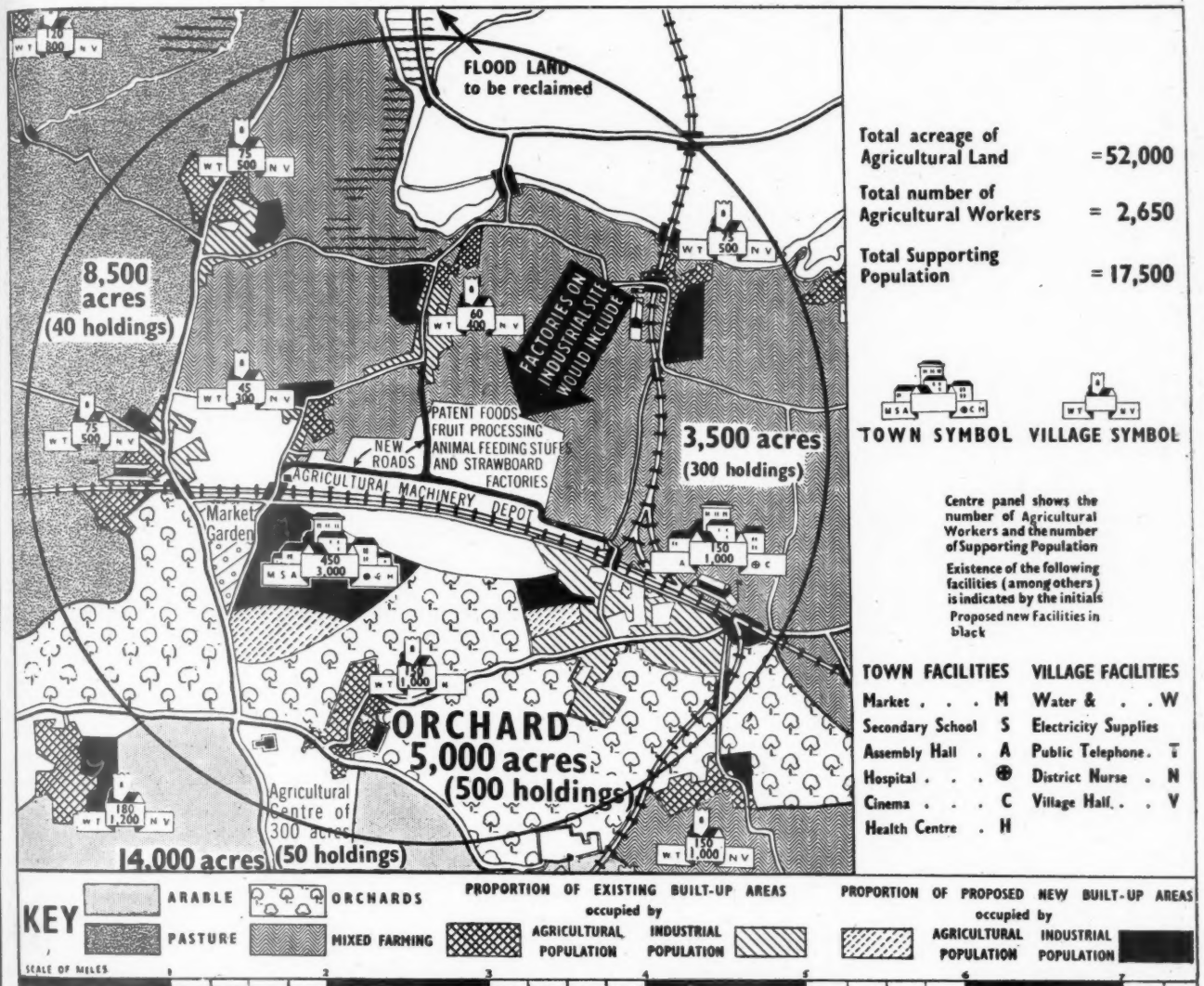
of 3 miles from the industrial site. The industrial area itself is clearly separated from the residential quarters.

The potential 5,000 workers would normally represent a total population of some 25,000; another 5,000 or so being employed in distributive trades, transport, administration, the professions and such service industries as building, laundries, etc.; and the remaining three-fifths of the population consisting of housewives, children and the elderly.

The existing central town is badly sited and it is suggested that, with some internal re-planning, it should only grow to 10,000 people and be separated from a new town by a strip of parkland sited along a belt of low-lying badly-drained land. A road, parallel to the railway, would connect the old and new towns and a cycle and walking track would run through the park strip.

The new town, sited on the slope of a rise near the main north-to-south road, would be planned for a population of 16,000 and would contain a secondary school, a technical college and a good shopping centre with a market. These would serve the whole group of small townships centred upon the industrial site. At present the only secondary schools are in the northern and eastern towns, and there is no technical college in the area. The range of shops in the central town is inadequate to serve a large population and is not easily accessible by road from the surrounding communities.

The new town would also contain a health centre, including a gymnasium and swimming bath. It would be separated from the three villages to the north by a proposed industrial



AGRICULTURE: The map above shows the proposals resulting from a survey of the agricultural possibilities of the district. It serves as a guide to possible lines of profitable development—not as a rigid plan.

clubhouse and its parkland, which would form a central park for the surrounding residential areas.

This scheme of decentralized residence is suggested for several reasons. Labour and social conditions are greatly improved if there is a wide choice of places for living so that workers can "away from the job" in their leisure hours and are not obliged to live cheek by jowl with their work-mates. The site is already surrounded by villages to which industrial population is extremely likely to be attracted by reason of their nearness to work. Yet none of these, nor the existing central town, is in a suitable position for any great growth. There was need, therefore, for a new town in a central position to provide the additional amenities required by a modern community.

agriculture

A survey of the agricultural possibilities of the district shows that the area could be roughly divided into six tracts:—

1. A belt of land extremely suitable for fruit growing—in particular cherries. This might be expected to employ on an average 15 workers per 100 acres. Holdings of upwards of 5 acres would be likely to prove profitable, especially if marketing were centrally arranged and all surplus fruit—not sold as fresh fruit—were to be processed on the industrial site. Pickers could be recruited from the new townfolk.
2. A broad band of fertile arable land on the lowest slopes of the downs. This tract would be suitable for large scale mechanized cultivation. In this case it would probably employ about 3.5 workers per 100 acres. The most profitable size of holding would probably

be upwards of 300 acres. The amount of saleable produce from this area would justify the erection of food processing plants on the industrial site.

3. A large tract of heavy clay-land towards the north-west most suitable for dairy farming. This area would be sufficient to provide the whole projected population of the district with 1 pint of milk per day, which is the suggested dietetic optimum. Dairy farms differ widely in size, but herds of about 60 cows on an acreage of some 200 acres, run on a system of four-year leys, would probably prove profitable in this area.

4. A somewhat varied area of clay, gravel and alluvial land occupying the centre of the district. This appears most suitable for small holdings and mixed farms which might profitably concentrate mainly upon the provision of fresh food for the local population. Fairly small holdings should be profitable here as the work would be less mechanized.

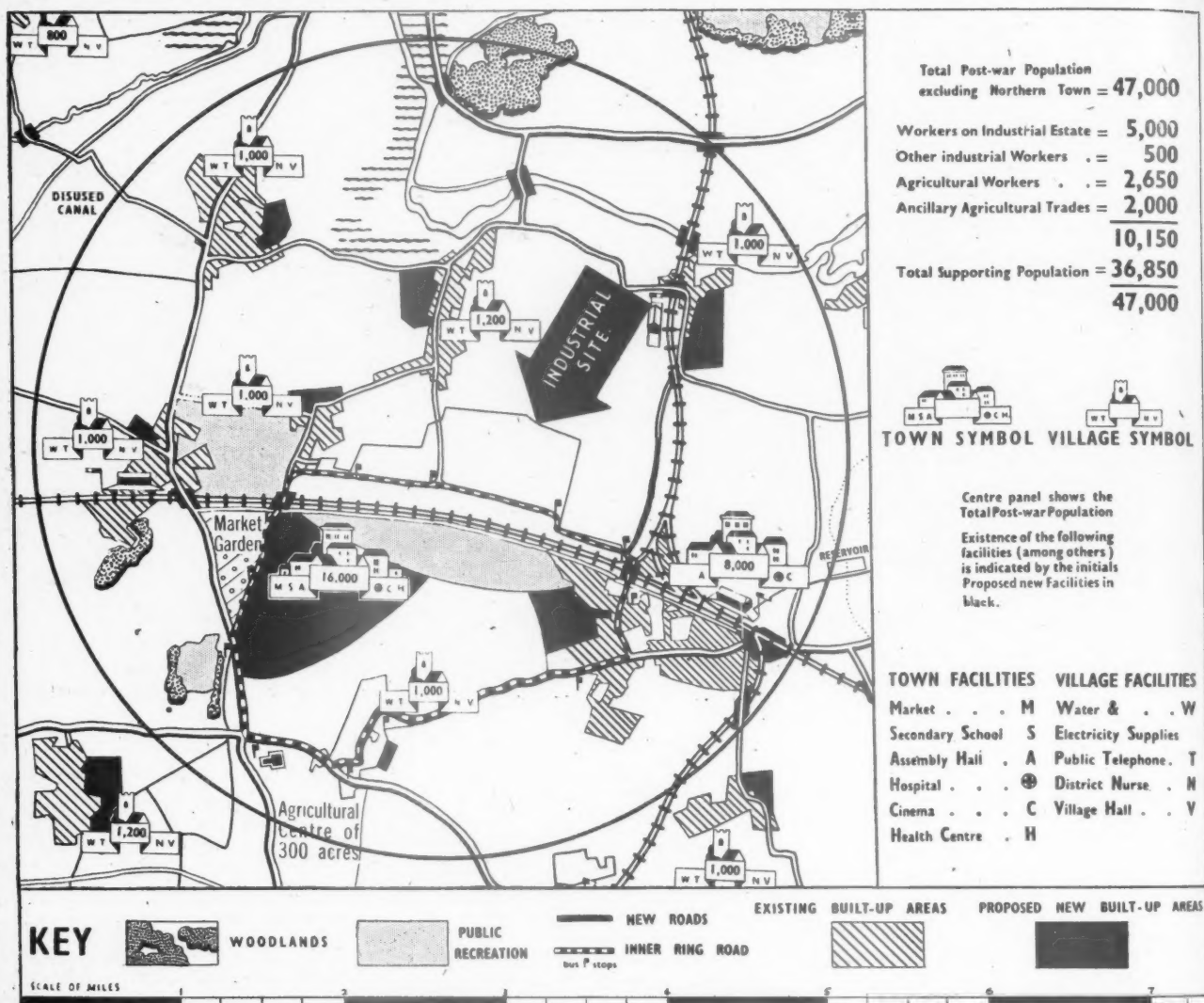
5. The upper slopes of the downs. Here dairying, on the Hosier system, and some sheep farming, seems most suitable.

6. The patches near the river liable to flooding. These might afford opportunities for reclamation in the immediate post-war period, by men and women awaiting demobilization.

It has been found that farm workers usually represent about 15 per cent. of the total rural population—another 25 per cent. being employed in distributive trades, etc., and also in necessary types of ancillary village industry.

The population of the existing villages has been shown adjusted as it might be if this outline programme were fulfilled in every particular. The scheme is intended to serve as a general guide to possible lines of profitable development in many areas—not as a rigid plan.

Certain villages have been shown enlarged and others declining. It is suggested that the former should be provided



INTEGRATED SCHEME:

Above is the development of the district considered as a whole; it covers an area of 52,000 acres.

at an early stage with a village hall, the services of a district nurse, a public telephone system, piped water and cheap electricity. The school should, if necessary, be rebuilt; further shopping facilities and a bus shelter added; and an active programme of house building and reconditioning started. The small villages left to decline would receive none of these new attractions and their few inhabitants might gradually be expected to move to the better equipped villages. The remaining cottages might well prove attractive to "week-enders" in search of rusticity.

It is suggested that a central farm should be established near the main crossroads, easily accessible from all parts of the area. This would serve as a marketing, hiring and repairing centre; as a local agricultural experimental station; as a headquarters for a veterinary service; and as a training school.

integrated scheme

The full development of this district, covering over 52,000 acres, has been considered as a whole. Approximately half the total population would be dependent upon the prosperity of the local agriculture and half upon that of the industrial site. The area is sufficient to provide a population of some 50,000 with a balance diet of fresh foods and to supply annually some 10,000 tons of fruit and 8,000 tons of grain to be processed for the national market.

Towns and villages are of such a size and in such situations

that the people can be easily supplied with all reasonable requirements for an ample life freed from unnecessary drudgery, and with good and varied prospects near at hand for their children.

A ring road would link the industrial site, the central farm, the railway station, the central town and the new town. Along this road there would be a regular service of buses and lorries picking up and setting down passengers and goods at set stopping places.

Elementary, secondary, agricultural and some other technical education would be provided in the area, but the population would travel to one or other of the major towns for first-class concerts or theatres, and for major shopping requirements; two such towns lie within twelve miles of the district and can be reached easily both by bus and train.

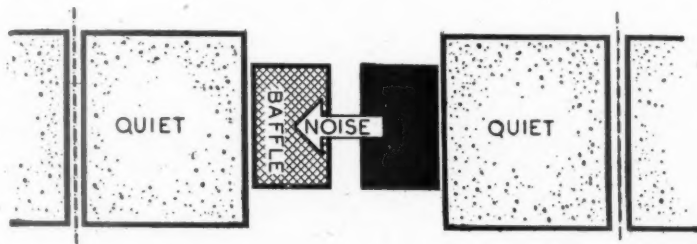
The highest parts of the hill land and some particularly attractive hills in the curve of the river have been scheduled for public recreation. A hostel and cafes, etc., are shown on the outskirts of the eastern town and in the south-west on an approach to the hill-lands, the first on the site of an ancient castle, the latter a country house.

A system of green lanes and footpaths is shown, linking these recreation areas with the towns and with other parts of the country. Some of these follow ancient trackways.

Considerable afforestation is shown on some of the slopes of the hills, which, near this area, are often heavily wooded with beech. This might well, in later years, provide material for furniture making on the industrial estate.



THE HOWARD HOUSE DESIGNED BY FREDERICK GIBBERD



GENERAL—This prototype house has been produced as a permanent dwelling suitable for mass-production in factories by John Howard & Co., civil engineering and building contractors. Unlike many of the other post-war houses produced by private enterprise, the Howard has been designed as an ideal house type rather than as a system of construction or to suit a particular building material. To save skilled labour brickwork

has been entirely eliminated, and timber has been reduced to a minimum. To ensure speed of erection, the construction is dry and needs little site work. The prototype pair illustrated here has received the consent for erection of the Burt Committee, and has been built on a site at Datchet. Research work on the house was begun two years ago. To begin with, the reports made to the

MOH Advisory Committee on House Planning were examined which represented both the view of the expert and of the consumer. The house has been based on the main general recommendations of the reports.

PLANNING—The working section of the house, the kitchen, bathroom, w.c., and utility room are all planned as a unit separate from the living and sleeping accommodation. The house offers three distinct types of plan. One bedroom can be furnished and curtained off as two children's rooms; and the third bedroom can form a bed-sitting room. The house can be built in a terrace without the use of tunnel access for tradesmen, and at the same time, with the kitchen facing the garden.

Services have been concentrated in a prefabricated plumbing duct, and the house has been planned against noise. All noisy rooms, the kitchen, utility room, bath and w.c. are remote from the habitable part of the house, and the service units of adjacent houses are placed next to each other, so that all the piping for two houses is concentrated together, thereby reducing the drainage and service costs.

A single house can provide three distinct plan types, as shown in the diagram. By erecting light

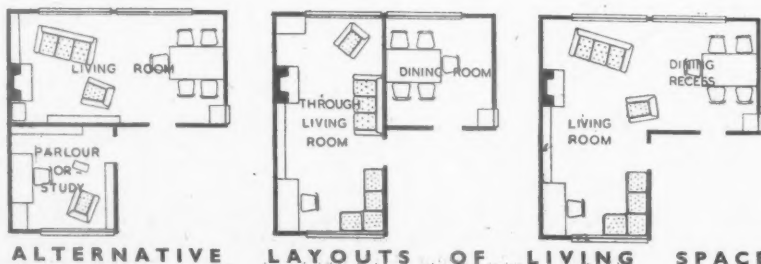
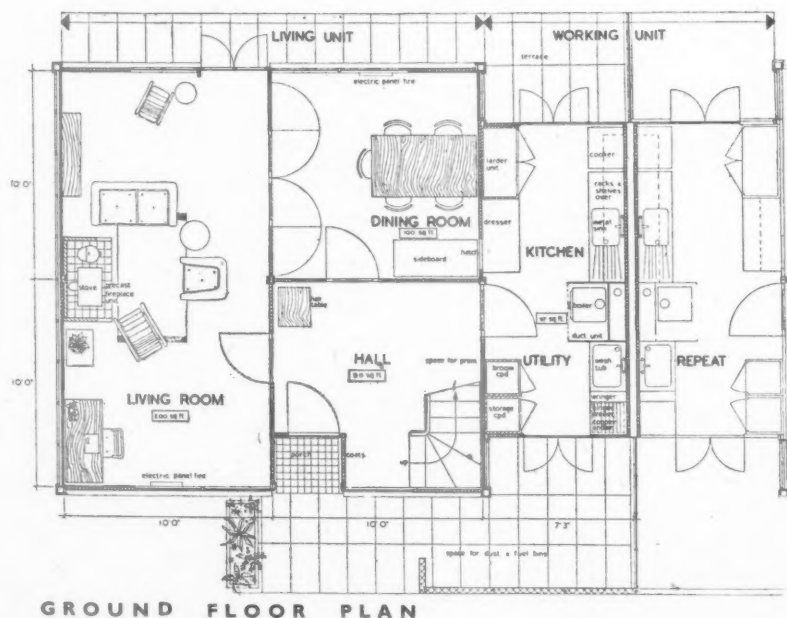
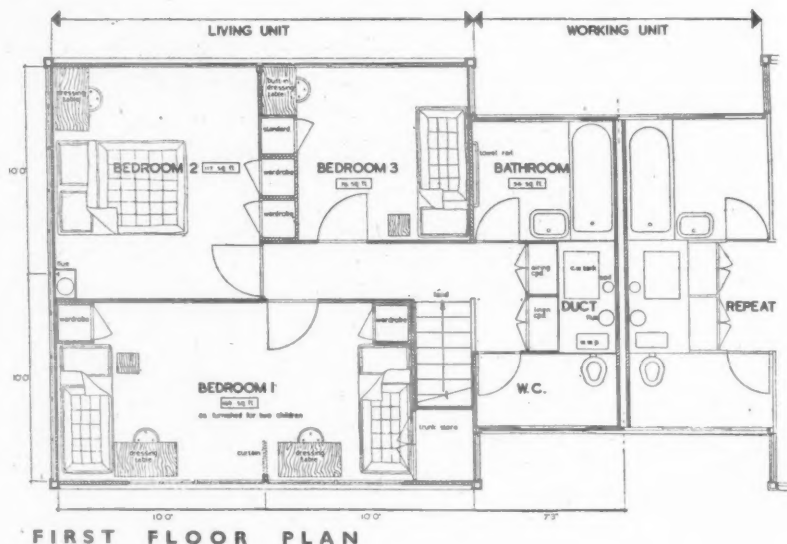
partitions or folding doors there is a choice between a through living-room type house with separate dining-room; a parlour type house with wide frontage living-room onto the garden; and an open ground floor type house in which there is one large L-shaped room. In each case there is direct service to the dining table through a hatch from the kitchen. Similarly, in each case the living room extends onto a garden terrace by means of glass doors.

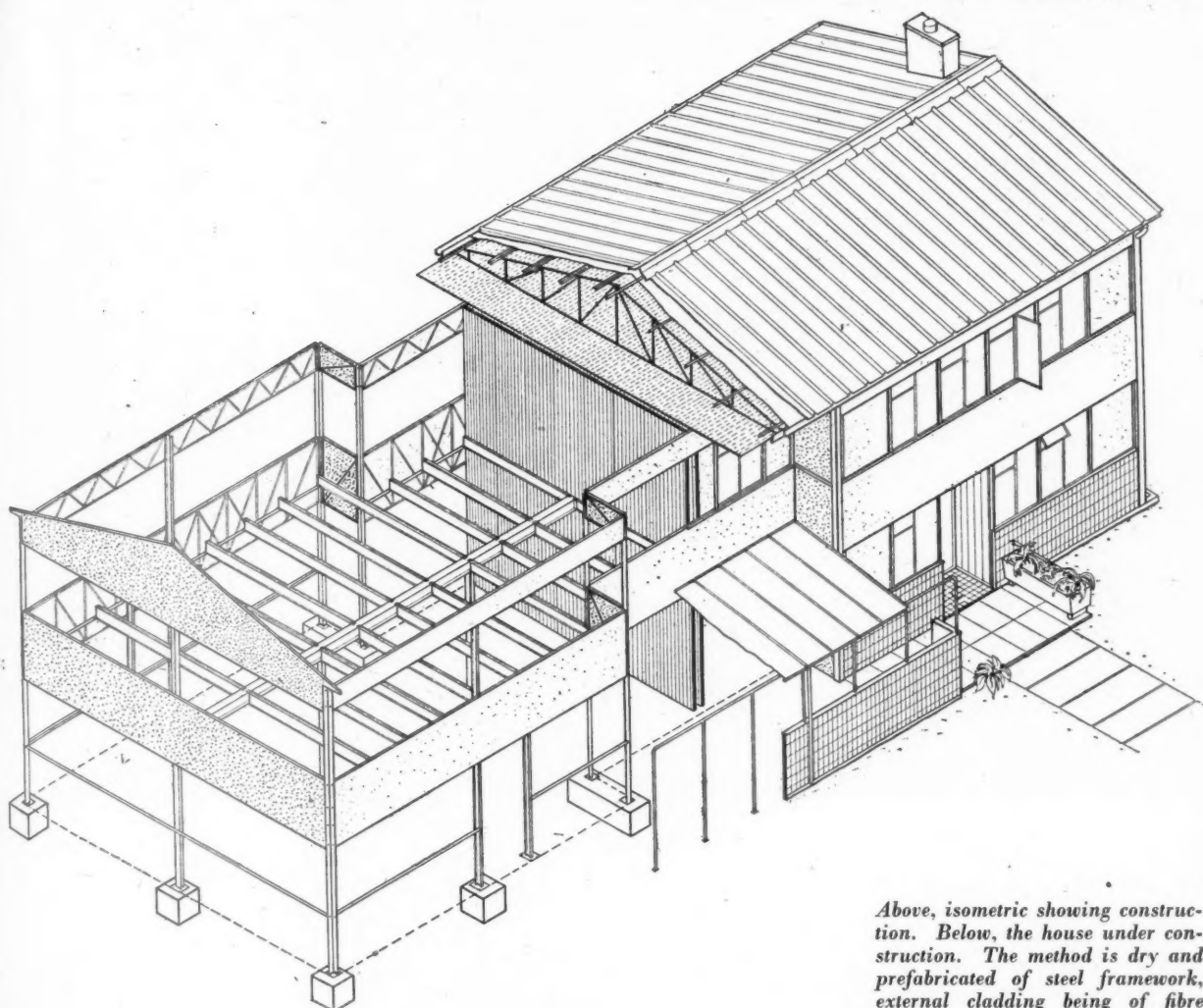
CONSTRUCTION—The system consists of a series of prefabricated units mounted on a light welded steel frame of standard rolled sections. Site work amounts only to dry assembly. The steel frame is erected in a few hours, after which the ribbed asbestos-cement roof sheets are put on so that subsequent work can be carried out under cover. Additional insulation is provided in the roof.

The external wall units are large panels with a rough-textured external surface of any colour. The plinth is of pre-cast units faced with briquettes or tiles.

The floor consists of a series of deep prefabricated units complete with timber floor and ceiling finish. External cladding is of laminated panels of fibre board, cemented wood wool and aluminium foil. Additional insulation is provided by a cavity between the external wall and inside lining. The resulting insulation is greater than that of the 11-in. cavity wall.

SITING—The houses can be erected in semi-detached pairs or in terraces of any length. In the past the great drawback to the terrace type has been the means of access to the kitchen, which was either by back lanes or by tunnels through the houses. The service unit of the Howard House, with its screened space in front, allows direct access to be made to the kitchen overlooking the garden at the rear. Tradesmen can call, the dust be collected and the fuel delivered directly from the road in front of the house without disturbance to the living quarters. Another problem with the standardized house plan is the difficulty of siting it in any position, while at the same time getting sunlight to the living room. This has been overcome here by the flexible planning of the living space. Thus, the house can be placed on an east to west axis with wide living space across the house, facing south, or can be on a north and south axis with a through living room with east and west sun.

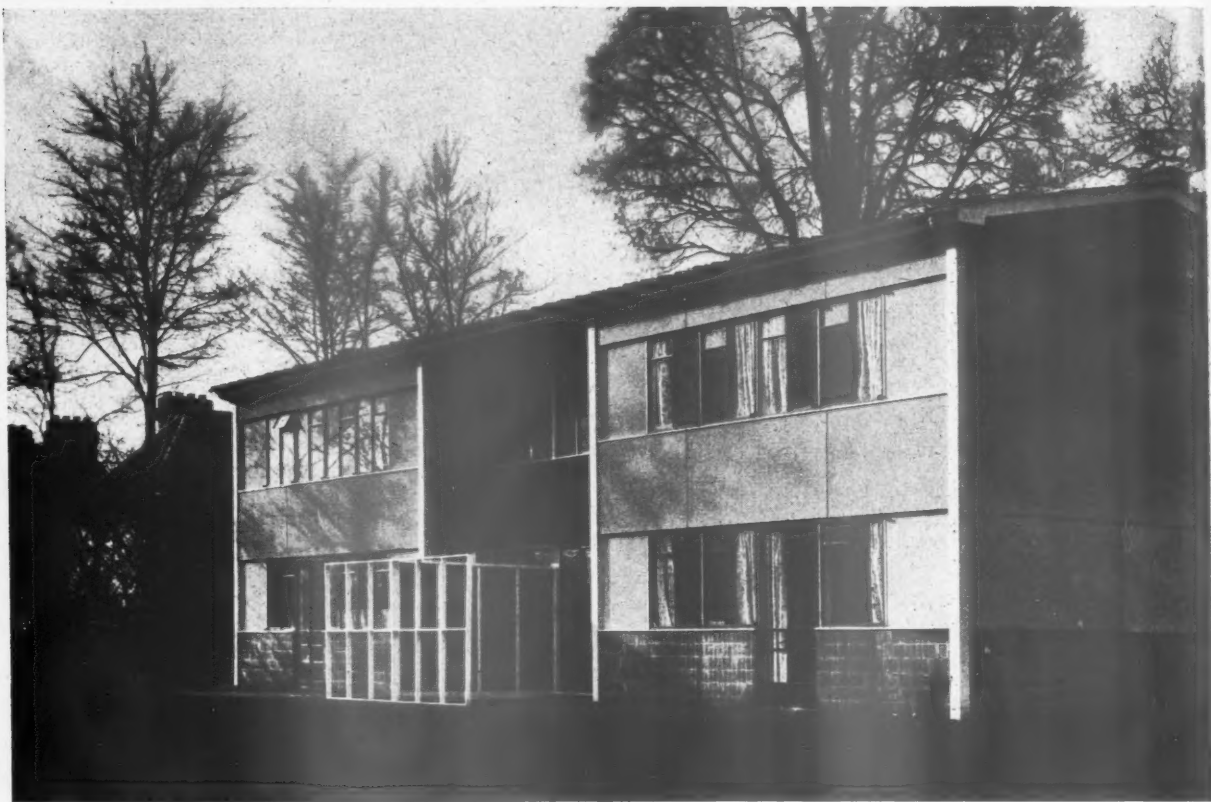




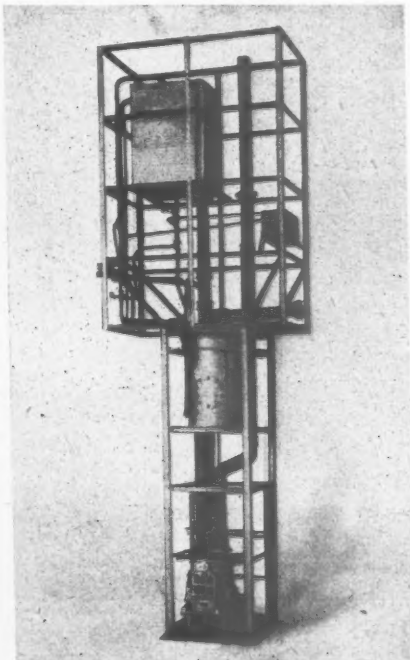
Above, isometric showing construction. Below, the house under construction. The method is dry and prefabricated of steel framework, external cladding being of fibre board, cementated wood wool and aluminium foil; internal lining is of fibre or other building board.



HOWARD HOUSE: DESIGNED BY FREDERICK GIBBERD



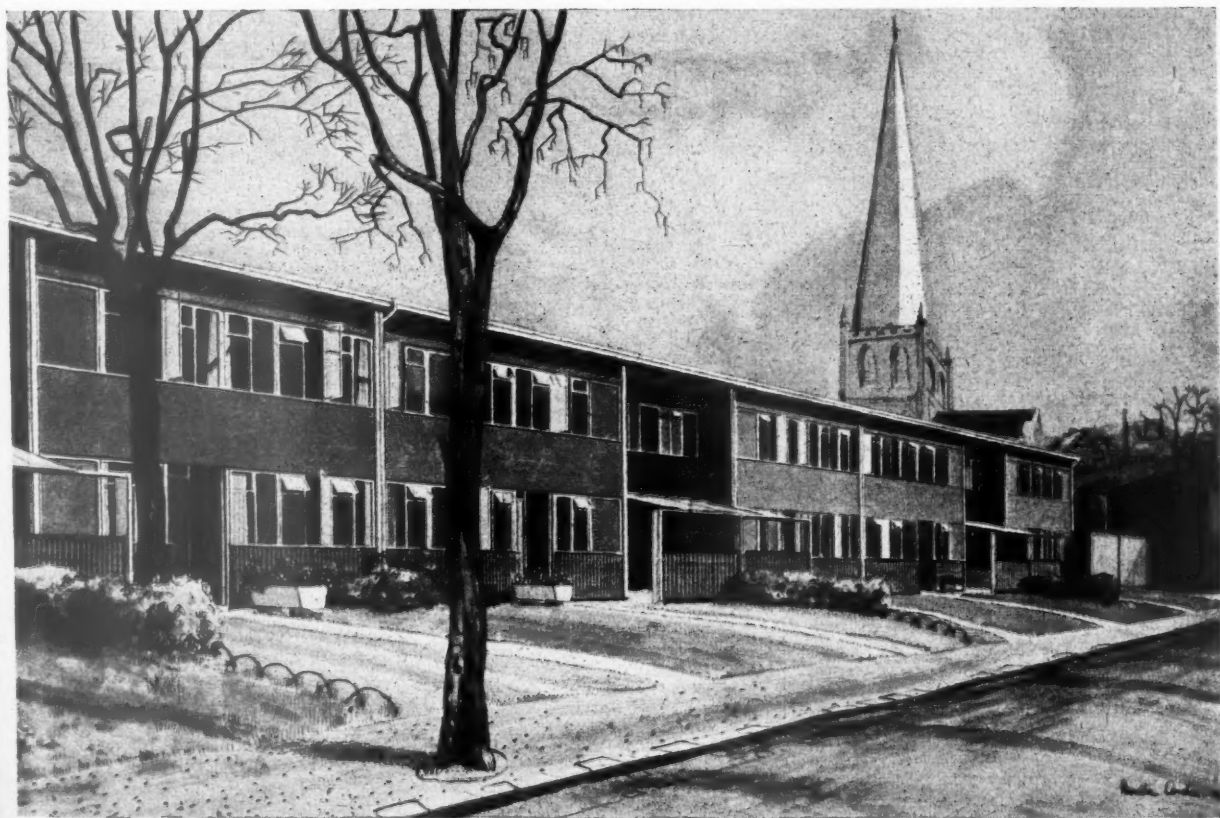
Above, view from the garden. Below, left, the kitchen looking towards the front of the house. Below right, the prefabricated plumbing unit containing water, heating and drainage services.



H O W A R D
H O U S E
DESIGNED BY
FREDERICK GIBBERD



Above, photograph taken during construction showing a flooring unit complete with timber floor and ceiling finish. Below, a perspective by Neville Conder showing the suggested treatment of the house in terrace form; by careful planning, rear access for tradesmen by back lanes or tunnels has been avoided.



INFORMATION CENTRE

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

STRUCTURE

1895 Brickwork and Drainage

THE NEW BUILDERS' HANDBOOK NO. 1. BRICKWORK AND DRAINAGE. E. J. Ward and A. Voller. (George Allen & Unwin, 5s.) Practical and comprehensive instructions on brickwork and drainage in the modern house. Useful to young trainee.

The book is written to meet the requirements for rapid training of those entering the building trade from the services to help in the work of reconstruction after the war.

This handy and short work (108 pages and 94 figures) will prove an extremely useful companion of the young trainee. It gives in clear and concise language all necessary information on practical construction in brickwork based on modern methods. The chapters deal with: Bricklayers' Materials (Brick, Mortar), Bonding, Quoins and Junctions, Building the Foundations, From Footings to Damp-proof Course, Supporting the Floors, Wall Openings, Fireplaces, Flues and Chimneys, Jointing and Pointing, Cavity Walls, House Drainage. Perhaps it will be possible to include in later editions some information about (1) scaffolds for bricklayers and how to build and use them, (2) the share of unskilled labour as help to the bricklayer, (3) efficiency expected from the skilled bricklayer. An index of technical terms might also be useful.

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MATERIALS

1900 Expanding Cements

EXPANDING CEMENTS AND THEIR APPLICATION—SELF-STRESSED CONCRETE. A. Caquot and H. Lossier. (Le Génie Civil, April 15 and May 1, 1944, pp. 61-65 and 69-71. See also Journal of the American Concrete Institute, January, 1945, pp. 238-240.) Review of development of pre-stressed concrete. Physical characteristics of expanding cements and their use in various types of structure.

Pre-stressed reinforced concrete has repeatedly been referred to in the Information Centre. In all methods described in previous publications pre-stressing is accomplished by stretching the reinforcement either mechanically or by heating. Another method proposed by H. Lossier is the use of a cement possessing the special property of swelling regularly during the setting period. The research department of Poliet and Chausson, cement manufacturers in France, developed such a cement.

The expanding cements are composed of three elements (a) ordinary Portland Cement, (b) sulpho-aluminous cement, which acts as the expanding factor, (c) a stabilizing element which after a regulated time stops the expansion by absorbing the principal reagent. The article describes tests for four classifications of this special cement, differing only in the magnitude of their total expansion of the neat paste cured under water. The cement called Strongly Expansive expands 1.2 to 1.5 per cent. The expansion of concrete made with such cements increases with the cement content up to 840 lb. per cu. yd. when it reaches about $\frac{1}{3}$ of that of neat cement after which the rate of increase drops very fast. The setting time is slower than that of Portland cement. At early stages the compressive strength is less than that of concrete made with ordinary Portland cement, at 28 days it is about equal and from then on higher. Full size models were tested using the different classes of expanding cement in pavements, arches, floors, etc.

Expanding cements have been studied and improved for more than eleven years and have reached a state of development which yields stable and well defined chemical and physical properties. The intensity and period of expansion can be controlled. When the expansion is restrained either externally (e.g., by abutments) or internally (reinforcement), the gradual increase in compaction of the concrete increases its ultimate compressive resistance.

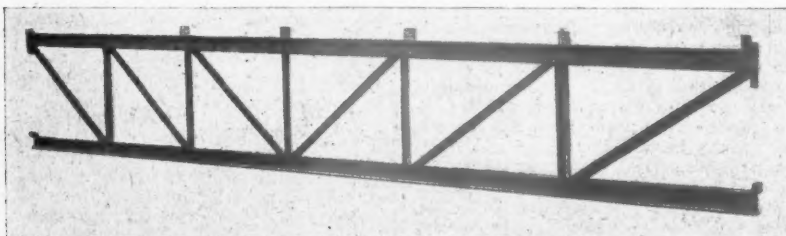
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Foundations.—For all work cast against the earth the resisted expansion increases the compressive strength of the concrete and its friction against the ground.

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Standard welded truss of new design developed in the USA. See No. 1896



L. E. Walker, Photo

FORECOURT ENCLOSURE, KING'S LYNN

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INFORMATION CENTRE

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

STRUCTURE

1895 Brickwork and Drainage

THE NEW BUILDERS' HANDBOOK NO. 1. BRICKWORK AND DRAINAGE. E. J. Ward and A. Vollor. (George Allen & Unwin, 5s.) Practical and comprehensive instructions on brickwork and drainage in the modern house. Useful to young trainee.

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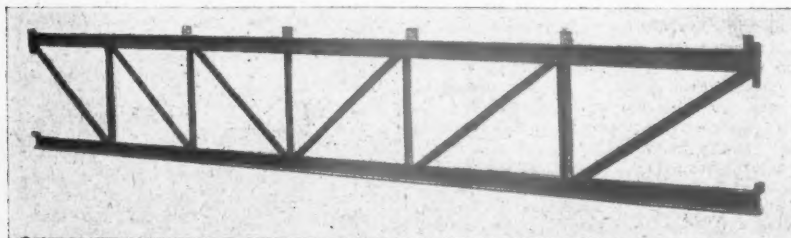
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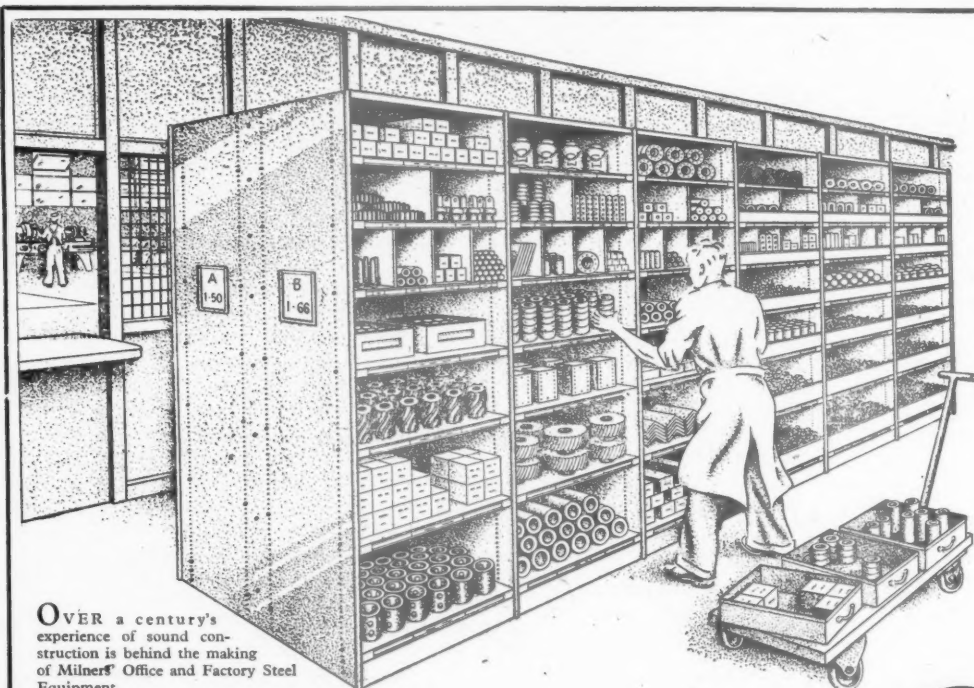
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expanding concrete permits an automatic decentring of the structure.

Tunnels, dams and the like.—Grouting with expanding mortars improves their watertightness.

Pavements and roads.—Observation of actual section under working conditions indicates the possibility of eliminating cracking.

Reinforced concrete in general.—The energy of expansion of the concrete restrained by the reinforcement during the setting period automatically pre-stresses the reinforcements.

1901

Copper

CLASSIFICATION OF COPPER AND COPPER ALLOYS. Prepared by Copper Development Association. (Revised August, 1944. Free of charge.) Tabulated data of chemical and mechanical properties of the more common copper-base materials.

1902

Glass

DEVELOPMENTS IN GLASS. A. S. Tylor. (Illuminating Engineering, June, 1944, p. 369.) Brief review of more unusual achievements in glass technique.

LIGHTING

1903

Merchandising

MERCHANDISING WITH LIGHT. R. C. Allison. (Illuminating Engineering, September, 1944, p. 534.) Lighting of merchandise for display in department stores.

This is a description of the lighting practice followed in a large and well-known Canadian department store. It is set out in great detail for each type of goods, e.g., women's wear, furs, perfumes, and candy and meats. The appropriate colours are listed, and the types of source indicated. For instance, it is said that for the sale of diamonds no red or yellow light can be used. The 3500° white fluorescent should be present "to fill the stone with light," and a battery of incandescent daylight pin-spots should be used for sparkle. No doubt other opinions might be held about some items, but the description is fair, and seems logical and useful.

1904

Merchandising

MERCHANDISING WITH LIGHT. S. R. McCandless. (Architectural Record, November, 1944, p. 104.) Visibility, distribution of light, and use of colour in shops.

1905

Merchandising

THE LIGHTING OF MERCHANDISE. (Architectural Record, November, 1944, p. 102.) General principles of lighting merchandise in shops. Fluorescent and incandescent lamps.

The author refers to modern American shop-lighting practice as being towards higher illumination levels, lower brightness contrasts, and a mixture of direct and indirect light. The principles are not stated as such, but it is obvious that the American engineers are now becoming sensitive to the illumination characteristics which have recently been discussed by the Lighting of Buildings Committee in this country (MOW Study Report No. 12). Some general notes about light sources are also given, and it is pointed out that mixture of fluorescent and incandescent lamps will often be needed to give the full range of colour and quality required.

1906

Colour in Factories

COLOUR AND LIGHTING CO-ORDINATION IN INDUSTRIAL INTERIORS. Faber Birren. (Lighting and Lamps, August, 1944, p. 22.) Series of instructive case histories. Some general principles of use of colour in factories.

The author refers to the dangers of using white paint indiscriminately; the attendant risks are those of glare and excessive contrast. The most unsatisfactory results usually occur with white walls; ceilings in very light colours are often acceptable. Several case histories are given to document the points about the use of white paint.

There is a useful discussion of contrast, with several examples which illustrate well the exact nature of contrast conditions in workshops. Particularly good is the reference to special background screens for tools of various kinds. There are several points in favour of such screens, and these are numerated.

QUESTIONS and Answers

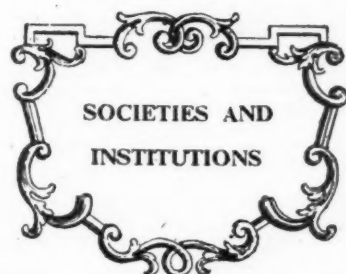
THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service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

1907

Flat Conversion

Q I wish to convert a building into several flats and am having difficulty with the Local Authority regarding sanction of plans. The Local Authority quote the 1936 Public Health Act, Sec. 62, Sub-Sections 1 (a) and 2 (b), wherein it is stated that if a house originally constructed for one family becomes occupied by two or more families, there shall be deemed to be a material change in the purposes for which the building is used and, therefore, within the meaning of the Act these alterations shall comply with the bye-laws as they affect a new building. Now 8½-in. walls are demanded for party walls between flats, and it is also contended that in the case of flats a floor becomes a party wall, and should be made fireproof. These demands would cripple the scheme in question and, as the Government includes in its scheme for solving post-war housing difficulties the conversion of large properties into flats, I shall be very glad if you could advise me if there are ways and means to get over these difficulties. In the ARCHITECTS' JOURNAL of October 26, 1944, you illustrated some excellent flat conversion schemes which have been carried out, and I particularly noted that the party walls are in most cases the original partition walls of various rooms, etc.

A The 1936 Public Health Act, Section 62, Sub-Sections 1A and 2B are still operative, and the Local Authority is quite right in requiring adherence to the sub-sections. However, as housing is of such importance, special consideration might be given to the matter, and we would suggest that you write to the Ministry of Health.



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

RIBA

Maxwell Fry

March 26, at the RIBA, 66, Portland Place. Lecture on PLANNING IN WEST AFRICA, by Maxwell Fry, F.R.I.B.A., town planning adviser to the British West African Government.

Maxwell Fry: The geography of the place is most important. From the ocean rise clouds of steam, and from the desert inland a column of dry air. In between there is a vast area of dense forest with wind and clouds and a great deal of rain. There is a precise weather cycle; if part of the forest is cut down, a corresponding area of desert will appear in proportion. The forest is about 400 to 500 miles deep.

There are four British Colonies in West Africa. Gambia has 300 to 400 miles of snaky river, with ten miles of land on each side of it. Sierra Leone, 400 miles away, is largely unexplored, with a hinterland half-mountain, half-swamp. Its annual budget always shows a deficit. The Gold Coast has the full range of climate. It is rich in minerals and has a big native cocoa crop. Nigeria is the largest British colony. It is 1,000 miles across, and has a population of 22 to 25 millions.

In the hinterland there is still very little contact with the outside world. When Europeans first came they came for gold, and they found it. Competition developed and small groups of traders made deals with native chiefs and settled at ports and river mouths.

Slave trade brought the British to the coast in strength to prevent it. Trading in goods expanded as an alternative. With it came missionaries and administrators. This is more or less the situation today. Trade is still dominant and administration incomplete. Missionaries are still there, and often the only means of education is through them.

Trade is mainly a European affair with the Africans on the other side of a carefully guarded trade wall. It has robbed them of much of the reality of their life, their customs and integrity. However, in the British colonies traders coming in may not buy and exploit

the land. There is no freehold in land, the ownership of which is vested in the natives on a basis of use; a custom of theirs which means that whoever works the land has rights of ownership in it while he is working it. If he moves he must clear the land and relinquish his rights to the next man who comes in to work it; he may take whatever produce he has worked for, and may even come back next year to take the fruit from the trees he was responsible for growing. This means that in development which results from planning the main part of the benefits are bound to be shared with the natives.

My job in West Africa is very wide in scope. I have been asked to start them going in town planning and, so far, I am only half way through it. West Africa is at a stage where the towns are expanding extremely rapidly. Build a road and a town will spring up at the end of it. My job is to help the various governments to formulate housing and town planning schemes, so that work can get under way when war ends and building permits are allowed, and when West African troops get back from Burma and can take part.

Behind my appointment is the Colonial Office and the Colonial Welfare and Development Fund, established by Parliament and extended to 1960. I have a staff of about 8, including Jane Drew and Clark, a West African trained at Edinburgh University.

The first job has been to start on towns with problems of urgent priority:

Bathurst, Gambia. It will have a very large new airport. It is a charming old ruined town, built originally on a swamp, and flooded annually. Much of it is below sea level. It was thought to have a population of about 14,000. But there are no reliable figures on anything to help the town planner. By the time a survey had been made the plan was more or less finished. It was then found that the population was over 50 per cent. more than the estimate—21,000. It was decided that the government shouldn't leave the town as it has done in so many other places. It is hoped to attract most of the population from the island to the airport, which is now more important than the port itself. There is a good architect and staff to do the job.

Freetown. This is a lovely town, slightly eighteenth century, but very run down. It provides a great anchorage. Its population has declined in vigour. Its administration has passed through a terrible period of financial stringency. Rainfall is 250 inches, falling during a very limited period; the rest of the time the town is very short of water. There are no adequate wharves; the cost of unloading from ships is about 3 times higher than at Hull. Sanitation consists of about 5,000 cesspools, which have never been emptied. No one knows where many of them are. During a plague, the European administration ran up the hills above the town; they ran so fast they ended above the cloud limit, so now they live in a saturated atmosphere. The needs of the town are: A decent water supply; an engineer is now working on this. A proper deep-water quay; this has been agreed upon. Efficient sanitation; this has still to come.

The road system is all haywire. There is a separate system on each spur of the mountain, none being even properly connected. Surgery is needed to clean up the roads and connect them, gulleys need to be bridged.

This is all part of general big-scale development schemes for the hinterland. It has been agreed to prohibit all road advertising, and to protect the extremely lovely coast-line (where there is first-rate bathing) from straggling development. A good road is proposed along the coast. The centre of the town is to have its face lifted. The Town Council has a big African majority and is staffed by several African officials; the people have expressed a desire for a town hall, and they are going to get one. Since the new wharf will be two miles up-river, the old wharf buildings are to be cleared away, and on this waterside site there is to be a dance hall, concert hall, etc., with a deep water swimming pool adjoining; a ramp runs up from the wharf to a street leading

right into the heart of the town where the municipal offices and new town hall will stand.

Takoradi, Gold Coast is a brand new slap-up port. The town has a geometrical layout in the form of a triangle. The old port of Sekondi is still preferred by the people. It is a slum, but human. It is one of the old surf-boat ports, where the natives propel their boats with paddles made to look like hands; nothing will make them give these up. Although the two ports are under one administration, they are seven miles apart, with a swamp in between. There is no means of joining them, and since land has been found behind Takoradi for expansion, enough for 45,000 people or 30 years' development, it is proposed to develop this as the new town. The first layout to be drawn up frees it of the worst aspects of rigid geometry, and it is proposed to build a highway to it along the coast by-passing Sekondi. The council were finally convinced of a future for Takoradi as opposed to Sekondi when they were told that Syrian traders from Sekondi were buying land in Takoradi. The Syrian trader is the local middleman and has a reputation for never missing an available opportunity.

Jane Drew has started the work going in Nigeria, and the staff is still collecting information. Whereas the Gold Coast is rich, the average income in Nigeria is about £6 a year. But here whole races of the natives still govern themselves down to the smallest detail of administration. They are most anxious to get on with town planning, and come asking for a pattern to be drawn up for their towns and villages on which they can base future development.

In many towns at the moment it is just a matter of life-saving, e.g., Lagos, with a population of 400,000-500,000 people, crammed into a small island in the swamps.

Ibaden, largest African town, has a population of $\frac{1}{2}$ million, and one European Sanitary Inspector.

In housing there is very little collaboration between European administration and the Africans. But since I arrived many Africans have been coming forward. Most of them are women, who have very certain ideas of what sort of houses they want. First of all they say they want the right sort of house to bring up a family in; they don't want to live any longer in shanty compound houses, where kitchens and latrines are shared amongst many families. (This is news, for I was told by European administrators "Hands off compound houses. The Africans like them.") African housewives are quite willing to use any new ideas in cooking equipment; they are not conservative in any way, though they have been accused of it. I found that the terrace house was taboo, but traced this to antiquated town planning ideas of administrators, borrowed from over here.

I started an amateur Building Research Station, where we experimented with bricks out of mud, and other materials in various parts of the country. The Colonial Office was so impressed with the work that it has provided money to set up a proper Building Research Station for the whole of the West Coast.

At the end of the first year it was thought necessary to pass legislation. A town planning ordinance was worked out, based on previous colonial ordinances and recent work in England. The ordinance is now before the Gold Coast Legislative Council. Important clauses were included dealing with valuation to prevent speculation, which is bound to be attempted. Values have not much changed in war, so they are fixed from a date twelve months before the coming into operation of the ordinance.

An exhibition was held showing plans of towns. The Gold Coast government agreed to put all their cards on table, so details of every aspect of planning were shown graphically. People made a beeline, of course, to see if they had property on land to be developed. The general effect of the exhibition was terrific. Africans previously thought planning meant making towns beautiful for European residents and visitors, but when they found that it was something to do with themselves they were extremely enthusiastic. There was an enormous demand for planning everywhere and a very

intelligent interest was taken in it. At a meeting of chiefs of tribes, magnificently dressed in traditional robes and knobs of gold, they asked if the exhibition could be sent on a tour to the villages. This it is now doing. The *chef d'oeuvre* of the exhibition is a large and detailed model of the proposals for the centre of Accra, Gold Coast.

The West African Institute feels it is not enough to train clerks only, and is intent on keeping alive local craftsmanship, and training in creative jobs generally. I started a furniture workshop when I arrived, and workmen are turning out furniture to my designs in excellent local woods for the home market. It is hoped after the war to find foreign markets for this as well.

The results of the first year at the amateur Building Research Station was to work out new bricks, tiles, interlocking concrete blocks, and burnt-tile hollow blocks (the latter is particularly suited to West Africa). There are four or five town planning officers in Nigeria, all architects. I make a strong point of having all architects with town planning experience as town planning officers. It was a struggle to get this over in Nigeria, but it was finally agreed that an architect should be employed as planning officer instead of a sanitary or civil engineer, as originally intended.

As for the hinterland, this is so vast that it is not possible to superintend through town planning officers the drawing up of plans, so we are bringing out readable books for the guidance of local administrators on how to prepare local plans.

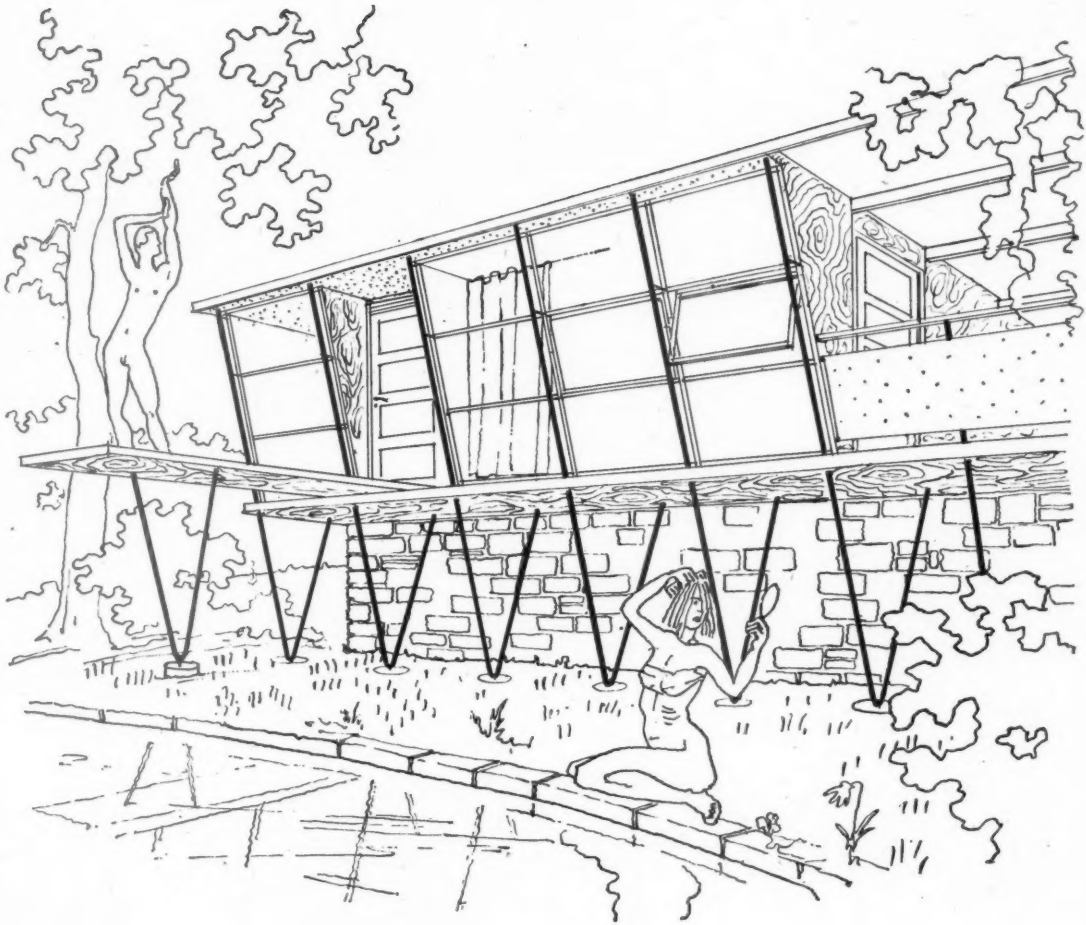
JWEF and EJMA R e p o r t

In November, 1943, the English Joinery Manufacturers' Association, realizing that the post-war trend would lead still further to prefabrication in the factory, formed the English Joinery Manufacturers' Federation, with a view to taking a more direct part in negotiations concerning the conditions of labour in its own industry. The name has now been changed to the Joinery and Woodwork Employers' Federation.

A separate Federation was necessary because the Association, being a company incorporated under Section 18 of the Companies Act, 1919, was precluded from participating in negotiations with the trade unions on these matters.

The Federation recently held its first annual general meeting, when, in order to admit a large number of members of the Timber Manufacturers' Association, and to give it a more comprehensive title, its name was changed by resolution to the Joinery and Woodwork Employers' Federation, and the following Executive Officers and Executive Committee were elected:—W. E. Adams, J.P., F.C.I.S. (John Sadd & Sons, Ltd.), re-elected Chairman; E. W. King (E. W. King & Son (Newport), Ltd.), re-elected Vice-Chairman; M. van Westerborg (Joinery and Builders Supplies, Ltd.), re-elected Hon. Treasurer; R. J. W. Appleton (Educational Supply Association), James Austin (Austins of East Ham), E. Boot (Rothervale Manufacturing Co.), A. F. Clarke (Midland Woodworking Co.), John Duxbury (Magnet Timber, T. B. Hustler (James Hustler & Son), C. W. Jennings (Jennings (Bristol)), Henry N. Newsom, M.C., J.P. (H. Newsom Sons), and H. J. E. Ripper (Rippers), being elected members of the Executive Committee.

Messrs. Price Waterhouse & Co. were elected Auditors. The headquarters of the Federation are at Sackville House, 40, Piccadilly, W.1, and Mr. R. G. Harvey Greenham, B.A., LL.B., Secretary of the English Joinery Manufacturers' Association (Incorporated) is the Secretary.



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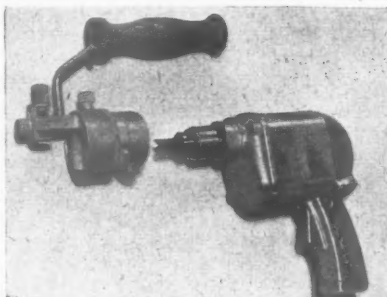
RP-18

Trade Notes

It occurred to Mr. G. Scratchley, a retired Croydon builder, that the reglazing of windows in bomb-damaged houses could be carried out more speedily if a practical, preferably electrical, tool could be devised to eliminate the hard work involved in the hacking out of the old putty. He made some experiments, and submitted them to Mr. W. J. Bilton, mechanical engineer, who liked the idea, but found the method of achieving it mechanically unworkable. Mr. Bilton worked the idea, and produced a tool which needed no further improvement, though a horizontal handgrip was added as an extra safeguard at the instance of Mr. Jackson, a leading architect at the Ministry of Works.

Demonstrations resulted in the Ministry's official approval, and Croydon, Mr. Bilton's home town, took advantage of the tool in grappling with its bomb damage repair difficulties. Thus was born the Bilton-Scratchley Router, a simple ingeniously shaped cutter fitted to a portable electric drill, a labour saving tool of permanent use to the building industry.

The cutter is fitted to the Wolf $\frac{1}{4}$ in. light production drill type EG2C in the ordinary way, and over this is slipped the special attachment enabling the tool to maintain the correct position vis-a-vis the window sash. Adjustment to rebate dimensions is effected by a simple turning of a knurled pin for height and a slight twist to a helical-slotted sleeve for depth. The two-handed tool is then guided along the frame, and the $\frac{1}{4}$ in. cutter shaves off the old putty as fast as the light machine (5 lb. total weight) can be pushed along the window. The Wolf drill can be obtained from any leading tool



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merchant. For particulars of the attachment apply to Mr. W. J. Bilton, 28, Cross Road, East Croydon.

Buildings Illustrated

The following are the sub-contractors on the erection of the prototype house built at Datchet by John Howard, Ltd., to designs by Frederick Gibberd, F.R.I.B.A., A.M.T.P.I. illustrated in this issue: Allied Ironfounders Ltd.; R. W. Goods, Hotspur Boilers, Otto Stoves, Baths, etc.; Attridge, F. J., Esq.; Glazing; Attridge, F. J., Esq.; Plumbing; Alfol Insulation Ltd.; Alfol Reinforced Foil; Bramley Engineering Co. Ltd.; Abrasive Saw Wheels; Carter & Co. Ltd.; Tiles; Cement Marketing Board; Cement, Tyrolean Mixture; Cockburn, H. & Co. Ltd.; Bath and Fittings; Crittall Manufacturing Co. Ltd.; Window Frames; Electrolux Ltd.; Refrigerator; Elliott's West Howe Pottery; Red Tiles; Greenham, Henry J. Ltd.; Tile Slips; Ide, T. & W. Ltd.; Clear Glass; Isleworth Sand & Ballast Co.; Sand and Ballast; Lea, Jos. & Sons;

Pressed Metal Louvre; Lee, W. A. Esq.; Sitch Groundings; Linterns Ltd.; Plate Racks; Long Humphreys Ltd.; C.I. Flue Reducers; Miller, Morris & Brooker Ltd.; Soil, Plumbing Materials and Fittings; Monarch Electric Ltd.; Convector Heaters; Nettlefold & Sons Ltd.; Ironmongery; Newsum, H. N. & Sons Ltd.; Joinery; Planet Foundry Co. Ltd.; Otto Stoves; Pryor & Son; Cupboards and Partitions; Shuttleworth & Co.; Timber; Slough Gas & Coke Co.; Gas Service; Tentest Fibre Board Co. Ltd.; Insulation Boards; Tunes Engineering Co. Ltd.; Copper Sheets; Turner's Asbestos Cement Co. Ltd.; Trafford Tiles, Asbestos Sheets and Wallboard; Vulcan Products Ltd.; Various Paints; Wallis & Co. Ltd.; Sink Units; West, George, Esq.; Plants and Trees; Warwick Rim & Sectioning Co. Ltd.; Cover Strips, Stainless Steel Sections; Wellman Bros.; Ironmongery; Wiggins-Sankey Ltd.; Sinks, Basins and Fittings; Williamsons, Jas. & Sons Ltd.; W.P. Flooring; Troughton & Young Ltd.; Electrical Equipment; Williams & Williams Ltd.; Window Frames.

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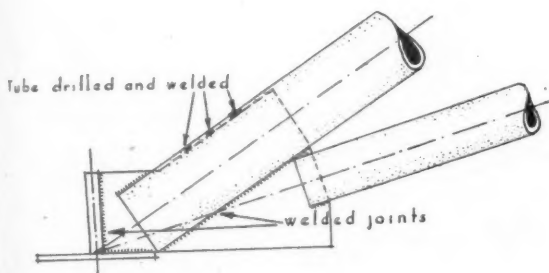
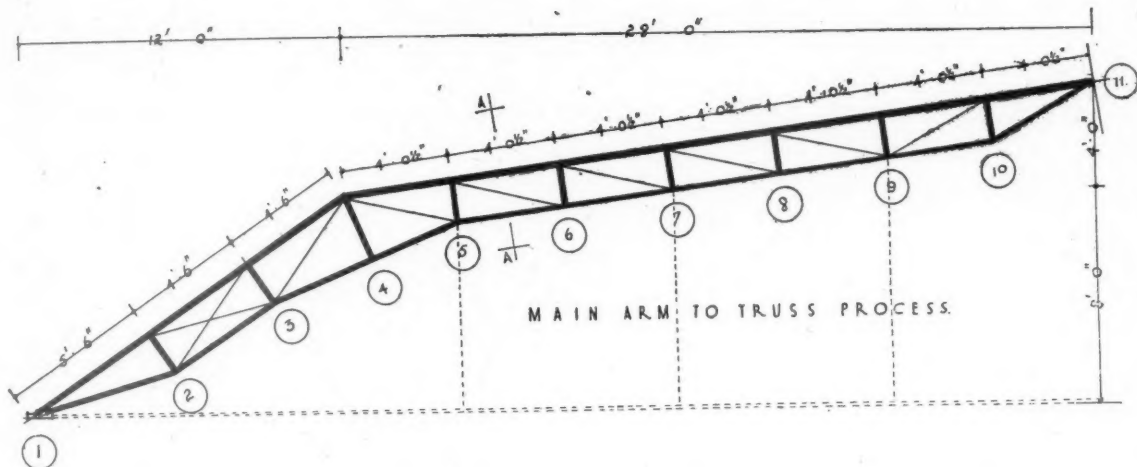
Fullst information may be obtained from

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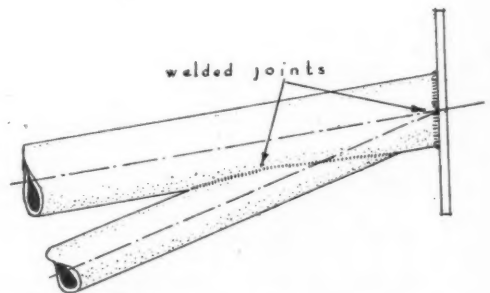
Chancery 6731, 2, 3.

PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 17



DETAIL AT 1



DETAIL AT 11

MAIN TRUSSES

The main trusses conform to a contour of 42° pitch for the first sixth of the span, the remainder being at 12° pitch—giving a minimum amount of unusable roof space internally.

Each truss is composed of two opposing main arms butted together at the ridge (11), with a tie beam taking the tension between the columns. Note that the upper and lower chords in the truss are strengthened against compression (AA) arranged only where the greatest forces occur. Thus the design of the upper chord was allowed to be based on the minimum upper chord force reinforced to take the greater stresses as and when they occur. The toe of the truss (see detail at 1) is bolted to the head of the column by means of a horizontal plate and the two main truss arms (see detail at 11) are bolted together using central vertical plates to arrange the bolt holes. This method of connecting truss and column is further detailed in Data Sheet No. 22. For the structural frame being detailed in this series of Data sheets (dimensions 80' width \times 150' length \times 15' height to tie beam) four main roof trusses were employed at 30' centres.

Continued overleaf

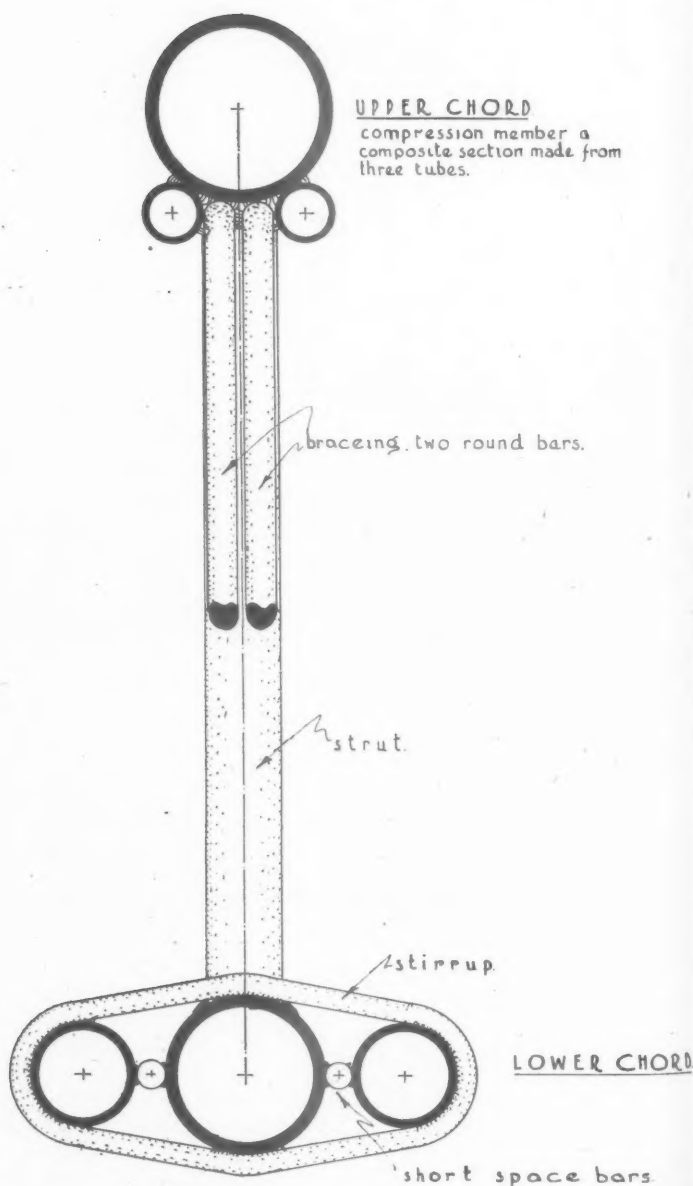
PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 17

The toe of the truss (see detail at 1) is bolted to the head of the column by means of a horizontal plate and the two main truss arms (see detail at 11) are bolted together at central vertical plates. This method of connecting truss and column is further detailed in Data Sheet No. 22.

For the structural frame being detailed in this series of Data Sheets (dimensions 80' width \times 150' length \times 15' height to tie beam level) four main roof trusses were employed at 30' centres.

NOTE.—These Data Sheets are appearing fortnightly in THE ARCHITECTS' JOURNAL—the complete series is available in Folder Form and application for copies should be addressed to Scaffolding (Great Britain), Limited, Saunderton, Princes Risborough, Bucks.



MAIN TRUSS-SECTION A.A.

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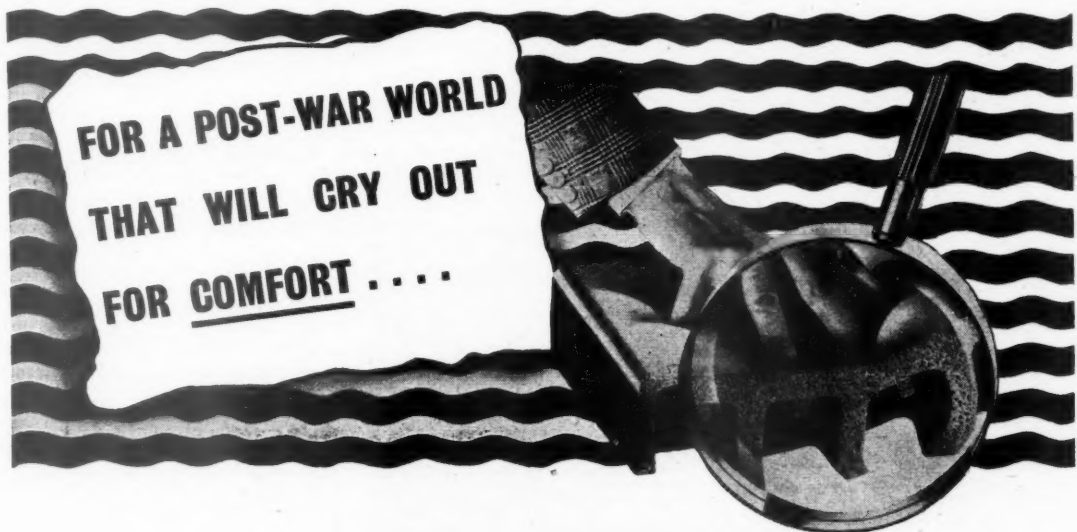
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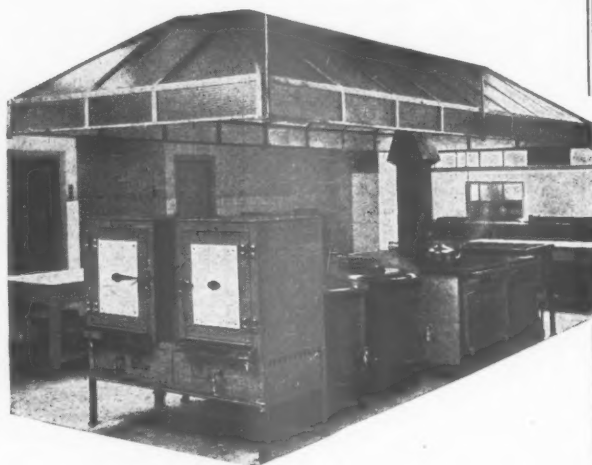
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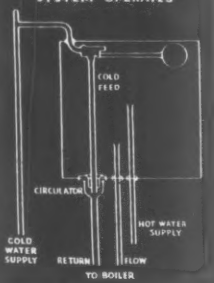


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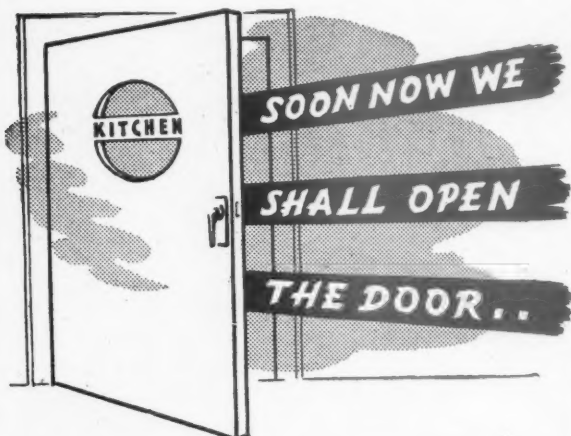


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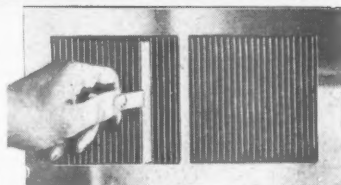
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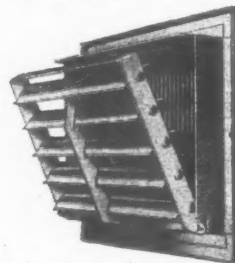
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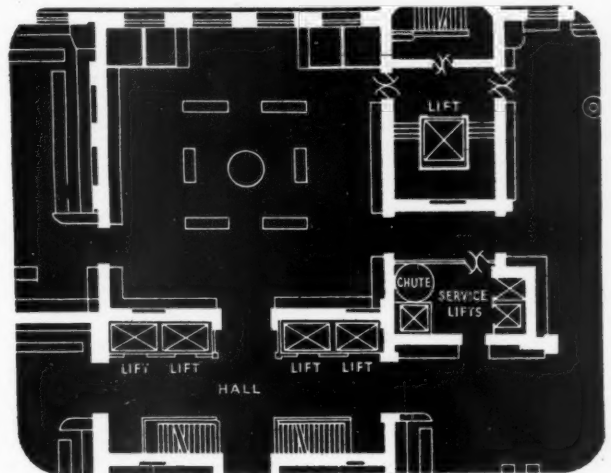
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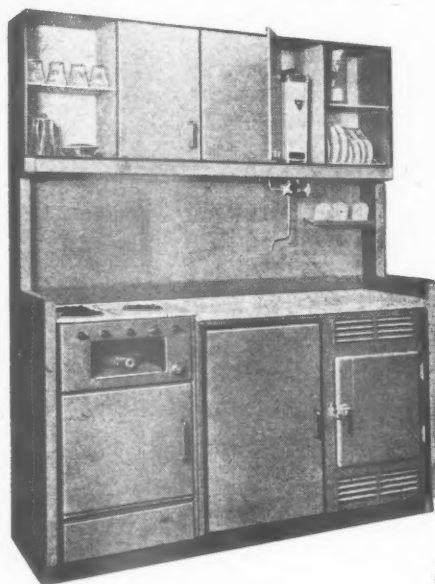
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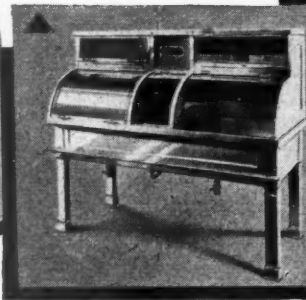
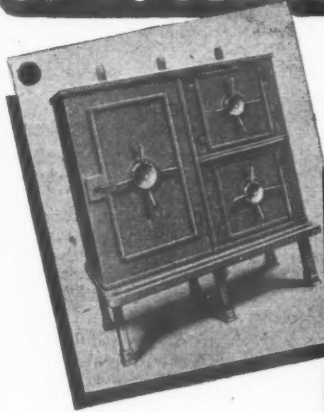
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It is hoped to fill the vacancy by September, 1945, but in the case of the successful candidate being a member of H.M. Forces, the commencing date of the appointment may be postponed.

Further particulars and forms of application may be obtained from the Director of Education, Guildhall, Kingston-upon-Hull, and should be returned not later than the 31st May, 1945. 677

SENIOR ARCHITECTURAL ASSISTANTS required for Oxfordshire County Council. Must have had general experience in an Architect's Department, and be capable of making surveys, taking levels. Knowledge of work in connection with schools an advantage. Salary £300-£375.

Applications must be made in writing, stating date of birth, full details of qualifications and experience (including a list in chronological order of posts held), and salary in present post, and quoting Reference 281/45, should be addressed to the Ministry of Labour and National Service, Appointments Office, 23, Valpy Street, Reading.

ARCHITECTURAL ASSISTANTS, temporary, required by the County Borough of Birkenhead. Candidates should be A.R.I.B.A. or hold an equivalent qualification, and must have had experience in housing, alterations and additions to properties, new buildings, quantities, specifications and estimates.

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ARCHITECTURAL ASSISTANT, temporary, required by the County Borough of Bootle.

Candidates must have been born before 1923, and must hold a recognised architectural qualification, preference being given to those with experience in a Municipal Office. They should be competent in the design and supervision of municipal housing and public buildings.

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Write, quoting EA.1397XA, to Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for application form, which must be returned completed by 10th May, 1945. 682

TECHNICAL ASSISTANTS required by the Borough Council of Malden and Coombe, Surrey. Candidates must have been born before 1923, and have the necessary qualifications and experience.

SENIOR ENGINEERING ASSISTANT, A.M.I.C.E. and A.M.I.M. & Cy.E. preferred. Able to prepare designs of engineering works and structures, bills of quantities, and estimates, particularly in regard to highways, sewerage and sewage disposal.

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Reference: E.1490XA.

ENGINEERING ASSISTANT, A.M.I.M. & Cy.E., and preferably sections A and B of I.C.E. Exam. Must be a good surveyor and leveller, and able to prepare designs of engineering work and structures.

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Reference: EA. 1348XA.

The appointments are temporary, and are subject to the Council's regulations governing sick pay and holidays.

Applicants should write, quoting the appropriate references, to the Ministry of Labour and National Service, Appointments Department, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2, for the necessary forms, which should be returned completed on or before 9th May, 1945. 683

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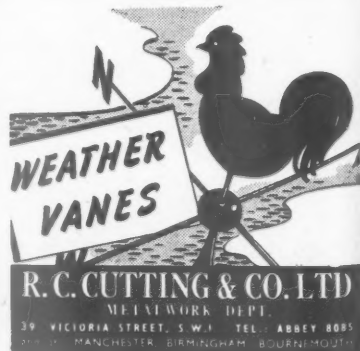
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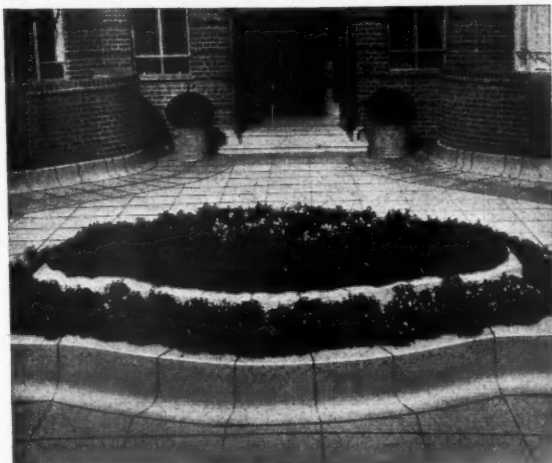
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