

THE ARCHITECTS' JOURNAL



standard contents

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

DIARY NEWS

from AN ARCHITECT'S
Commonplace Book

ASTRAGAL

LETTERS

PHYSICAL PLANNING

CURRENT BUILDINGS

INFORMATION

CENTRE

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

INFORMATION SHEET

SOCIETIES & INSTITUTIONS

PRICES

Architectural Appointments
Wanted and Vacant

No. 2600] [VOL. 100
THE ARCHITECTURAL PRESS
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★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone number of the organizations concerned. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association. 34/6, Bedford Square, W.C.1.	Museum 0974
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. Shobnall Road, Burton-on-Trent.	Burton-on-Trent 3350
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	British Steelwork Association. 11, Tothill Street, S.W.1.	Whitehall 5073
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CEMA	Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1.	Sloane 0421
CIRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CSI	Chartered Surveyors' Institution. 12, Great George Street, S.W.1.	Whitehall 5322
DIA	Design and Industries Association. Central Institute of Art and Design, National Gallery, W.C.2.	Whitehall 2415
DOT	Department of Overseas Trade. Dolphin Square, S.W.1.	Victoria 4477
EJMA	English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FMB	Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 55, Great Ormond Street, W.C.1.	Holborn 2664
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
HPS	Housing Production Society. 1, Old Burlington Street, W.1.	Regent 3380
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128-29
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767
MARS	Modern Architectural Research. 46, Sheffield Terrace, W.8.	Park 7678
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Belgrave Square, S.W.1.	Sloane 4522
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300
MOI	Ministry of Information. Malet Street, W.C.1.	Euston 4321
MOLNS	Ministry of Labour and National Service, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Abbey 7711
MOTCP	Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1.	Whitehall 8411
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1.	Abbey 1010
NBR	National Buildings Record. 66, Portland Place, W.1.	Welbeck 1881
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Oxford 48809
NFBTO	National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1.	Holborn 2770
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 2881/2/3
NT	National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham Palace Gardens, S.W.1.	Sloane 5808
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
PWB	Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
RCA	Reinforced Concrete Association. 91, Petty France, S.W.1.	Whitehall 9936
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Temple Bar 8274
SFMA	School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.	Chancery 5313
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 75, Cannon Street, E.C.4.	City 6147
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815

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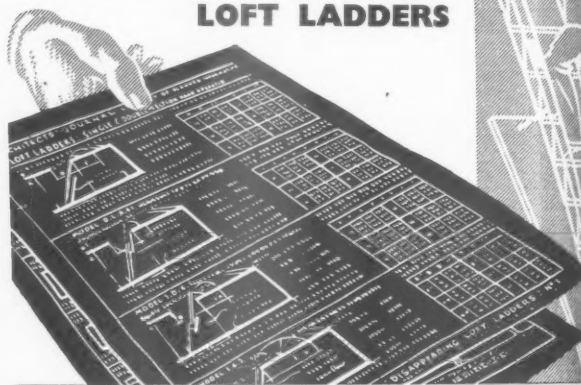
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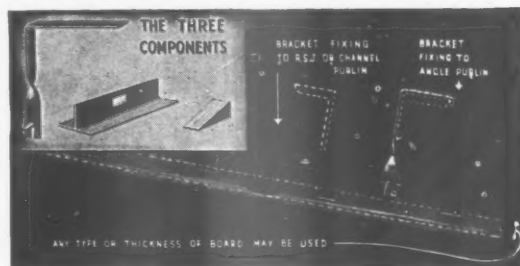
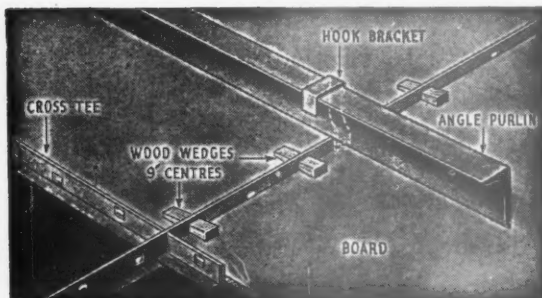
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The New Horizon . . 5



Original Painting by Anna Zinkeisen, R.O.I.

*Through earth, sea, and heaven a doom shall be driven,
And, sown in the furrows it plougheth,
As fire bursts from stubble,
Shall spring the new wonders none troweth.*
FRANCIS THOMPSON—"SONG OF THE HOURS."

Never in the long history of the world have so many nations been engulfed in war. Never has its misery and devastation so deeply affected so many lives. Never have the warped and sickly minds of bestial men wrought such irreparable harm with their ruthless and wanton cruelties. A doom has been driven which has obliterated the old complacencies for ever.

But the righteous fight against all brutal tyrannies has given to all free peoples a flame-quickened consciousness of the rich opportunities which exist for universal progress and understanding. Spreading like fire over stubble is a growing sense of individual responsibility; a unity of purpose that peace and liberty must be ensured for this and future generations.

When the dark and menacing clouds of war have receded from the stark and riven earth, enlightenment will be sown to emerge with a more intense appreciation of the manifold benefits which science can bestow upon an unshackled humanity.

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or to the Secretaries, Invisible Panel Warming Association, Pinners Hall,
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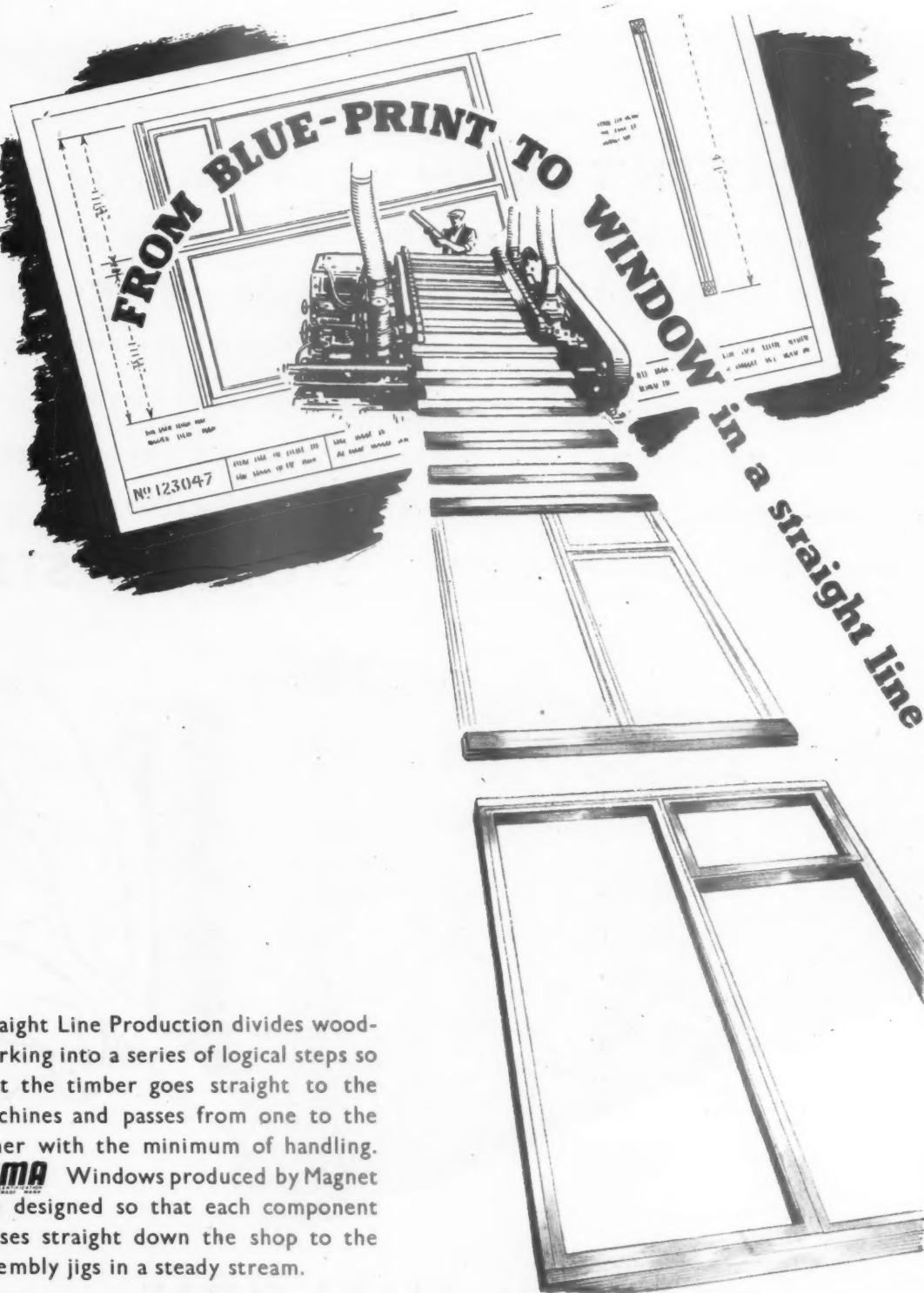
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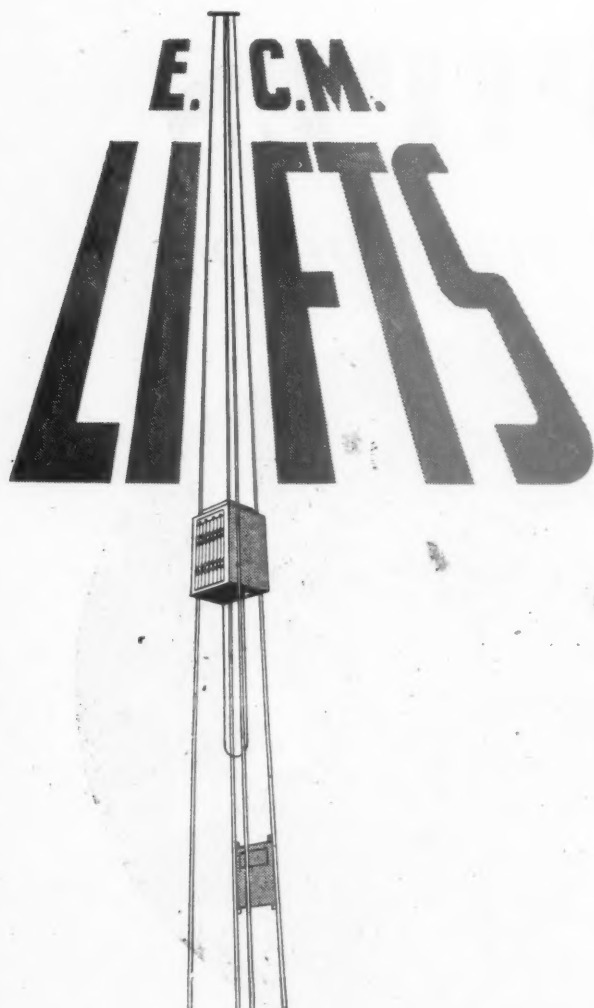


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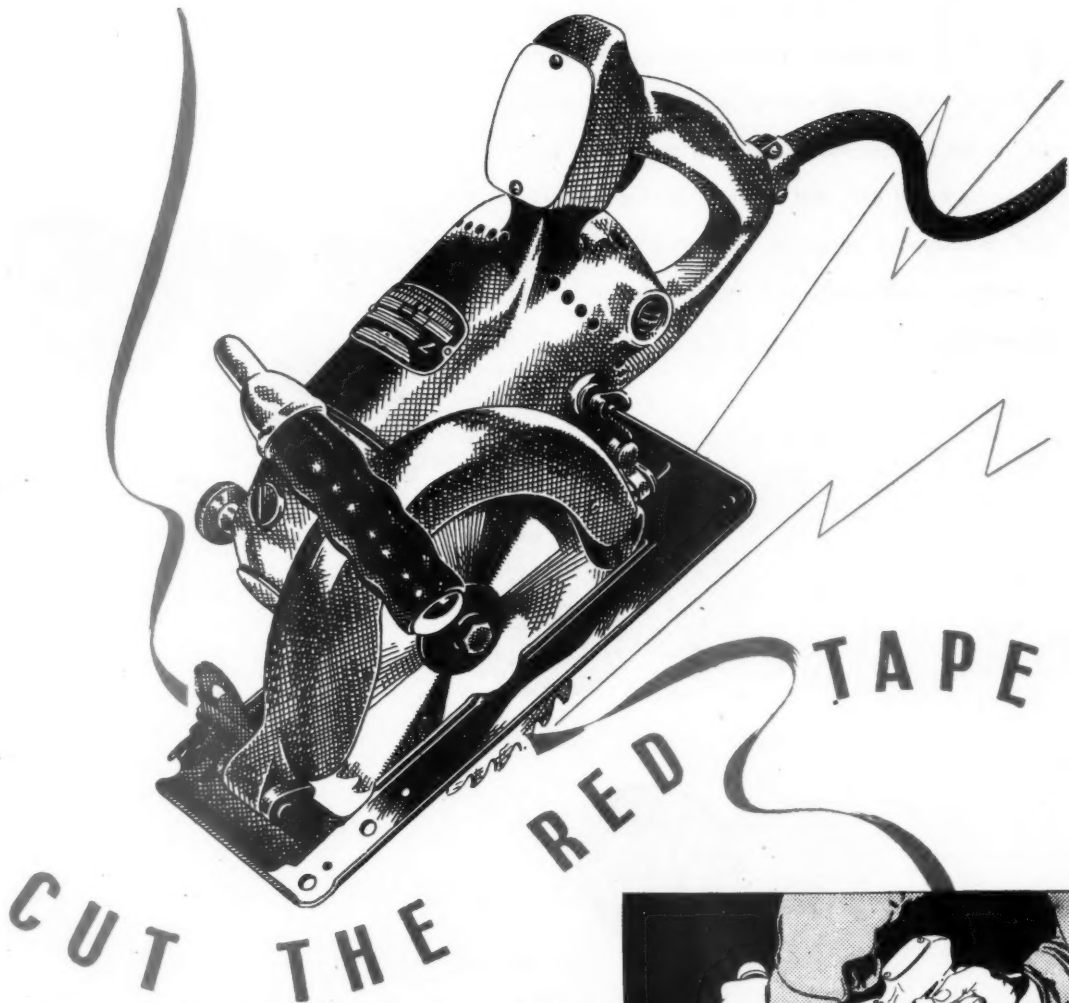
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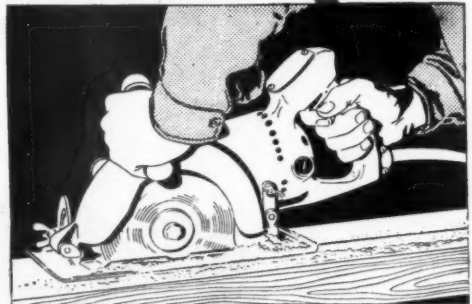
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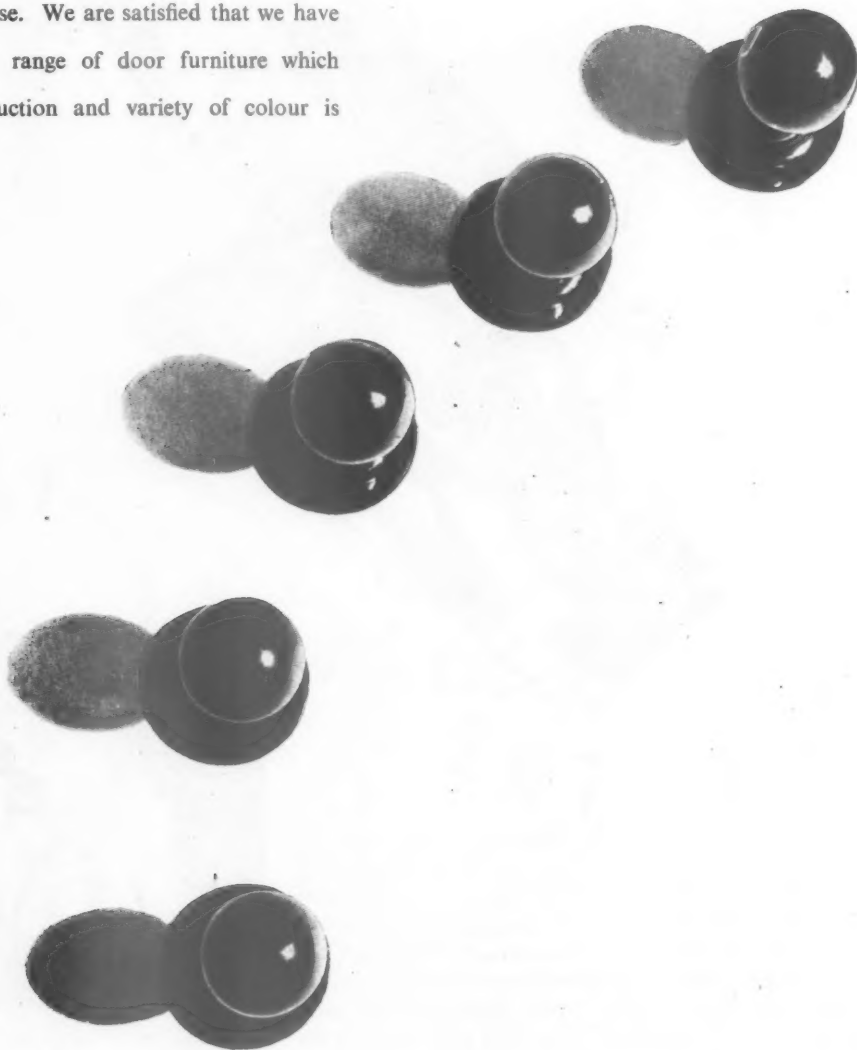
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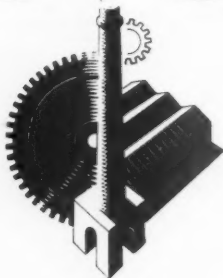
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Recent headlines prompt questions concerning **POST-WAR BUILDING**

Q. Coal output is down, prices are up: rigid economy is necessary to make fuel supplies cover existing demands. Soon, millions of post-war buildings will be designed, erected and will need heating. What can the **BUILDING INDUSTRY** do to help meet the situation which may then arise?

A. The greatest contribution the Building Industry can make is to ensure that every heated building is adequately insulated.

Q. When is a building "adequately insulated"?

A. When it has its full Economic Thickness of Insulation.

Q. What does that mean?

A. The Economic Thickness of Insulation is that thickness at which the combined total cost of heating and insulation, over the life of the building, is at a minimum.*

Q. At what stage of a building should the Economic Thickness of Insulation be determined?

A. When the building is in the early design stage, so as to facilitate selection of the most suitable insulation and means of application and to permit the heating plant to be designed with proper economy.

Q. What are the main factors affecting the Economic Thickness of Insulation?

A. Temperature requirements, cost of heating plant, cost of fuel and the anticipated life of the building.

Q. How does the "anticipated life of the building" affect the Economic Thickness of Insulation?

A. For a single initial expenditure, insulation saves fuel every year throughout the life of the building. Therefore, other things being equal, permanent buildings show a greater return than temporary buildings for a given amount of insulating and justify a greater thickness. If insulation material is in short supply **PERMANENT BUILDINGS SHOULD RECEIVE PRIORITY.**

* Full information on the calculation of Economic Thickness of Insulation is given in our booklet "STRUCTURAL INSULATION," free on request.



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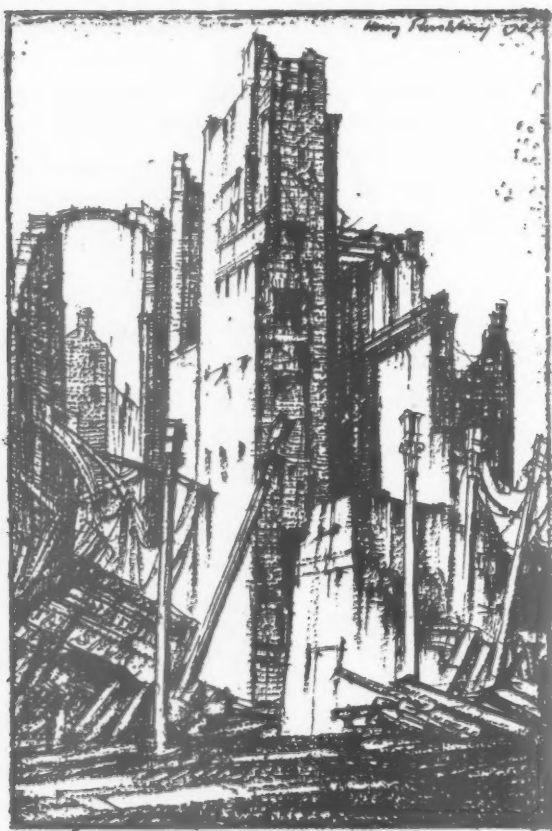
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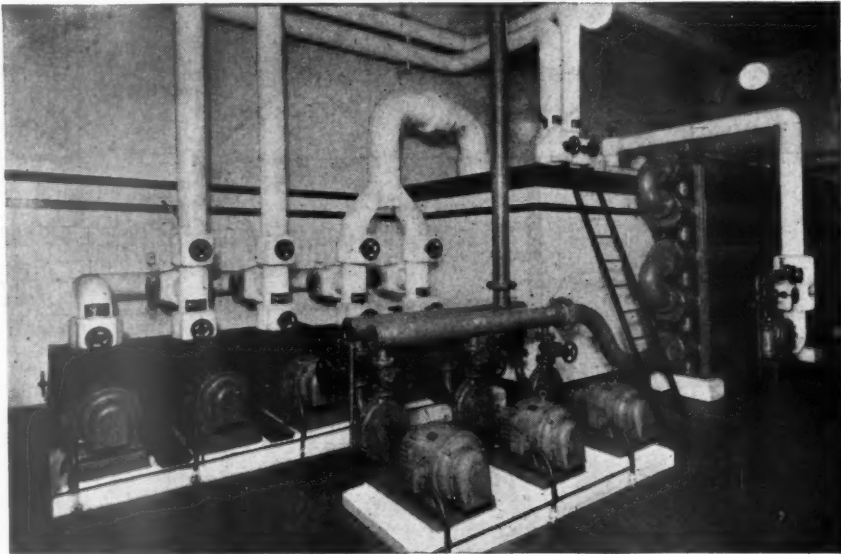
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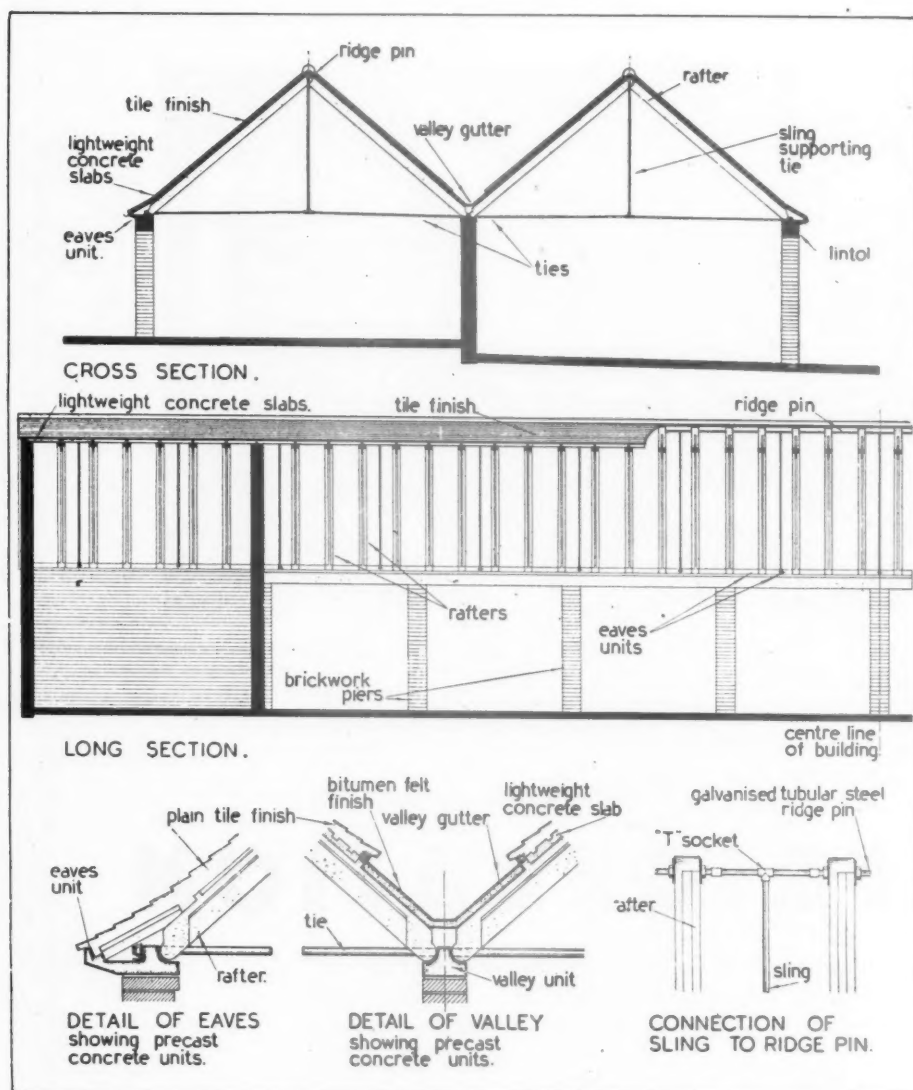
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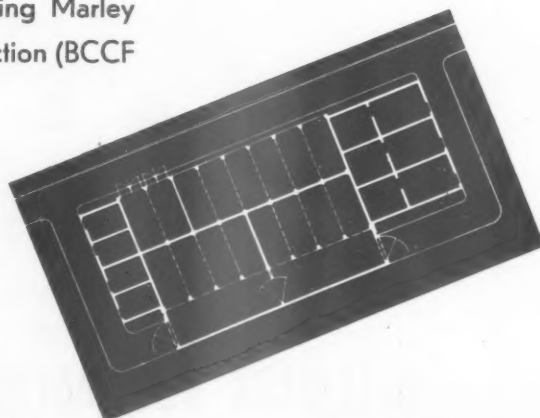
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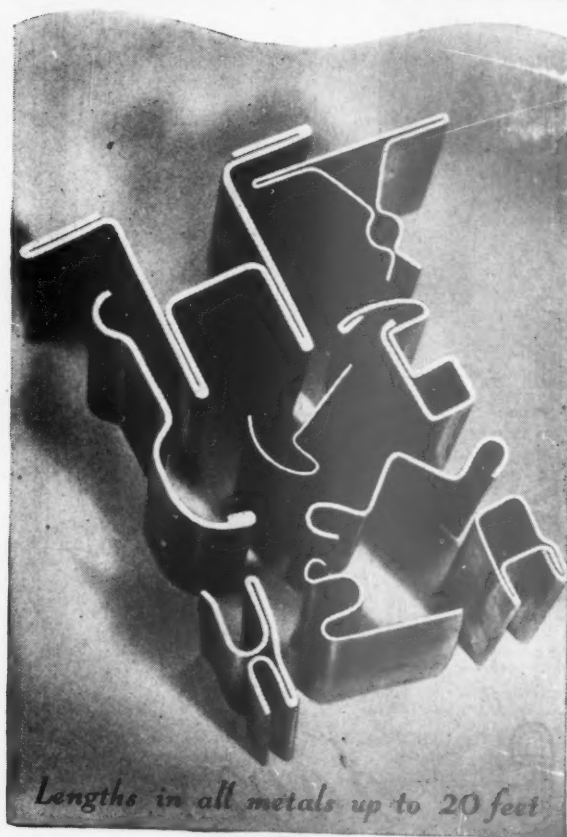
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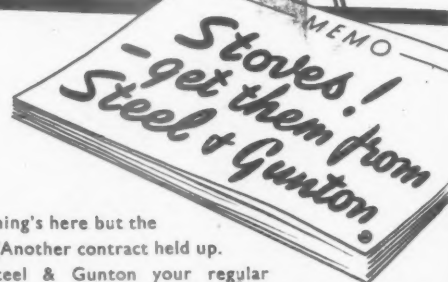
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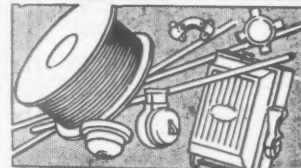
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★ Of the 'Times' leader comment on the Burt Report: "In particular, the report's exposure of the neglect of heat insulation in the past is noteworthy. A higher initial outlay in this direction would be amply repaid by enhanced home comfort and by a reduction of the 55,000,000 tons of raw coal annually consumed for domestic purposes."

★ Boreas, the North Wind, was worshipped as a divinity by the Greeks, who expressed visually his blustering and stormy aspect with characteristic felicity. This representation is based upon the relief on the famous Octagonal Tower of the Winds, built at Athens by Andronicus the astronomer. The tower was surmounted by a brazen Triton, contrived to turn so that it faced the wind invariably.

CELOTEX

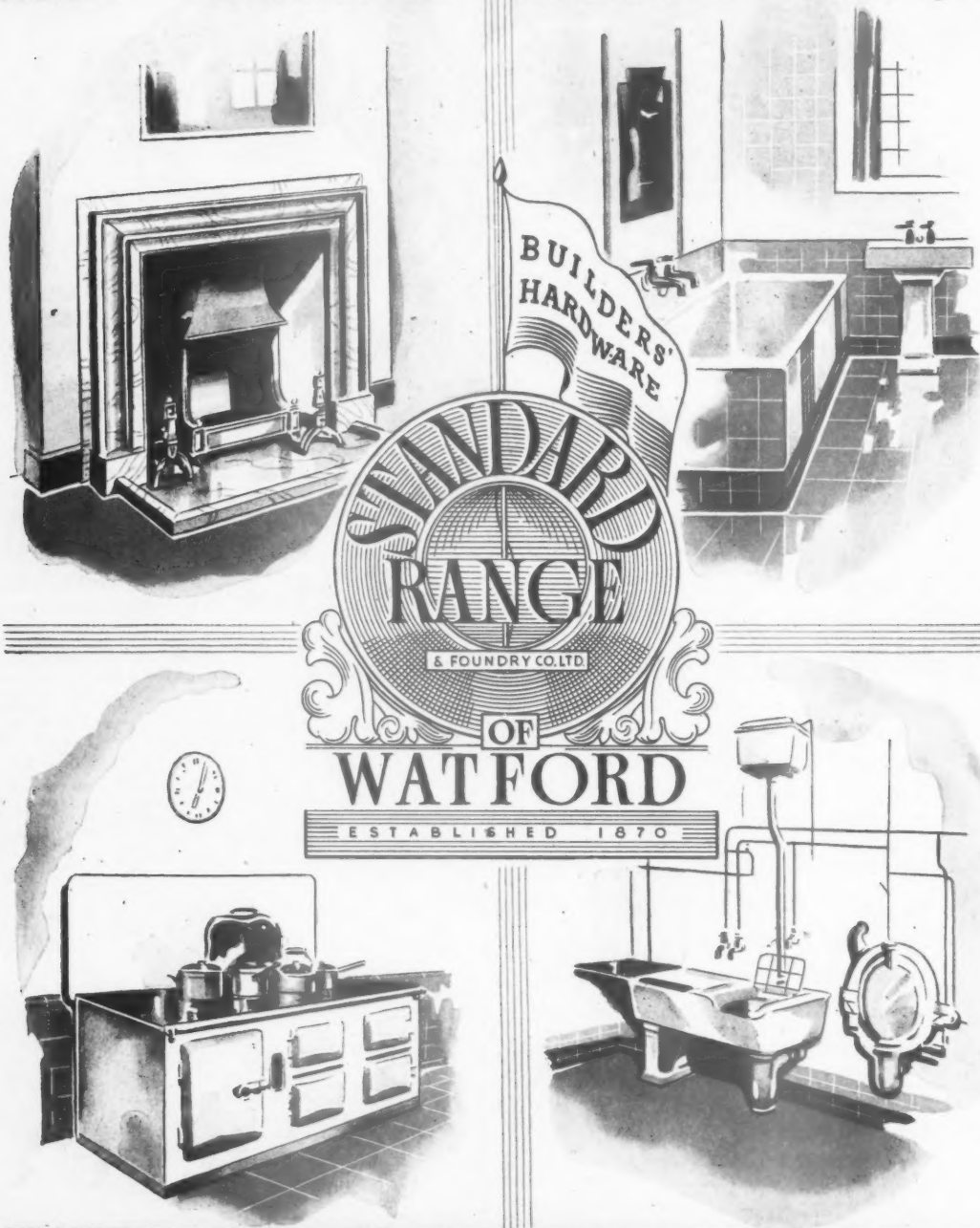
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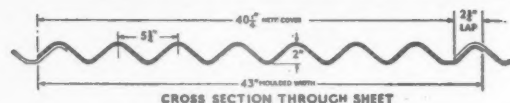
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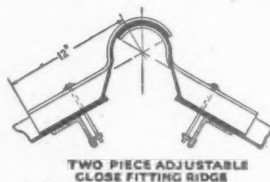
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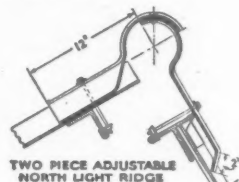
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DETAILS AND METHOD OF
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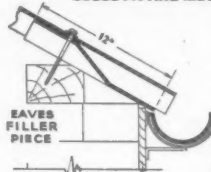
CROSS SECTION THROUGH SHEET



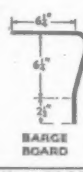
TWO PIECE ADJUSTABLE
CLOSE FITTING RIDGE



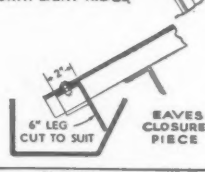
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NORTH LIGHT RIDGE



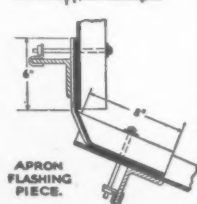
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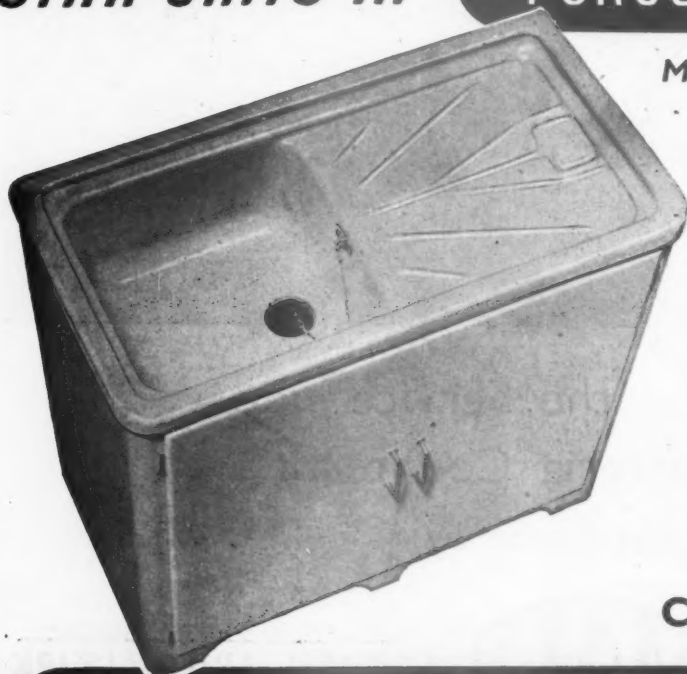


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9' 6"	3.783	97.85	2	6' 1 1/2"	15	50' 6 1/2"	
9' 0"	3.583	92.7	3	10' 3 1/2"	16	53' 10 1/2"	
8' 6"	3.385	87.75	4	13' 7 1/2"	17	57' 5"	
8' 0"	3.185	82.8	5	17' 0"	18	60' 7 1/2"	
7' 6"	2.987	77.4	6	20' 4 1/2"	19	63' 11 1/2"	
7' 0"	2.787	72.0	7	23' 8 1/2"	20	67' 3 1/2"	
6' 6"	2.588	67.0	8	27' 0"	21	70' 6"	
6' 0"	2.388	61.8	9	30' 5"	22	74' 0"	
5' 6"	2.191	56.65	10	33' 9 1/2"	23	77' 4 1/2"	
5' 0"	1.991	51.5	11	37' 1 1/2"	24	80' 8 1/2"	
4' 6"	1.792	46.35	12	40' 5 1/2"	25	84' 1 1/2"	
4' 0"	1.593	41.4	13	43' 10"	26	87' 5 1/2"	

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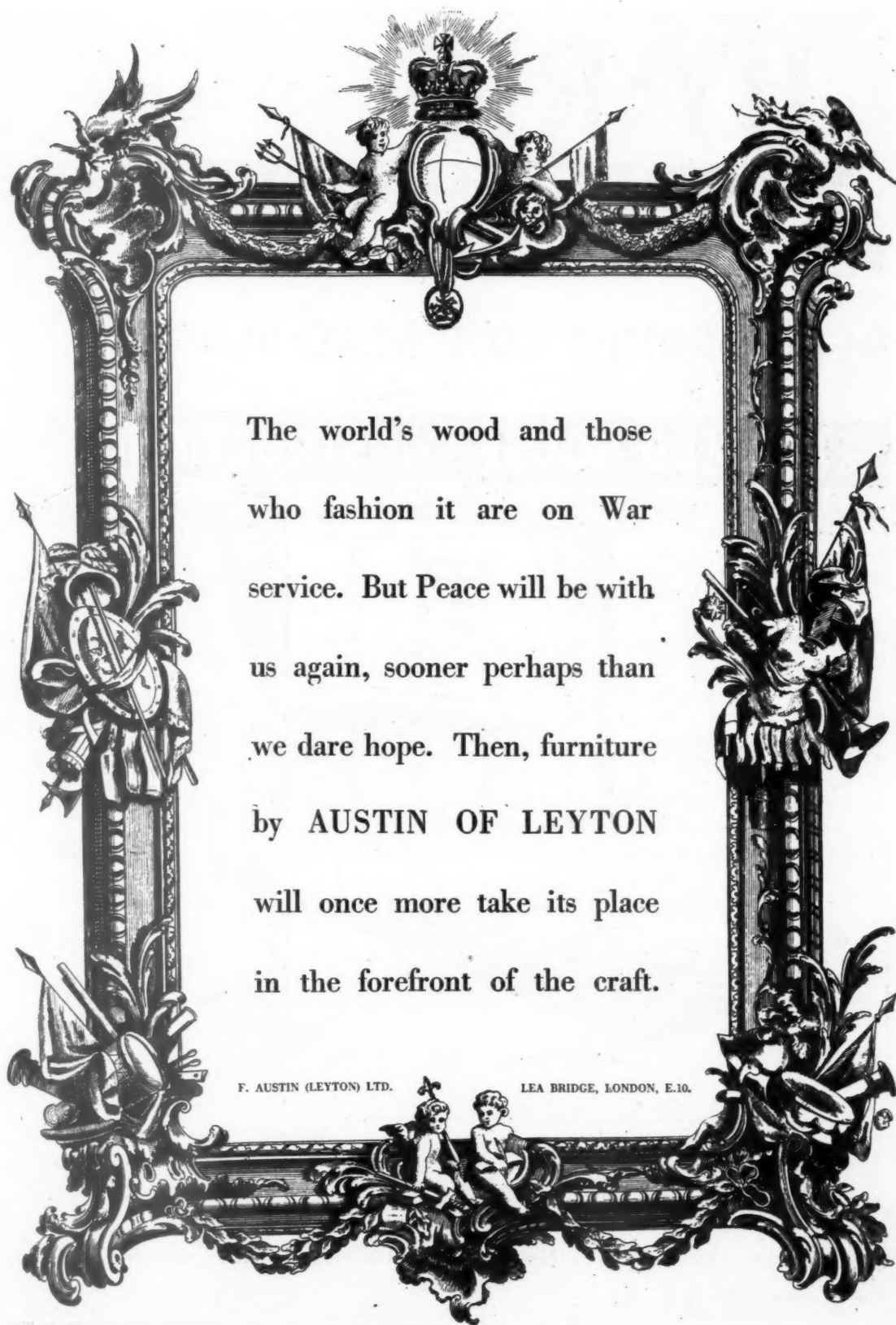


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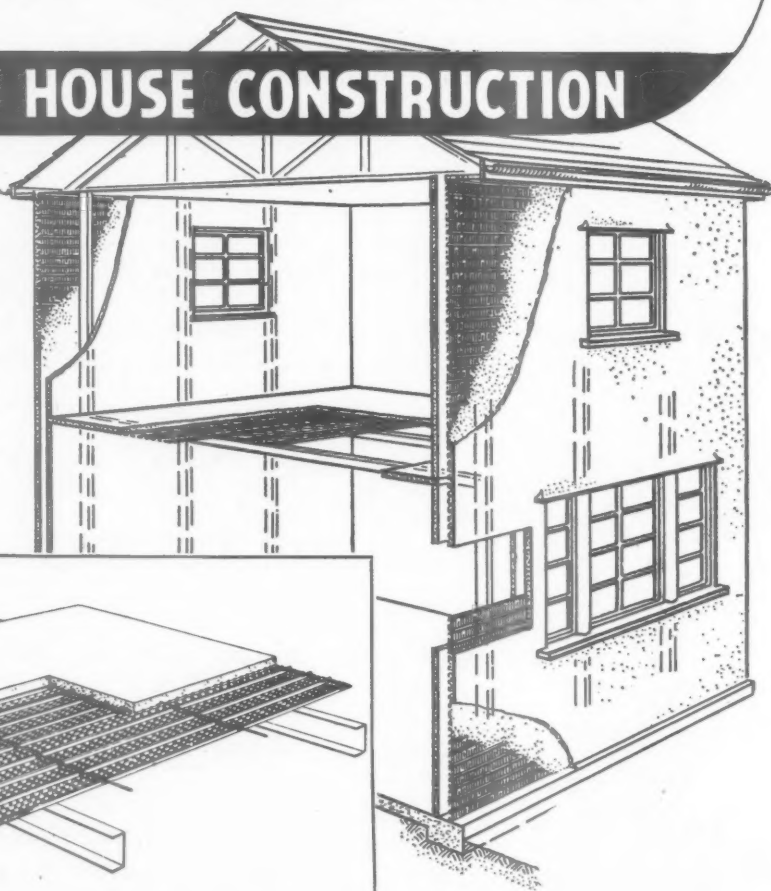
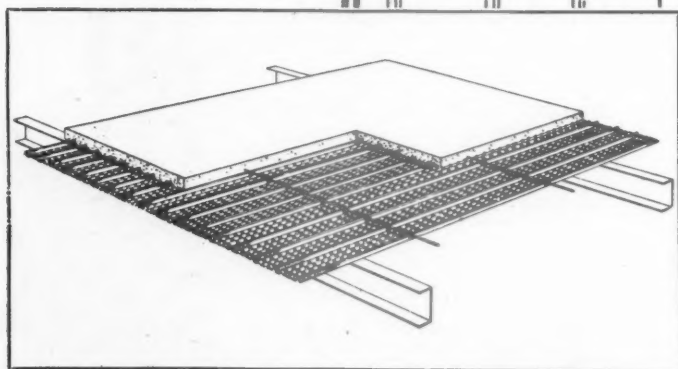
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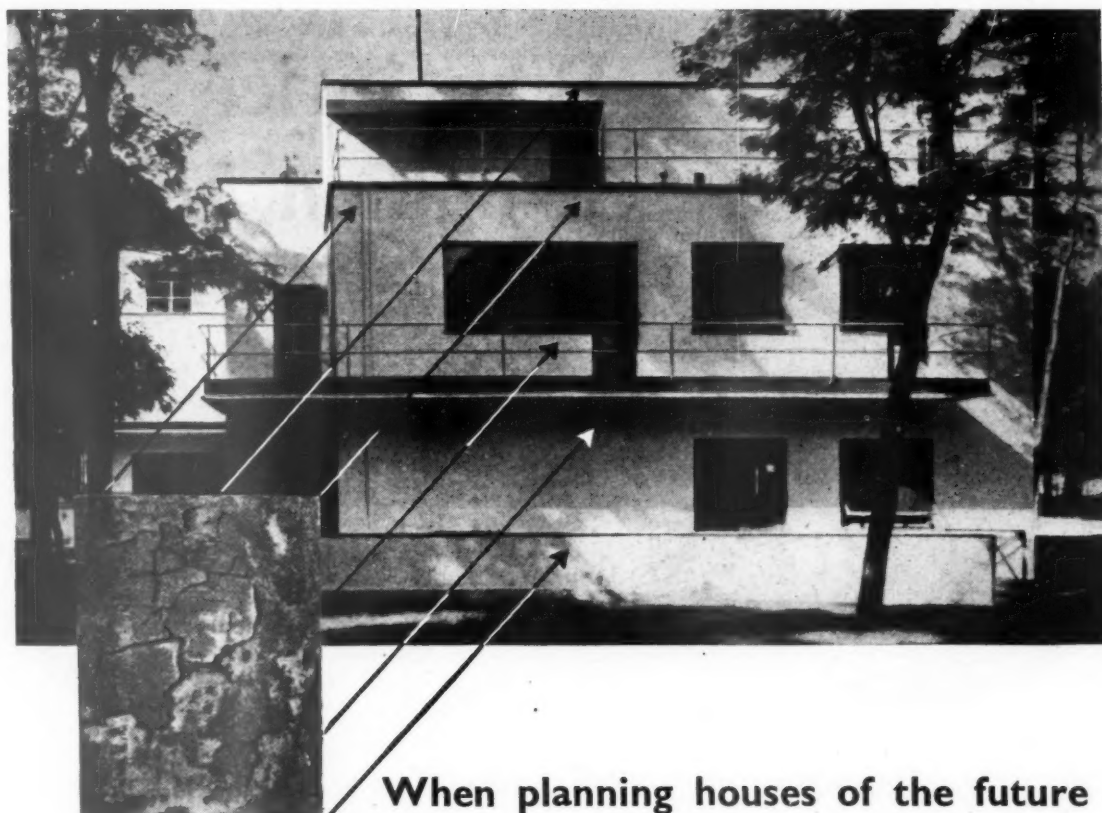


Above: Diagrammatic drawing of framed house showing Hy-Rib in walls and floor.

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NEWS

THURSDAY, NOVEMBER 23, 1944
No. 2600. Vol. 100

News	373
The Old and the Proposed New Chamber	374
This Week's Leading Article ..	375
Astragal's Notes and Topics ..	376
Letters from Readers	377
Scorched Earth Policy, by Aubrey T. Westlake ..	379
MOW Exhibition at Birmingham	383
Information Centre	387
Societies and Institutions ..	389

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.

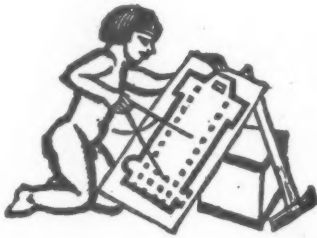
★★ means important news, for reasons which may or may not be obvious.

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

The Architects' Registration Council of the United Kingdom offers for award in June, 1945, certain MAINTENANCE SCHOLARSHIPS IN ARCHITECTURE.

The scholarships will consist of a grant for the payment, in whole or in part, of the school fees and necessary subscriptions, instruments, books, etc., and, when necessary, a maintenance allowance not to exceed as a rule £100 a year. The scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the council. The scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarships will not be granted to students who will be less than 17 years of age on October 1, 1945. Particulars and forms of application may be obtained from: The Secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68, Portland Place, London, W.1. Copies of previous years' examination papers may be obtained from the Secretary on payment of 6d. The closing date for the receipt of applications, duly completed, is February 1, 1945.

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 NOVEMBER DECEMBER AND JANUARY

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

BERWICK-ON-TWEED. *When We Build Again.* Exhibition and Film. (Sponsor, TCPA, in collaboration with Messrs. Cadbury Bros.). The Town and Country Planning Association is holding a conference on the last day of the Exhibition. DEC. 9-16

BLACKBURN. *Living in Cities.* Exhibition. At the Assembly Hall (Sponsor, BIAE). Nov. 23-DEC. 1

HOLBEACH, SPALDING, Lincs. *The English Town—Its Continuity and Development.* Exhibition. (Sponsor, TCPA). DEC. 4-16

LONDON. *County of London Plan and Town House.* Exhibitions. At the National Association of Maternity and Child Welfare, Piccadilly, W. (Sponsor, Housing Centre). Nov. 23-24

T. P. Bennett, late Director of Works, Ministry of Works. *Principles of Organization and Management as Applied to the Building Industry.* At the London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1. Last of three lectures and discussions. Fee 2s. Synopsis of lecture: Division of the contract between head office and site: (a) architect; (b) building contractor. Site organization: (a) information; (b) material; (c) labour and welfare; (d) sub-contractors. Control of time and cost. (Sponsor, University of London in co-operation with the Institute of Industrial Administration). 5.30 p.m. Nov. 28

Dr. N. Pevsner. *Vincent van Gogh.* At the Courtauld Institute of Art, 20, Portman Square, W.1. 1.15 p.m. Nov. 30

N. Davey (of the Building Research Station). *Concrete in Modern Use—Its Appearance and Durability.* RIBA. Architectural Science Board Lecture. At 66, Portland Place, W.1. Synopsis of lecture: 1. Controlling factors in the production of concrete of uniform quality and of good appearance: (i) selection of materials and design of mix; (ii) grading and workability of mix; (iii) mixing, placing and completion; (iv) formwork. 2. Finishing and texturing. 3. Basic requirements for concrete of good durability: (i) Strength and density; (ii) low shrinkage; (iii) resistance to erosive and corrosive agencies. 4. Concrete for specific purposes: e.g., for heavy duty floors in factories—methods of laying and finishing. 5.30 p.m. Nov. 29

F. A. C. Maunder. *A Factual Basis for Reconstruction.* At Caxton Hall, Caxton Street, S.W.1. (Sponsor, Town Planning Institute). 6 p.m. DEC. 7

Sir Miles Thomas. *Town Planning and the Car Owner.* At 2, Savoy Hill, W.C.2. (Sponsor, TCPA). 1.15 p.m. Nov. 30

When We Build Again. Exhibition. At the Gas Showrooms, Wandsworth, S.W.18. (Sponsor, TCPA). Nov. 23-25

Town and Country Planning Association's Annual Conference. On Problems of Re-development, Overspill and Rural Planning. At the Waldorf Hotel, Aldwych, W.C.2. (Sponsor, TCPA). DEC. 8-9

What is Modern Architecture? MARS Group (Modern Architectural Research) discussion, at which the public is invited to take part. At the RIBA, 66, Portland Place, W.1. Chairman: Professor Sir Charles Reilly. Speakers: John Summerston, E. Goldfinger, Prof. William Holford, Anthony M. Chitty, and M. Hartland Thomas. After the introductory speeches, the meeting will be open for general discussion. 6.30 p.m. DEC. 13

David Cushman Coyle. *The Tennessee Valley Authority.* At 2, Savoy Hill, W.C.2. (Sponsor, TCPA). 1.15 p.m. DEC. 14

K. de B. Codrington. *The Art of Seeing.* At the Courtauld Institute of Art, 20, Portman Square, W.1. 1.15 p.m. DEC. 7

T. P. Bennett. *The Architect and Organization of Post-War Building.* At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA). 6 p.m. DEC. 12

The Insulation of Buildings, Domestic and Industrial. Fifth paper in series on *Thermal Insulation.* At the Institution of Mechanical Engineers, Storeys Gate, S.W.2. 2.30 p.m. DEC. 13

J. C. Nicol. *Organization of Industrial Electrical Maintenance.* At Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor IEE). 5.30 p.m. DEC. 14

RICHMOND YORKS. *Rural Housing.* Exhibition. (Sponsor, Housing Centre). Nov. 23-29

SPALDING, Lincs. *The English Town: Its Continuity and Development.* Exhibition. At the East Elloe Post-War Housing Committee, Holbeach. (Sponsor, TCPA). DEC. 4-16



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BRANCHES AND DEPOTS THROUGHOUT THE COUNTRY

From AN ARCHITECT'S Commonplace Book

THE CLICHES OF CONTEMPORARY ROMANTICISM. [From *Architecture Arising* by Howard Robertson (Faber and Faber)]. Le Corbusier would not hesitate to use field stone or rough timber as an alternative to concrete if he found that its use was a natural consequence of building conditions. . . . Immediately this thing is done it becomes public property, and is recognized and accepted by the Le Corbusier admirers. From that to an outcrop of concrete with field stone incorporated in it is only a step, particularly since Le Corbusier himself evidently became intrigued with the decorative possibilities of these combinations, for in architecture he conserves the palette of a painter. . . . From being a piquant idiom in the contemporary designer's phrase-book, the rubble wall becomes at times almost a major theme; elsewhere it joins forces with ogee partitions, freestanding circular staircases, treads with open risers, the accentuation of roof incidents such as lift and water towers, curvilinear cornice overhangs, one-way pitched roofs, and various other motifs which are more the expression of frolic and excitement than anything significant. These items are, most of them, "non-functional" in the word's strictest interpretation; they are in fact pieces of contemporary romanticism which do no harm and help to enrich the architectural language. But they should not be taken too seriously, any more than the charming fashion pictures of *Vogue*.

Rochester Diocesan Board of Finance is acquiring for use as a DIOCESAN CENTRE and Conference Retreat House four houses, including the historic Satis House, on Boley Hill.

The houses face the Castle, look down on the Cathedral, and have a wide terrace overlooking the river. Canon S. W. Wheatley, writing in the Diocesan Chronicle on some of the historic associations of Satis House, says: When William the Conqueror came Rochester way after his victory at Battle he fortified the position with a mount and stockade castle. The summer house of Satis is on the top of this mound, and the name Boley Hill is a remembrance of its stockade "bailey." Satis House is so called from Queen Elizabeth's use of the word satis to express her satisfaction after her entertainment there by Richard Watts, who was a victualling contractor, deputy victualler to the Navy, and surveyor of ordnance at Upnor Castle, and founder of the famous Six Poor Travellers' Hospital in High Street, Rochester, about which Dickens writes so appreciatively. Among possessors of Satis House was John Longley, Recorder of Rochester, and father of Charles Thomas Longley, Archbishop of Canterbury, who was born there in the house in 1794. Among later owners have been members of several well-known Rochester families. Foord lived there, and so did Sir Herbert Baker as a boy. Dr. Harmer, Bishop of Rochester, lodged at Satis House in 1905 for over a year.

Fifteen local government areas in Surrey are TO BE PLANNED AS A SINGLE UNIT.

A Joint Executive Planning Committee, including fifteen local authorities, has been formed in Surrey with the encouragement of the Ministry of Town and Country Planning. The committee known as the North East Surrey Joint Planning Committee, will include representatives of Croydon, Barnes, Richmond, Kingston-on-Thames, Esher, Surbiton, Wimbledon, Malden and Coombe, Merton and Morden, Sutton and Cheam, Beddington and Wallington, Mitcham, Epsom and Ewell, Carshalton, and Banstead. These fifteen local government areas will in future be planned as a single unit. This area, parts of which suffered badly from flying bomb attacks, includes industrial and residential districts with a total population of nearly a million, and a pre-war rateable value exceeding

£11,000,000. It is the policy of the Ministry of Town and Country Planning to encourage local authorities to co-operate in this way. Of the 1441 local planning authorities in England and Wales 1,045 are now combined in 181 joint planning committees.

People with constructive criticisms of the CITY OF LONDON PLAN should speak up now.—Mr. W. S. Morrison.

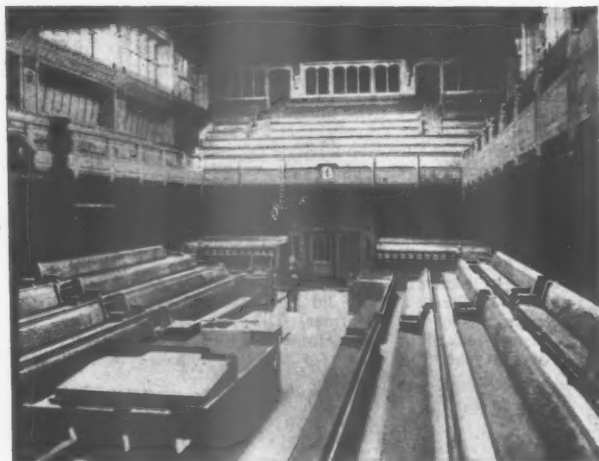
Mr. W. S. Morrison, Minister of Town and Country Planning, opening an exhibition at the Royal Exchange of plans and drawings for post-war reconstruction in the City of London, congratulated the Improvements and Town Planning Committee of the corporation on its decision to expose its findings to public judgment, and said he hoped people with constructive criticisms or alternative proposals would now speak up. He said: Let critics realize the complexities with which the corporation has to deal. The City of London is neither virgin soil nor a museum piece. It cannot be treated in abstraction from its proud history.

Proposals are under consideration for RE-BUILDING THE INNER AND MIDDLE TEMPLES.

Experts have been consulted, tentative plans have been drawn up for some parts of the damaged inns, and discussions have taken place between Benchers in charge of the job. According to the *Evening News*, one difficulty is that two inns intersect, and care must be taken to preserve a fair share of the accommodation and amenities for each. Middle Temple Lane is not a dividing line. There are parts of Middle Temple on both sides of it: Temple Church is half Middle and half Inner Temple. So there must be co-ordination of the two plans to ensure harmony. Pump Court will presumably be rebuilt much as it was. Changes here have been suggested, but, in the words of a leading K.C., it may be hoped no one will try to improve on Wren's cloisters. They should be reinstated with the old colonnades, exactly as in innumerable old prints of London. Any other course would remove from the approach to Pump Court one of the Temple's most famous features.



Sculptured old bell in the damaged tower of the church of St. Jacques at Montebourg, Normandy, recently occupied by the Allied Forces. It is being examined by M. Rene Levavasseur, French Government architect charged with the preservation of historical structures in the Department of La Manche (right) and Paul Boulet, mason.



The Old and the Proposed New Chamber

The two top photographs show the Chamber of the House of Commons as it was before it was destroyed in the raid of May 10, 1941. The two views below are photographs of the model of the new Chamber proposed in the *Report from the Select Committee on House of Commons (Rebuilding)* just published by the Stationery Office (7s. 6d.). This recommends Sir Giles Gilbert Scott's designs, of which plans and sections are contained in the Report. The photos on the left look north towards the Speaker's chair; those on the right look south towards the entrance. Though the late Gothic style has been maintained, the new Chamber will possess advantages over the old in having an up-to-date system of heating, ventilation, and lighting, an unobtrusive system of sound amplifi-

cation, better acoustics, the addition of secretarial, interview and conference rooms not hitherto available to Members, improved staff offices, enlarged accommodation for Whips and Ministers, improved access and circulation. Additional refreshment facilities will be available to the Press and other strangers. The floor of the House is of exactly the same dimensions as that of the old Chamber (68 ft. 0 in. \times 45 ft. 6 in.), though above gallery level the dimensions have been increased to accommodate the additional Strangers' and Reporters' seating. It is estimated that the preliminary preparations would take 18 months and building operations a further four to five years. The total cost, excluding professional fees, would be £784,000, of which the Chamber itself would cost £251,305.

★ *The first prize of £250 in the Timber Development Association's Timber House Competition has been WON BY JOHN P. TINGAY, A.R.I.B.A., Eastcote, Middlesex.*

The second prize of £100 goes to Ralph Erskine, A.R.I.B.A., an Englishman working in Sweden, whose design came over by plane only two days before the competition closed, and the third of £50 to Mrs. June Bosanquet, A.R.I.B.A., until recently a young AA student. The assessors were: C. Cowles Voysey, Brian O'Rorke, Frederick MacManus, Bryan Latham, Vice-President of the Timber Trade Federation, and G. W. Grosvenor, Chairman of the Timber Building Manufacturers' Association.

★

Plans have been placed before the Hull Housing and Town Planning Committee for a GARDEN CITY TO COST FIVE MILLION POUNDS.

The plans have been submitted by Mr. Harold Needler, a local miller, and Mr. George Williams, his architect. On a site of 1,000 acres in the Sutton Road district of the city it is proposed to build about 10,000 brick houses of varying types to be let at economic rents. The scheme, which will take 10 years to complete, includes self-contained shopping centres, about 100 acres for a school and playing fields, and provision for a maternity home, crèche, medical facilities, churches, cinemas, communal halls, hotels, clubs, and a sports ground. The committee instructed the city engineer to report on the scheme's relationship to industrial zoning in the neighbourhood of the site.

Ottershaw Park, near Chertsey is to be THE FIRST PUBLIC SCHOOL FOR WORKING-CLASS BOYS.

Under a compulsory purchase order the Surrey County Council has gained possession of Ottershaw Park, near Chertsey, and its 148 acres of ground. As soon as the war ends one of the new types of boarding schools contemplated in the latest Education Act will be established there. The Council also proposes to have on the estate a camp school and camping sites for holidays. Ottershaw Park was once the home of Miss Susan Dora Cecilia Schintz, daughter of the late Hans Gaspard Schintz, the Nitrate King. A large mansion, it has been used as an oil company's office.

Mr. Victor W. Dale has been appointed General Manager and Secretary of the BRITISH ELECTRICAL DEVELOPMENT ASSOCIATION.

Mr. Dale was the first member of the Association's staff when it was founded in 1919. He has been responsible for the organization of many nation-wide campaigns of educational publicity and development in which electricity consumers in this country increased from under one million to more than ten and a half millions. Membership of the Association is composed of the Central Electricity Board and the electricity supply undertakings throughout Great Britain and Northern Ireland.

THE NEW HUMANISM

A book has recently been published which deals with the architecture that is now arising.* It is by Mr. Howard Robertson, whose name needs no introduction to readers of this journal. He weaves a calm, unprejudiced picture of what we have, what we need and what we may expect. A few of us may not, perhaps, agree with all his criticisms, but they are couched in terms so disarming as to lead us to forget that there ever was such a thing as controversy within living memory. This is not a bad thing whilst the world is so full of hate; and there are, it seems, intellectual pastures where we may browse out of hearing even of the clash of adzes versus electric drills. Yet his book deals with this very crisis, this most controversial of controversies and within sound of the battle the author dares to bid us return to the architecture of humanism, without raising one hackle on our backs.

Humanism in architecture is the common touch which conjures a mutual understanding between the architect and those who see his work. It has been said, indeed, that whilst the inside of a house is the affair of the occupier, everybody is concerned with the outside. It is the outside, after all, which is 'architecture' to the passer-by and, if the passer-by fails to respond to the outsides that our contemporary designers present to him, it cannot be entirely his fault.

This journal has consistently spoken for contemporary design and has identified itself with the establishment of the æsthetic and practical principles which underlie the approach of to-day. That the æsthetic principles have been established, and moreover largely accepted by the profession, has been mainly due to the literary encouragement extended to them over the last fifteen years. Now the profession, if it is to capture popular support, must develop that national type of architecture of which Mr. Robertson says: "An international style, if there could truly exist such a style, would never have as fundamental an appeal as an international point of view expressed in a national idiom." In both the Gothic and Renaissance periods the international point of view *was* rationalized into the national idiom. So also with the architecture which, in Europe and America, has been slowly growing into the awkward child that in many cases it still is; having been brought up under the most advanced system of education, in which it has been allowed complete self-expression (even if neighbours or visitors, let alone parents, have been annoyed) it is now at least adolescent. Now, says Mr. Robertson, welcoming the signs of human development in its later examples, "recognition of the great æsthetic possibilities of . . . old and tried materials of building is gradually creeping back into the idiom of contemporary design." It is the word "back" to which we take exception. The contemporary idiom should, and indeed is beginning to, show a forward development. This development should be leading on to a truly twentieth century

* *Architecture Arising*, by Howard Robertson (Faber and Faber, 10s. 6d.)

vernacular, a vernacular which recognizes humanity and which humanity can itself recognize because it is national, because it is familiar.

The faults in our architecture to-day are due to a number of causes. One of them is that, when anything and everything has become possible with the new methods and materials, we have no restrictive standards, no recognized grammar, within which a coherent, disciplined and popular vernacular has been able to evolve. Wide standardization of building parts, whether old or new, is one step which will help to create that unity of scale and pattern in building which has been lost for over a hundred years.

But undoubtedly the chief reason for the architectural decline and the present chaotic and transitional period of design lies in those broad social economic causes, the need for whose change Mr. Robertson is perhaps too careful to avoid. A coherent, popular and human architecture can finally evolve only within a society which, while fully accepting the advantages and implications of mechanization applied to things, abhors the mechanization of human beings—a society that is itself coherent, popular and human. Then only through the rebirth among all men of that moribund desire for good design—the outward and visible sign . . .—stimulated by right education and the development of sound, contemporary, vernacular standards, can a new architecture of humanism arise.



The Architects' Journal
War Address: 45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9

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

RIBA NEWS FOR THE FORCES

A salute of a hundred guns for the *RIBA News* for the Forces. The Institute is doing a grand job which every Forces architect is welcoming with open arms. Perhaps it has been difficult to realize how ravenously the man in the Forces, particularly in the Forces abroad, hungers for news; news not only about hearth and home and fami-

lies, but also about that other part of home, his ordinary civilian job.

How well I remember the kind of talk that went on among a group of typical ex-architects, most of them in the Engineers, on the torrid deck of one of the troop transports that reinforced Alamein. "What's going on at home?" "What's going to happen after the war?" "Same old muddle, same old mess?" "Banker's Georgian for ever?" "Will they ever invent any new materials?" "Town Planning my foot!" "Is anybody doing anything for afterwards?" "Will the RIBA give us a hand when we get back?" "Not likely; too many big bugs about feathering their own nests." "I'll give it up and take to chickens."

Now these men weren't just naturally ignorant, prejudiced, or cynical. Nor were they a set of hack draughtsmen or third-class assistants put into uniform. They were all competent architects, under forty, mostly members of the Institute. But they had already been out of the game for three years, and they were starved of news. It was

dumbfounding to realize that not one of them had heard of the Institute's Reconstruction Committee, much less of its propaganda, lectures, exhibitions, and of all the other plans and hopes and efforts that were afoot generally. But hadn't they read their ordinary professional periodicals? Some had perhaps, but there is too much to read in them, spare time being at a premium, and they are designed mainly for practising architects.

There is not a shadow of doubt that this news starvation among Forces architects has been among the most serious and crucial problems facing the profession. News starvation, like real starvation, starts with irritation and ends with complete loss of appetite; here were over three and a half thousand architects drifting visibly and alarmingly towards complete forgetfulness and loss of interest in their real and vital work.

The RIBA Forces News, now in its third successful number, does not come a moment too early to stem this insidious tide. It ranges concisely and attractively over nearly the whole field of contemporary plans and events, starting with Demobilization and ending with the Dudley Report.

The matter and manner are first class; readable, pointed, compact, comprehensive, and snappy; all that was wanted. Best of all, this vest pocket journal is no larger than a letter from home, can be posted as easily, and read as quickly.

If there is a suggestion to be made, it is only that shorter paragraphing would give room for still more varied information. I should like, for instance, to see a regular half-page technical corner devoted to developments in building methods and materials.

Full-time fighters and administrators can hardly be expected to welcome the suggestion that they should read through twenty-two Government Reports, involving incidentally some million and a half words, in addition to the normal flood of military orders and forms, or Bumf, as it is affectionately styled by the men who know. Also, under the heading of *War and Architects* the Forces architect is desperately

eager to know what architects who are not in the Forces are doing.

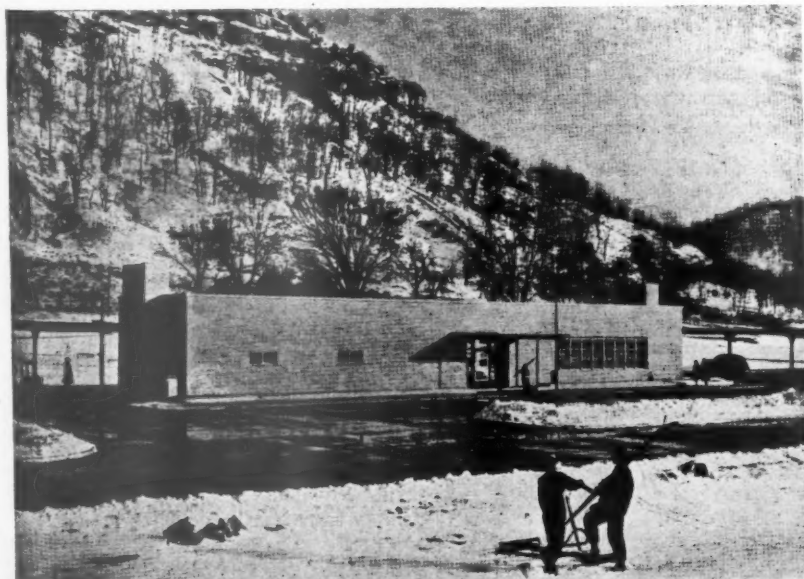
He is interested in civilian activities for their own sake, of course, but also he is inclined to suspect that a lot of cushy reconstruction jobs will be snatched by the men on the spot while he himself is finishing off the dirty work. More news on this important aspect, please.

On the side of manner, a still more personal and careful note should be sounded; the individual man in the Far East, as MOI and the BBC are finding to their cost, is not content with the negative and slightly patronizing assurance that he is "not forgotten"; he blue-pencil well knows that he is among the most important men on earth to-day, and he wants to be positively remembered and constantly reminded of that undeniable fact.

But still, a salute of a hundred guns for the RIBA.

SCIENCE AND FASHION

On the subject of car design—a caption-writer in the *Motor* showed nice discrimination recently. Beneath pictures of a pukka racing car designed on true aerodynamic lines and a sleek American coupé he put the respective captions, "Streamline Science" and "Streamline Fashion."



A railway station at La Crosse, Wisconsin, by Holabird and Root. An illustration to Architecture Arising by Howard Robertson. See this week's leading article.

POETS' CORNER

THE CASTLE OF COMMONS

Away with twice two hundred years,
With train, and car, and aeroplane,
Four centuries have been in vain.
The family motto reappears:
RETURN TO THE HISTORIC.
So off with spats, and on with spurs,
For come what may we'll be, Good Sirs,
"In keeping with the Gothic."

His morning coats and siren suits
No more must good Sir Winston wear,
But Crécy's chainmail must he bear,
And armoured breastplates, armoured boots,
While on his head, behold from far
How cunningly the smith did make
An armoured chimney pot to take
The smoke from his cigar.

No more shall Mr. Shinwell go
By omnibus. He shall proceed
Upon a trusty chestnut steed
In chivalrous and knightly show.
And there in goodly Palace Yard
He'll fodder brave the beast, forsooth,
Before o'er Liberty and Truth
He mounts his daily guard.

Now Nancy Astor and her girls
Shall share no more the talk of men,
But in a turret near Big Ben
Where West Wind wails and whines and
whirls,
Shall weave in dainty tapestry
The Saga of the Suffragette
From Joan of Arc to Cliveden set,
In silken threads of mystery.

And look now, Seigneurs, unto where
My Lord of Gallagher doth sit
In Ermine State and Holy Writ.
For Witness that we do declare
In the accents categoric
Of the King's own Minister's,
That come what may we'll be, Good Sirs,
"In Keeping with the Gothic."

EDWARD LEWIS

ASTRAGAL



LETTERS

(Mrs.) Marianne Walter,
A.R.I.B.A.

R. Blyth Winter, L.R.I.B.A.

London Housing Needs

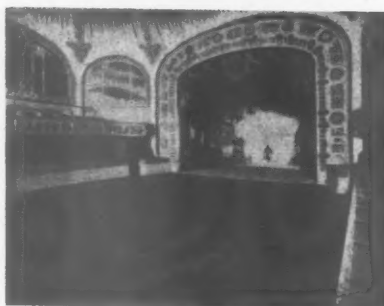
SIR.—Please permit me to congratulate you on the most timely publication of the excellent and important article on *London Housing Needs* by Alexander Block. "A good housing plan requires full mastery of all the relevant population facts" is indeed a fundamental truth, but hardly yet recognized even by Town Planners or Local Authorities. In an article on *The Housing Estate* (shortly to be published in the *Contemporary Review*) I have calculated the number, sizes and types of dwellings required by 10,000 persons of an average town population.

The calculation is based on the assumption that usually the biological family (mentioned in the Australian but not in the English Census) will want to form a "household unit" (called rather misleadingly "private family" in the Census of England and Wales) without the addition of lodgers and adult or old relatives. As Mr. Block has pointed out, the need for this form of privacy appears to be more marked now than ever in the history of mankind. The Roman "group family" (including slaves and servants) is extinct and even the "large family" of some 200 years ago broke up into the "stem family" (*a famille souche*) as Frédéric Le Play observed about 150 years ago. Le Play, Sorokin, Zimmerman and others put this "breaking up" process down to environmental changes—the latter mainly to progressive urbanization and the requirements of greater mobility connected with modern labour conditions (compare Sir William Beveridge's new work on full employment). I think that educational advances will make the biological (*i.e.*, parent-child) family increasingly unwilling to share accommodation with the past generation.

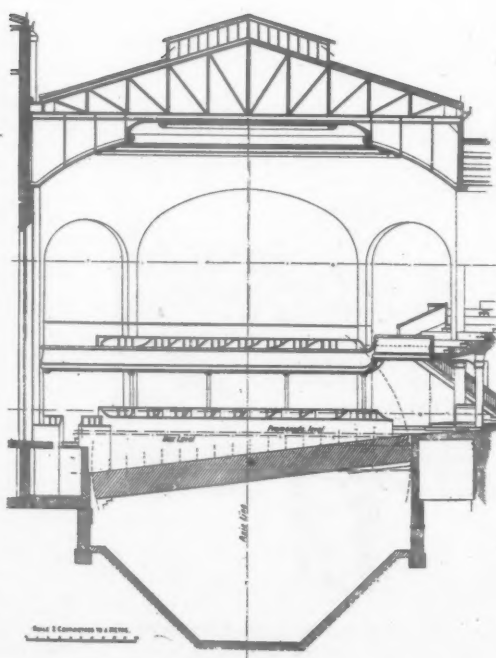
In the course of hundreds of lectures with discussions, I have become convinced that this dislike for "sharing" is as marked amongst the old as it is amongst the younger generation of to-day.

The calculation of dwellings referred to

REVERSIBLE FLOOR OF 1907



This *Basculo* or movable floor at The Apollo, 18, Rue de Clichy, Paris, was illustrated in the *Architectural Review* for December, 1907 and is here resurrected in view of its interest as a remarkable engineering job even by today's standards. By rotating the floor a music hall can be transformed to a ballroom before the eyes of the public in less than a quarter of an hour. The floor is on iron girders and measures about 15 metres by 15 metres, (roughly 278 sq. yds.) It turns on a horizontal axis and brings to the place of 380 fauteuils inclined at an angle, a horizontal dance floor. The whole is moved on a rotary axle by a 6 h.p. motor and passes into an excavation 10 metres deep. The *Basculo* is kept steady partly by its axle and partly by large bolts.



was based on careful population estimates (published by the Association for Planning and Regional Reconstruction) for 1950. The result was staggering to me. According to these estimates, 17.3 per cent. of the population will consist of single adults (including the old). Take any housing scheme at random and see what provision has been made for them. In Birmingham, for instance, 60 per cent. of the dwellings in the outer ring were post-1920 and one- and two-room dwellings formed only 0.6 per cent. of the total. In other words, $\frac{1}{4}$ per cent. provision of suitable accommodation for over 17 per cent. of the population. This staggering inadequacy has to my knowledge been only recognized so far by Mr. G. M. Bumphrey (*Town and Country To-morrow*).

Probably about one-half of our population consists of adults without children. As permanent houses with fewer than four rooms are most uneconomical in ground space as well as construction, and if we consider that about 85 per cent. of existing dwellings have four rooms (and over), the need for flats will very likely surpass your wildest dreams . . . and those of the Dudley Committee.

MARIANNE WALTER

Sheffield

MOW Standard Factory

SIR.—Architects must have examined with interest the plans recently published of the Ministry's Standard Factory, which herald the entry of the Government into the field of the factory estate developer and speculator.

The form of construction shown employing lattice girders to provide an uninterrupted floor space of 100 ft. is one appropriate where internal stanchions would be obstructive to the layout of plant or processes carried on within the factory. In my experience such cases are the great exception. Such a design is only warranted where especially called for, and, in view of the additional cost, cannot be considered but as an extravagance when applied to a standard design, especially where the standard design is expressly stated to be for the manufacture of newer and smaller types of industrial products.

The extra cost involved by the clear span is almost entirely attributable to the heavier and more complicated steelwork. Let us consider the case in this respect. Taking a normal factory construction with internal stanchions at 24 ft. centres and 30 ft. span North-light trusses supported on valley beams, the weight of the steelwork including steel purlins would be approximately 4.50 tons per 1,000 ft. sup. of floor space. For a factory of 50,000 ft. sup. the total weight of steelwork would therefore be 225 tons.

To provide 100 ft. clear span employing lattice girders, the weight of steel required per 1,000 ft. sup. would be approximately 7.50 tons, giving a total weight for the same factory of 375 tons.

This means an extra weight of steel amounting to 150 tons. Taking the price of steelwork erected complete at £35 per ton, this means an extra cost of some £5,250 on each factory.

To a practical architect there would have to be a very good reason before he could commit his client to this extra expenditure. Can it be that such considerations no longer operate when the client is, in the long run, the taxpayer?

These factories are stated to be under construction in "considerable numbers." It appears justifiable to ask—how many and why?

R. BLYTH WINTER

Chingford, Essex

PHYSICAL PLANNING SUPPLEMENT

B E F O R E

Right are cottages in Bermondsey which were demolished by the Borough Council as part of a slum-clearance scheme. The quiet "precinct-like" quality of the layout with the small gardens and informal planting should have provided a lesson for rebuilding. Instead, the modern tenements which replaced them seem to have been influenced more by the "model dwellings for the labouring classes," built in the latter part of the nineteenth century.



A F T E R

Right, the same view as above but after slum-clearance. The only clue to show that it is the same picture is the forlorn tree left standing on the far side of the asphalt desert. As Dr. Westlake points out in the following article, these twentieth-century "model tenements" are considered, quite rightly, "unsuitable for dogs, cats and other animals"—but not for children.



SCORCHED EARTH POLICY

by Aubrey T. Westlake

It is a distressing fact that our administrators and social reformers appear to learn nothing from past experience and so repeat the same old mistakes. The disastrous results of the craze for building "model tenements for the working classes" between 1890 and 1900 should have been a sufficient warning of what not to do. Instead we have been plunged by the Government, local authorities and benevolent building societies into an orgy of flat building, excused on the specious grounds that only so can slums be cleared and the workers rehoused.

The results of this policy were, some years ago, forced on my attention in the ordinary course of my medical work as a doctor, living and working for many years among the people of Bermondsey. Nowhere was the flat policy so thoroughly and systematically carried out as by this Labour Borough Council, giving, alas, an unequalled opportunity of studying its bad effects, effects which were the same wherever a similar inhuman flat policy was pursued.

In general, these can be summarized as a destruction of the old social and cultural life (including family life) of the working people of our large towns and cities, with nothing being put in its place, together with a spiritual starvation which bodes ill for the future.

The process of so-called "slum-clearance," I observed, meant in every case the destruction of cottage property; as far as I know, there is no example of a block of flat slums or tenement slums (often the very worst form of slum) being demolished, nor contrawise, any building being preserved or reconditioned. Always it is the most vulnerable, in this case cottages, which are destroyed; the same process which has gone on in Bermondsey, and London as a whole, since 1830, though never on such a wholesale scale.

Everything is sacrificed in this process of destruction. In addition to the genuine slums, we have sound cottage homes, architecture of the best domestic period, places of historic and antiquarian value, trees, gardens, and in particular backyards as a matter of course. The destruction of these latter two is the most serious, as with them disappear all the garden activities, the hobbies and spare-time pursuits which

have in the past made for a rich working-class culture, and all of which in these times should be most rigorously preserved. Incidentally, too, the people are deprived of the possibility of adding to income and good health by fresh garden produce, eggs and poultry, etc.

With the passing of the cottage goes, too, the old conception of the home and home life, as well as the normal environment for young children, which should, and did, include domestic animals and pets. With the abolition of the streets the older children are deprived of their chief educational playgrounds, the adults of their old social life and community feeling and interests; and all of peace and quiet.

In general, it may be said that everything which tends to humanize life is swept away, everything which makes for fullness of life, including children, destroyed.

That I am not exaggerating is clear from the attitude behind this statement by Councillor Starr, Chairman of the Bermondsey Housing Committee in 1938: "Dr. Westlake says we are destroying the cultured life of our tenants. Surely he is living in an old-fashioned world. People of to-day have little use for home life. Most of them merely sleep at home."

We are told, too, that we mustn't be sentimental; after all, people are being given something better, described in the Election Address of the Bermondsey Labour Candidates, October, 1937, as "decent and comfortable quarters," as though the working people were considered—as perhaps they are—as so much cattle.

The Borough of Wandsworth, under the inspiring leadership of the late Alderman Prince, is a striking exception to this. Here in the new municipal flats, themselves examples of gracious kindly English architecture, every flat dweller is provided with a garden. There are also a few examples of private enterprise doing the same.

The truth about these "decent and comfortable quarters" is that the people, and the children unborn, of Bermondsey, of London and of our other great cities, are being sacrificed to a hygienic standard. "Man does not live by bread alone," nor yet by bathrooms either. For, to quote Miss Denby, "Slum clearance is not merely a question of substituting a clean box for a dirty one. It is not a problem which can be solved by better plumbing," and she goes on to say that flats are "intensely unpopular among the working people

who consider that they provide an environment which is unsuitable for family life"—and they are quite right. It is a scandal of the first order that the workers of our great cities should be forced willy nilly into these inhuman and demoralizing barracks, which, however planned, still remain, as the workers know only too well, the destroyers of men.

In the homes, gardens and back-yards of the old Bermondsey there flourished, in spite of slums, healthy and happy hobbies intimately connected with the soil, the animals and the birds so beloved of the people.

Instead they have been put into soulless flats piled one on top of another, filled night and day with noise and the sense of never being able to get away from the other inhabitants of these human ant-hills.

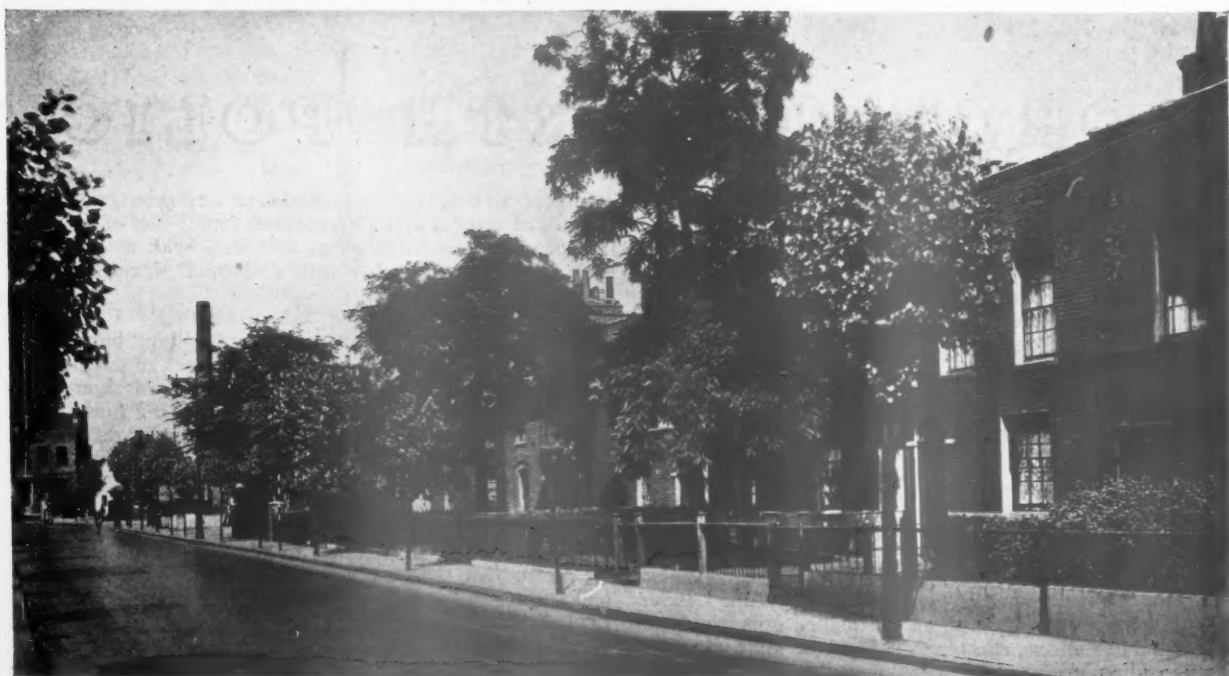
A new and more subtle and destructive overcrowding was being perpetuated—the overcrowding of large numbers in a single block. They were put in bare cell-like rooms—the so-called homes, where the only social activity left is to get out as soon as possible and resort to the newly built and enlarged public houses, where the brewers at least know that men do not live by bricks and mortar and asphalt alone.

It is much worse for the children. Indoors they have to be kept unnaturally quiet for fear of the neighbours, above, below, and at both sides; healthy romping and games are alike impossible; as one child put it, "we can't even have a row now." The effects of the resulting psychological repressions and inhibitions both on parents and children have yet to be felt, but we shall pay dearly for them in the future. Do you wonder that young married people of to-day have no children, or only one? Who shall blame them? Dr. Saleeby well named the flats "birth-control barracks."

Out of doors there is nothing but a dreary acreage of tarmac, sterile and completely barren of any inspiration to the child mind (ball games even are not allowed), the breeder, as I know from experience, of hooliganism and sheer destructiveness. This is particularly true of the adolescents. Is it any wonder that the educational authorities are getting apprehensive of the stultifying effects of wholesale flat-life on children? Why should they be condemned to live in what is considered, and quite rightly, "unsuitable for dogs, cats and other animals"—but not for children?

Even physically the younger children are worse off, as, owing to the difficulty of getting down, with a pram, from

HOUSES AND TREES WHICH WERE DEMOLISHED TO



5-6 floors, the mother tends to keep the children in as much as possible; nor indeed is it safe to let small children out on the public access balconies and tarmac playgrounds, and, as there isn't even a back-yard, they actually get less sun and air than in the old slums. Higher rents also sometimes mean less or more inferior food. As a result, there is a tendency to a higher incidence of disease among the 1-5 year olds in the flats. This is borne out by an investigation I made into the differential death rate for 1935 as between flats and cottages. Whereas it was apparently healthier for adults to live in flats, for children from 1-5, the death rate was both relatively and absolutely greater, *i.e.*, flats tend to kill off the young children (and this with a falling birth rate). I could not obtain permission from the Registrar-General to investigate these figures over a ten-year period.

A further development is the multiple restrictions and regulations, too numerous to mention, which surround the unhappy flat dweller; well may it be said, "Abandon freedom all ye that enter here." These, together with the stultification of all his creative impulses, gradually reduces him to servile obedience and reinforces the tendency to accept lying down the increasing tyranny of the flat policy. Thus are being reared and nurtured, not only the insoluble slums of the future, but the servile human machines which will live in them.

The stock argument for all this destruction of human values is that there is nothing else to be done in our large towns; it is flats or nothing. It is true that a rigid policy of twelve houses to the acre is not always practicable, but neither is it desirable, for it means the complete destruction of urban character. It is, however, perfectly practicable to build houses with every amenity for most of those who want them at a higher density, and to provide flats for those who want flats and for the few who desire but cannot immediately be provided with houses. If such a policy is to be successful, it will be necessary, first to estimate, accurately, population needs with regard to housing;* and, second, where flats are desired or are necessary as a short-term measure, to build them with every amenity that they can offer.

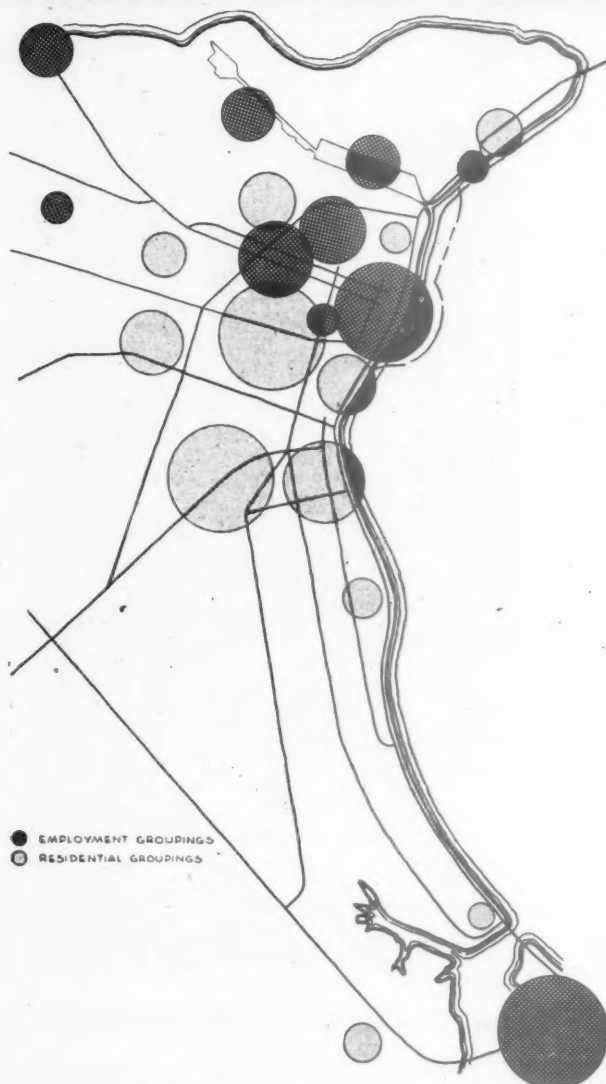
But the people must be given what they want and richly deserve—real homes. Thus the greatness of England will be built afresh on the basic needs of the human spirit.

* See *London Housing Needs*, Alexander Block, A.J. Physical Planning Supplement, 9-11-44; (errata p. 344, line 27 for "decimal" read "decennial.")

MAKE ROOM FOR THIS ◻ ALTHOUGH THIS ◻ WAS LEFT



On facing page, another part of Bermondsey which went to make way for the flats shown left on this page. Apart from the human factors consequent upon such a policy, which are described by Dr. Westlake, even the urban character of the continuity of the street frontage is lost in this example with its forced symmetry and horizontality. Above is an example of the model tenements built for the working classes in the latter part of the nineteenth century. These blocks have all the inhuman grandeur of a prison. There are five floors without lifts, and in most of the flats artificial lighting is needed for most of the day—yet these were left standing.



Above is a map showing the centres of concentration of work and residence in Corpus Christi, Texas, one of the cities chosen for the Progressive Urban Studies made under the direction of the late National Resources Planning Board. The studies provided the basis for the manual mentioned below.

LOCAL PLANNING IN USA

Community planning in America is fortunate in being assisted by active organizations, such as the Public Administration Service and the American Society of Planning Officials. The former has produced an excellent book called *Action for Cities: A Guide for Community Planning*. It is a guide prepared to assist municipal officials and civic leaders in carrying out a comprehensive planning programme without heavy reliance upon trained personnel. The guide is not a theoretical treatise but a practical working tool, built around the experiences of such cities as Tacoma, Salt Lake City, and Corpus Christi. Its clearly defined sections and simple layout should make it useful and popular.

Following this book the American Society of Planning Officials have produced two pamphlets

describing local planning activities. One, *A City Manager Urges Planning*, is a letter from the Manager of Kansas City, Missouri, to the Mayor and Members of the City Council. In it he defines the six major planning problems in Kansas City today:

1. The need for a basic plan.

A report of the Mayor's committee of Cleveland, is here quoted to show that "the idea of a heavy initial expenditure for the making of a Master Plan followed by a sharply reduced staff for ever after, merely to carry out the plan, has been conclusively rejected in favour of the concept of planning as a day-to-day integral element in the governmental structure."

2. The need for a land use survey as a basis for zoning revision.

3. The need for rebuilding on the basis of areas larger than square blocks. "If this theory is accepted the plan must provide more than rows of sanitary barracks to replace rows of unsanitary hovels."

4. The need for a plan in which the post-war programme of public works is an integral part.

5. The need to co-ordinate existing agencies connected with industry and to select a committee to study the problems of industrial development.

6. The need to look to the regional sphere of which the city is economically a part.

The author emphasizes that much of a plan's success depends on voluntary positive action and co-operation by private individuals and corporations. Four divisions of planning activity are suggested:

1. General planning and the basic plan.

2. Urban redevelopment and zoning.

3. Industrial development and transportation.

4. Capital budgeting and mandatory referrals.

The other pamphlet, *Green-ville Faces Planning*, is the story of the development of a planning programme in Greenville, Ohio, told by John E.

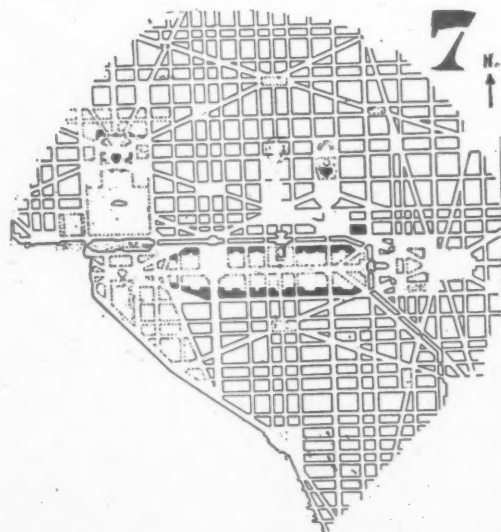
Vance, Secretary of the City Planning Commission. The story verifies the Kansas City Manager's statement that the success of a plan depends upon action and co-operation by public bodies and private individuals. A day in 1938 was officially designated by the Mayor as City Planning Day, when a guest planner was invited and public meetings were held. Amongst subsequent planning events was the gift by a private citizen of a large area of land adjoining the public park to be improved, at his own expense, with drives, landscaping, lagoons, shelters, walks, Girl Scout lodge, foot bridge, etc. In 1941, the City Council set aside money for the Planning Commission to use in preparing its Comprehensive City Plan. The pamphlet concludes, "As a community, we have already profited much by planning and zoning. Looking into the post-war period, we feel that we will benefit even more. If there is federal aid for public improvements, our plan will provide the *Why* for such improvements. All private and public building will, in the future, insure our community the maximum value for every dollar spent by private or public agencies. Each improvement will be guided by the plan to fit a distinct pattern for a better and more beautiful community in which to live."

PLANNER'S QUIZ

THE ANSWER TO THE LAST PROBLEM

6. Salisbury, England—13th century—English approximation of the Bastides of France. Built by Bishop le Poer to re-house the people of Old Sarum, where there was a chronic shortage of water. The market place forms the central focus of the town and the cathedral is at the south west. In the early days streams trickled down each of the streets to heighten the charm of the new town.

Can you place this town pattern? Its historical background, the form of social organization underlying it, the town planning approach employed, the locality?



Answer in the next Planner's Scrapbook.

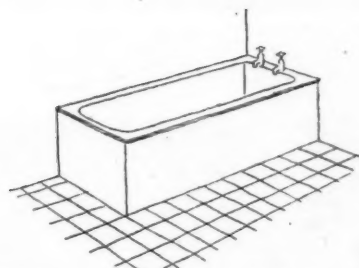
The entrance to the exhibition.



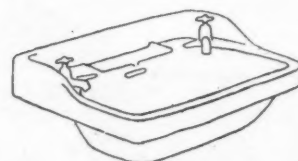
MOW EXHIBITION OF STANDARD HOUSING EQUIPMENT

This exhibition, recently held in Birmingham and organized by the Ministry of Works in co-operation with the Ministries of Health and Fuel and Power, complemented the MOW demonstration houses at Northolt, and illustrated the principal items of housing equipment recommended in *Housing Manual*, 1944. It showed the standards of equipment which the Government recommends should be used by local authorities and others in the future rehousing programme. The need for mass-production through standardization was the main lesson of the exhibition, in that this will have the advantages to the consumer of low cost, good quality and design, simplified planning, and ready replacement, and, to the producer, assured markets,

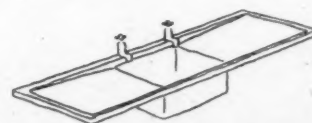
the elimination of the expense of maintaining large and varied stocks and the use of the most efficient use of machines and plant. Equipment shown included kitchen storage units, refrigerators, the electric larder cooler, the electric socket-outlet plug, taps, windows, chimney pots, bathroom equipment, combinations of equipment such as that proposed for the Portal House. Heat installations were also shown, covering cooking, room heating, water heating and clothes washing applied to different lay-outs of living space and different types of fuel. The exhibition sought to show that to get the best results, the right fittings must be used in the right plans and that the aim should be good equipment with adequate living space and good architecture.



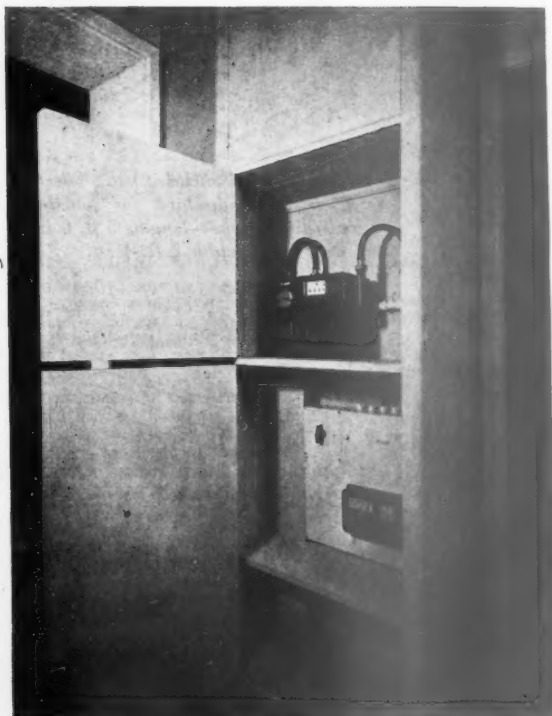
The standardized enclosed bath, selected as a British Standard for housing. Overall dimensions—lengths 5 ft. 6 in., and 6 ft. 0 in., width 2 ft. 4 in.



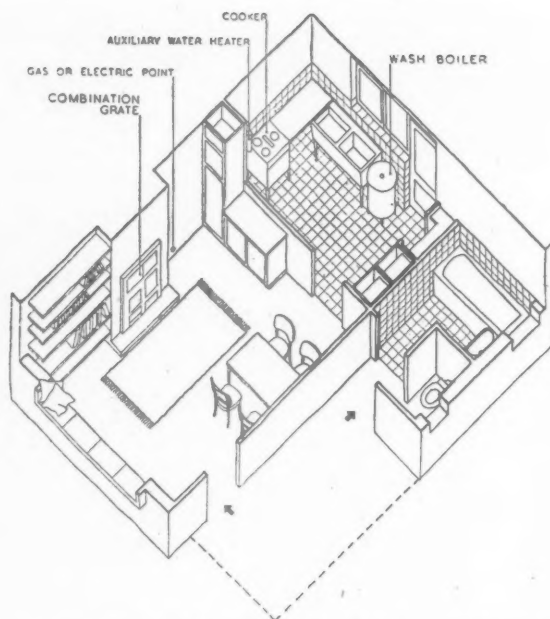
The standardized wash basin. Overall dimensions—larger size 25 in. by 18 in., smaller size 22 in. by 16 in.



The standardized metal sink and drainer unit (either stainless steel or porcelain-enamelled). Overall dimensions—length ft. 3 in., width 18 in. and 21 in.

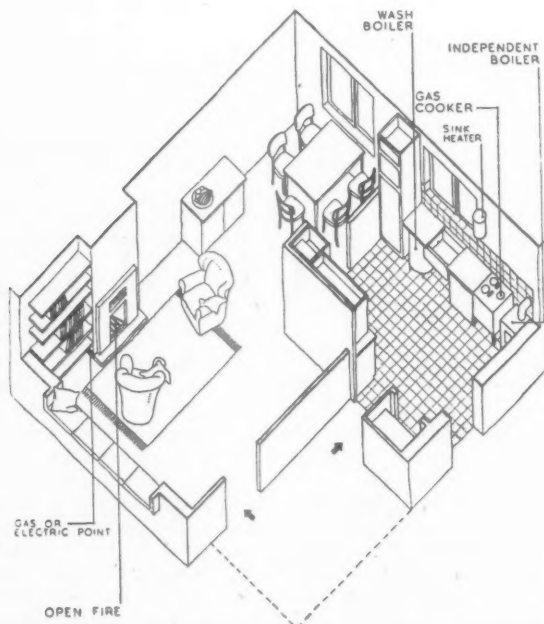


MOW EXHIBITION



I KITCHEN-LIVING ROOM

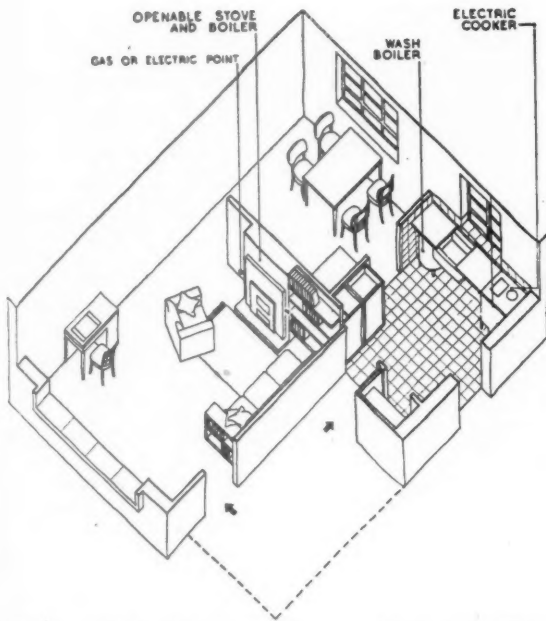
This and the following four examples show several ways of arranging the heating equipment according to the use of the living space and the type of fuel being used. In this example, main heating is : cooking—combination grate ; room heating—combination grate when open ; water heating—combination grate. Auxiliary: cooking—gas cooker ; room heating—none ; water heating—gas circulator. Left top, the living room. Left, the kitchen.



II WORKING KITCHEN

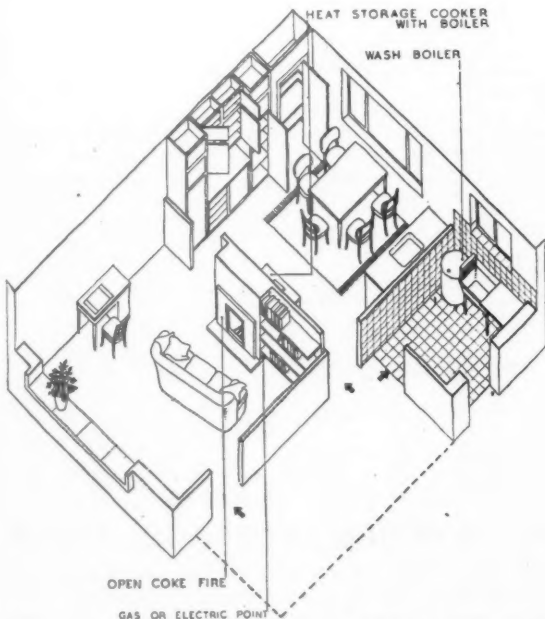
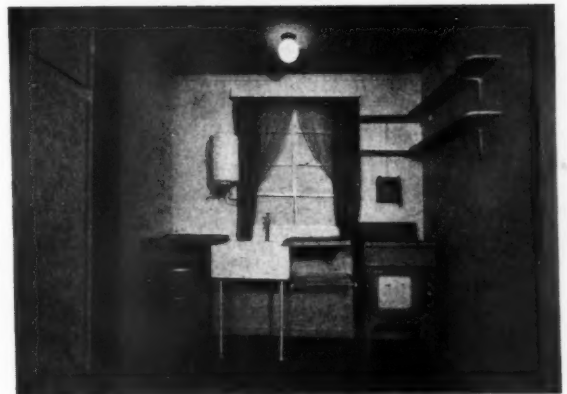
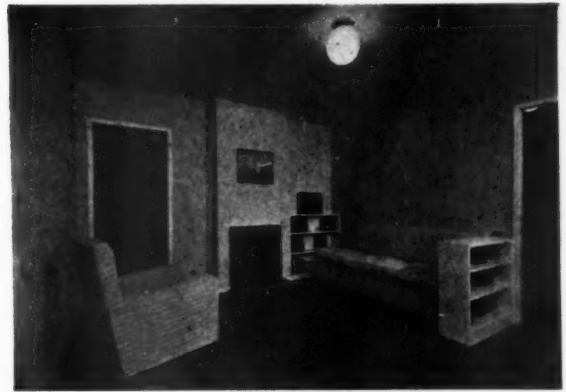
Main : cooking—gas cooker ; room heating—open fire with convected air ; water heating—independent boiler. Auxiliary : cooking—none ; room heating—gas and electric point ; water heating—gas sink heater. Left, standard gas and electric meters placed together in an accessible cupboard.

AT BIRMINGHAM



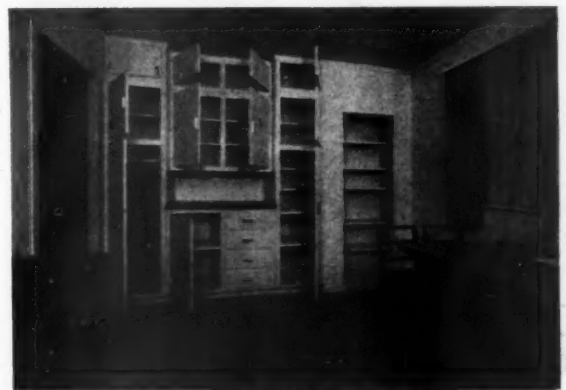
III WORKING KITCHEN AND SEPARATE DINING SPACE

Main: cooking—electric cooker; dining-room heating—warm air from openable stove in living room; water heating—boiler in living-room stove. Auxiliary: cooking—none; room heating—gas or electric point; water heating—electric immersion heater in hot water storage container. Right top, the living room. Right, the kitchen.



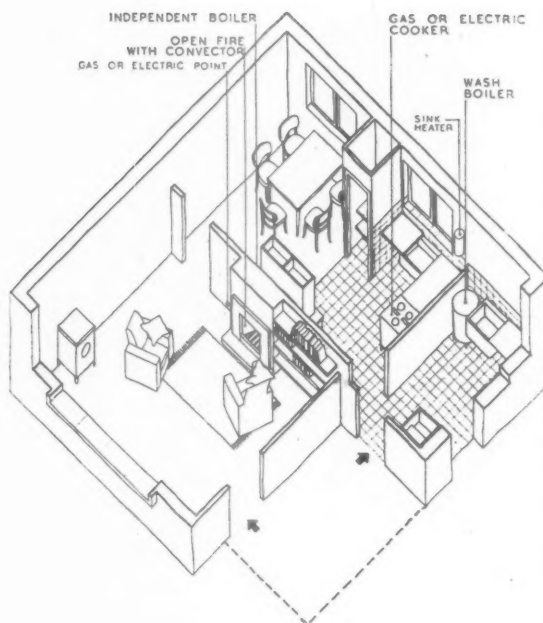
IV DINING KITCHEN

Main: cooking—fully insulated heat storage cooker; room heating—open fire burning smokeless fuel; water heating—heat storage cooker. Auxiliary: cooking—none; room heating—gas or electric point; water heating—none. Right-top, the dining-kitchen. Right, typical storage units in the dining-kitchen; the larder, on the right, is part of the structure.



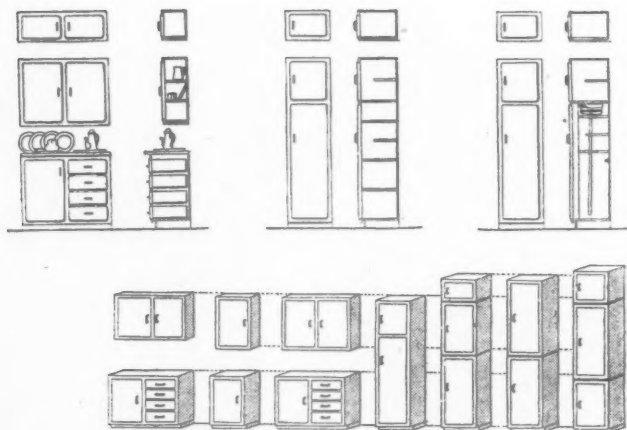
O F H O U S I N G

E Q U I P M E N T



V. DINING SPACE OFF KITCHEN

Main: cooking—gas or electric cooker; room heating—open fire with convection device; water heating—independent boiler. Auxiliary: cooking—none; room heating—gas or electric point; water heating—gas or electric sink heater. Left, the wash-house or utility room (also in No. IV).



VI KITCHEN STORAGE UNITS

Top, the three basic units which form the minimum required in any kitchen; left, dresser; centre, dry goods storage cupboard; right, broom cupboard. Above, how the units fit together; the standard width is 21 in., and there are two standard depths—12 in. and 19 in. It is recommended that cupboards should be finished with a washable surface and should extend to the ceiling. The worktable top is 3 ft. 0 in. high. A toe recess, 3 in. high and 2 in. deep, is provided at the base of all fittings. Left, a typical storage unit; broom cupboard on left, dry goods on right.

INFORMATION CENTRE

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

PHYSICAL PLANNING

1684

Dudley Report

DESIGN OF DWELLINGS. Report of the Design of Dwellings Sub-Committee of the Central Housing Advisory Committee of the Ministry of Health (the Dudley Committee). (HMSO, 1s. Reviewed in *Architect's Journal*, leading article, August 24, 1944, p. 135. *Précis of report on site planning*, same issue, pp. 149-150.) Valuable guide to local authorities. Proposals for raising all-round standard of post-war housing of 3-4 million houses. Stresses need for greater flexibility in planning than in past. Suggestion for lay-out of kitchen-eating arrangements. 900 ft. super regarded as minimum space for 3-bedroom house. Recommendations for equipment. Excellent special report of a study group of the Ministry of Town and Country Planning on site planning and lay-out in relation to housing included.

The MOTCP report on site planning and lay-out is of special value, and is in six parts: 1, Relationship of housing and town planning. 2, Neighbourhood planning. 3, Space about buildings. 4, Roads and car

parking. 5, Architectural form. 6, Planting in streets and public places.

Important points are:

1. Unquestioned acceptance of the old pattern as the basis for the new will not affect any real improvement. It perpetuates the weakness of piecemeal redevelopment, and

the mistake of determining the proportion of houses to flats, not on the needs of the community as a whole, but on the cost and availability of particular parcels of land. It is the overall density of a whole neighbourhood which should be borne in mind as well as the local densities of groups of houses or estates.

2. The neighbourhood unit is recommended to restore the sense of forming part of a recognizable community; 10,000 is suggested as the ideal population for such a unit.

It is desirable that there should be some principal focal point, some definite centre in every neighbourhood; and, so far as it can be achieved, every centre should have its own individual character. Among neighbourhood buildings which may well be at the centre are places of worship, the branch-library, a cinema, public house, branch administrative buildings, the necessary clinics, smaller club buildings and shops.

The following table from the report indicates the relative acreage suggested for the various needs:

A RESIDENTIAL NEIGHBOURHOOD OF 10,000 PERSONS.

Use	Open Development	Outer Ring	Inner Ring	Central	Central
	Acres	Acres	Acres	Acres	Acres
Housing	333	200	133	100	83
Primary schools (3-11 years of age)	17	17	17	17	17
(School and playing field area)					
Open space	70	70	60	50	40
Shops, offices, etc.	9	8	7	6	5
Community centre, churches, etc.	7	5	4	3	3
Public buildings	4	3	2	2	2
Service industry and workshops	7	6	5	4	4
Main roads, including half boundary roads, up to a maximum of 20 ft., and parking..	35	28	20	17	14
TOTALS	482	337	248	199	168
Average net residential density*	30	50	75	100	120
(persons per acre)					
Gross neighbourhood density†	21	30	40	50	60

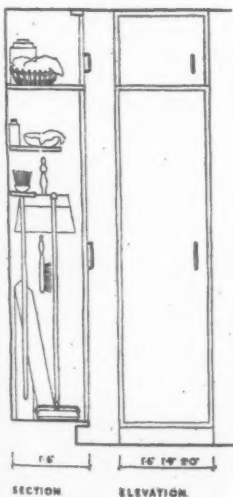
* Net residential density is the average number of persons per acre of housing area; which comprises the curtilages of the dwellings, access or internal roads and half the boundary main roads up to a maximum of 20 feet, where these are contiguous to residential property.

† Gross density is the average number of persons per acre of the whole neighbourhood, the acreage of which is shown by the totals.

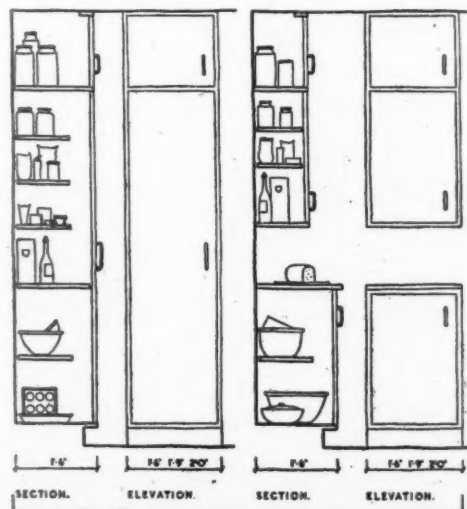
SINGLE FULL SIZE UNIT.

SINGLE FULL SIZE UNIT. SINGLE UNIT 2. SECTIONS.

DOUBLE UNIT 2. SECTIONS.



BROOM CUPBOARD.



ALTERNATIVE DRY GOODS CUPBOARDS.



DRESSER FITTING.

Storage fittings. From Design of Dwellings. See No. 1684

3. The Report suggests that henceforth three separate measures of density planning and/or control may be necessary. First, there should be a population density planned for every neighbourhood. Second, there should be a floor-space standard applied to defined areas (e.g., areas of 100-300 houses; on the lines of the land-units under which housing densities have been calculated in town-planning schemes in the past). Third, there should be a control safeguarding the lighting (15-18° angle of obstruction at sill level) and amenity space for every building.

4. It is unsatisfactory to design a road pattern and then fit the necessary buildings to it. The buildings and their approaches must be thought of together. The pattern of domestic roads should generally be of a free and varied rectangular kind. There are greater architectural opportunities in the arrangement of houses in terraces than in semi-detached blocks. The provision of garages for all types of houses must be considered.

5. Existing trees should be retained and incorporated in layouts. The top soil from roads and building sites should be set aside and saved. If some division between pavement and front garden, and between adjoining front gardens, is felt to be necessary, this should be provided by a low hedge or a simple low wall or fence, probably not more than 48 in. or 2 ft. high. For the divisions between rear gardens, a much higher fence, and a solid one, is necessary if the privacy which should be an essential characteristic of the private garden is to be maintained. The most practical proposition may be to build a wall for such distance, say 7 ft. or 8 ft., as will assure the privacy of windows, and beyond that to plant a substantial hedge.

1685

Scottish Report

PLANNING OUR NEW HOMES. Report by the Scottish Housing Advisory Committee on the Design, Planning and Furnishing of New Homes. (HMSO, 3s. Reviewed in the *Architect's Journal*, leading article, March 30, 1944, p. 237.) Outlines scope of Scottish post-war housing problem. Recommends three-stage programme. Furniture, equipment, and neighbourhood planning dealt with. Well produced and fully illustrated.

The first housing stage recommended is the building of temporary, mass-produced houses, together with full use of converted war buildings and the erection of Duplex houses.

The second stage, which is to proceed at the same time as the first, is the building of permanent houses to short-term standards.

The third stage, which is to be started as soon as costs are stabilized, and labour and materials are plentiful, will provide permanent houses to improved long-term standards.

A chapter deals with services, fittings, plumbing, air convection, district heating and refuse disposal. Built-in kitchen equipment is considered and specified.

The second part of the report deals with the provision of furniture in houses built by local authorities, with recommendations for extending the Utility Furniture scheme.

The report covers planning to the extent of the direct relationship of housing to planning in such matters as neighbourhood units, community services and buildings, grouping and spacing of houses, design of street furniture, tree planting and gardens, water and sanitation, and roads. Terrace housing is recommended as being "in the best traditions of Scottish domestic architecture."

LIGHTING

1686

Public Buildings

LIGHT SOURCES FOR PUBLIC BUILDINGS IN NEW YORK CITY. A. Lorch. (*Lighting and Lamps*, June, 1944, p. 18.) Various lighting arrangements examined by New York City Architects' Department for standard use in public buildings. Article deals mostly with hospital ward lighting.

In the course of preparing its post-war programme, the New York City Public Works Department has had to examine details of several functional problems, among which is lighting.

The article is introduced by explaining the Department's attitude to lighting. They are obviously advanced in general thought, well past the foot-candle stage and the indirect lighting fetish, both of which they firmly place on one side. They have made up several model rooms for trials and have examined arrangements of lamps—mostly fluorescent—for general economics, maintenance, safety, comfort and purpose.

The article is mainly devoted to their analysis of hospital ward lighting. Their main requirements were determined as follows:—

1. General light at low intensity, glare free, with small, louvred, night lights near floor level.
2. Localized bed-head lighting for reading and examination of patients. Must be comfortable for people lying down.
3. Fixtures accessible for servicing.
4. Glassware avoided as a hazard.
5. Freedom from direct radiant heat from lamps to patients.

The various combinations of lamps which were examined are discussed pro and con. One incandescent indirect arrangement was judged fairly satisfactory, but preference was given to a semi-direct fluorescent grouping. Four other systems were tried.

1687

Daylighting Classrooms

THE WAYS OF DAYLIGHTING CLASSROOMS. D. Haskell. (*Architectural Record*, May, 1944, p. 75.) American experience of classroom daylighting. Suggestions for new glazing arrangements. Emphasis on value of reflecting surfaces and louvres.

This note discusses some existing experimental classroom types and includes several suggestions for new developments based on the experimental designs.

Four unilateral types are discussed first. All employ sloping ceilings by which window head heights are raised to 13 ft. or more, and by which it is also claimed that better light diffusion is obtained. In all cases louvres or venetian blinds are employed, though in one case the louvred effect is secured by the use of the mortar beds between glass blocks, the latter also serving as redirective panels. The louvres are shown in several ingenious forms and apparently are used for schools in all climatic circumstances.

It is difficult to see what value the sloping ceiling has, because, after all, a reflector must receive light before it is useful, and very little direct light normally comes at a low enough angle to strike even a sloping ceiling effectively.

There are six bilateral examples, all consisting of unilateral schemes augmented by clerestories and the opposite wall.

The clerestories are usually heavily loaded in these schemes, though in one ingenious arrangement there is a horizontal white reflector just below the clerestory externally, and a special reflector on the ceiling in-

side, so that a highly efficient arrangement is achieved.

A group of special designs for extra size classrooms is included. The lighting arrangements resemble factory designs, being forms of monitors and saw-tooth types.

One is left with the impression that in some of these ingenious arrangements the principles of lighting are not too clearly understood. However, the consistent use of louvres and venetian blinds seems to indicate widespread confidence in their usefulness that probably has a firm background. One can see this influence operating now in this country.

The measurements by which the lighting curves were determined do not conform in technique to that used in this country. They are foot-candle measurements, which are likely to be unreliable because of the wide variability of daylight intensities even under comparatively stable weather conditions. Nor is sunlight and daylight well differentiated. In this country a ratio, the daylight factor, is used, constant for all conditions. Some caution should be exercised therefore in interpreting the curves data given.

1688

New Lamps

A REVIEW OF NEW LAMPS. (*Architectural Forum*, July, 1944, p. 12.) New incandescent and discharge lamps likely to be available in America after war.

This article is a useful and interesting catalogue of new lamp types which will be available in America, and presumably later in England, after the war. The main types listed are these:—

275 watt sun lamp (for ordinary sockets).

Low wattage germicidal lamps.

Black light lamps.

1/10 and 1/25 watt neon glow lamps.

Fluorescent types.

Infra-red lamps for heating and drying.

Lamps with built-in reflectors.

The most interesting of these for architects are probably the first and second. The first gives a mixture of infra-red and ultra-violet radiation in the form of a golden light like sunshine. Thus heat and health come from the same source, which should be very useful. It is intended for use in places like bathrooms, and has a life of 400 applications.

The second lamp—the germicidal type—has an almost infinite variety of uses, from home and school, to meat storage and dairy work.

Black light lamps—the third type—are simply sources of ultra-violet of a frequency useful for activating fluorescent ceilings.

The last type is ingenious, and no doubt will come into wide use quickly. The lamp is given a suitable shape for a reflector, and is then silvered on the inside. It would presumably be convenient for industrial and other concentrated beam uses.

PLUMBING

and Sanitation

1689

Plumbing in USA

POST-WAR PLUMBING IN USA. Norman J. Rodder. (*The Plumbing Trade Journal*, August, 1944. Culled from the *National Real Estate Journal*.) Brief notes on materials and fittings. Plastics. Fibre pipes. Shower baths. Dental lavatories. Flushing valves.

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The brief notes reported are not of great value, but a few interesting points are made. The author considers that wartime expedients have produced little or nothing which is likely to alter the use of traditional materials. Plastics may have an application in a minor way, and fibre pipes will be used for outside sewer and drain work. On fittings the chief points of interest to us in this country are an indication that shower baths are regarded now as normal house equipment. They may be combined with bath tub or separate units. The overhead shower is obsolete. Bath tubs in better class work tend to have a turn up against the wall to prevent seepage of water between bath and wall. Dental lavatories are gaining favour. These are small, have a flushing rim, and no drain plug. Flushing valves of new types are being made. (The DSIR Plumbing Committee Report does not recommend such valves for use in this country.)

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.

1690

Contractors' Profit

Q What is the prevailing method in the UK of fixing Contractors' profit on building contracts, with particular reference to the Ministry of Home Security Form of Contract? I would like to know the percentage profit generally allotted, and whether it is based wholly on contractors' labour costs, or on contractors' labour costs plus cost of materials not supplied by the contractor.

A Procedure varies so much that we would restrict our remarks to the Ministry of Home Security Form of Prime Cost Contract. It would be misleading for us to refer only to overheads and profit without stating how the Contractor is paid under the Contract as a whole, so we are giving you a brief résumé of the contract.

1. The Contractor is paid his net costs, which include wages and materials; sub-contracts; all insurances; carriage; royalties and fees; the hiring of heavy or mechanical or power plant; consumable stores, such as fuel, water and electric power; tool sharpening and testing materials. Here we would point out that in other forms of contract insurances, for instance, may be considered as part of the overheads.

The heavy or mechanical plant, etc., mentioned above, includes such things as mechanical navvies, scrapers, bulldozers, cranes, concrete mixers, lorries, compressors, pneumatic tools, steel scaffolding and tarpaulins.

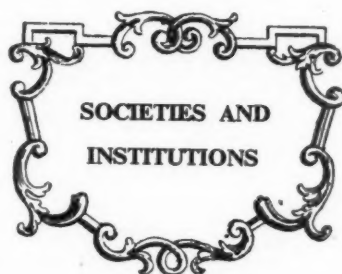
2. The contractor is paid a percentage upon the net costs for hand tools and appliances, including ladders, wood scaffolding, picks, shovels, etc., the percentage being 2½ per cent. when the net cost does not exceed £5,000, 2 per cent. when the net cost exceeds £5,000, but does not exceed £10,000, and 1½ per cent. when the net cost exceeds £10,000.

3. For overhead charges and profit and

all costs not mentioned in 1 and 2 above, the contractor is paid a sum calculated upon a sliding scale, from which we give a few examples:—

Nett cost as in 1 above	Overheads and profit
Up to £1,000.	12½ per cent.
" " £2,000.	10 " "
" " £3,000.	9 " "
" " £4,000.	8 " "
" " £6,000.	7 " "
" " £12,000 to £25,000.	6 " "

As suggested above, it is important to remember when comparing these figures with other contracts, that the allowances for overheads and profit do not include the cost of hand tools and appliances, insurances and hire of mechanical equipment, which are sometimes regarded as overheads, i.e., an allowance of 12½ per cent. under this contract may not compare unfavourably with an allowance of perhaps 20 per cent. under another contract in which the term overheads is used to cover practically everything but labour and material.



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.

ICE

H. J. Manzoni

At the Institution of Civil Engineers. Lecture on THE BASIS OF TOWN AND COUNTRY PLANNING, by H. J. Manzoni, C.B.E., M.INST.C.E., M.T.P.I., City Engineer and Surveyor, Birmingham.

H. J. Manzoni: Perhaps the most difficult thing to realize is the manner in which the breadth and scope of physical planning has in-

creased. Just as in the consideration of the establishment of a basis for world peace, problems have to be dealt with from an international rather than a national point of view, so there is little doubt that physical planning has to proceed eventually to a similar world-wide goal.

A realization of the need of national planning is of very recent growth and there has been rapid development since the first town-planning legislation of 1909. Progress has naturally been speeded up by the effects of war on our towns and countryside.

The weaknesses which exist are due rather to unco-ordinated planning than to lack of planning. Local Authorities have been busy planning for years and have endeavoured in many instances to operate via joint committees on a regional basis also. The difficulties they have to meet are due to a lack of a national basis and also to the lack of a formula according to which their consequent responsibility has to be fulfilled. Regional planning involves financial obligations of a very comprehensive character, and it is in that respect that the difficulties have been insurmountable in the past. The natural desire and object of any Local Authority is to foster the welfare of its own ratepayers by the provision of more and more adequate services. The money required has to be obtained from local taxes or rates and, as rates are based upon the use of land, the authorities have aimed at attracting the maximum possible use of land for the most remunerative rate purposes.

The Need for a National Plan.

It is not very difficult to divide the whole country into regions having boundaries more or less suitable for planning purposes, but the character of those regions will vary widely. The one underlying similarity will be the need to define upon a rational basis those parts of each which should be used for the establishment of urban communities, or reserved from these purposes and used for open space or for agriculture.

In order to obtain the best results, it will be necessary to commence from the basis of a national skeleton plan showing such important aspects of Government policy as main communications, location of industry, national reservations of parklands and seashore and prescribing suitable regional boundaries. Such a plan will indicate also the national development of power resources and will be accompanied by a definite policy for agriculture and certain standards, e.g., of building, as a guide to detail planning. Unfortunately no such skeleton plan is available but, when it is considered that, within the setting of national planning in its widest sense, plans for education, public health, social security, economic development and the whole catalogue of national reconstruction policy has to be included, then the time lag in its preparation will emphasize a measure of its magnitude.

Regional Plans.

The second stage in the logical sequence is regional planning, before the third and final stage, local planning can be carried out. Unfortunately local planning cannot wait upon the preparation of national and regional plans, and so, quite rightly, has to be taken in hand by Local Authorities on the best assumptions possible. In the same way, it is obvious that regional consideration of physical planning is a very urgent matter—so urgent indeed that there is no time to wait for the completion of the national plan, concerning which it is consequently necessary to make certain broad assumptions based upon local factors which are likely to be relevant. Examples of such assumptions are not difficult to cite and Local Authorities and private local associations have them well in mind; for example, certain parts of the country have long been considered suitable as national parks or as

recreative coastal areas; other districts contain valuable coal measures as yet unworked, or agricultural soil of the highest quality. The development of the Severn navigation, a bridge across the Humber from Hull to open a new highway across Lincolnshire and a national scheme of water conservation are other logical assumptions. Even the main lines of a desirable new national communication system can be forecast with reason.

Regional planning should not aim at filling in detailed layout, but its function is to define the areas within which the land should be used by each of the two main groups of urban and rural activities, to co-ordinate the local plans so as to prevent marginal inconsistency and to plan in outline and, in some cases, in main details any physical features such as main roads, river improvements or airports. Regional planning, like national and local planning, should proceed upon the basis of a comprehensive survey of existing conditions and several excellent examples of that work have been completed and exhibited in the past year or two relating to the city of Kingston-upon-Hull, the county of Gloucester and Birmingham, while probably the most comprehensive survey of its kind is nearing completion in connection with a survey of the county of Hereford by the West Midland Group on Post-War Reconstruction and Planning.

Basic Planning.

From such surveys the basic planning for the area concerned can be carried out covering such main aspects as communications, water supply, drainage, etc. The fundamental factor of planning is the wisest use of land in the interests of the whole community and consequently the first deduction to be drawn from any planning survey concerns the division of the area into use zones. The more important factors which govern the choice of use zones are the needs of the area, the governing physical features and the artificial services, including transport, drainage, water, gas, electricity, social and health services, etc.

Sieve Method of Analysis.

An interesting technique developed to prepare a zoning plan of a region is known as the sieve method of analysis. It consists of using the various survey maps as a sieve through which to pass the needs or requirements of the area. For that purpose, each item of the survey should be shown on a separate map. To take an example—the overspill from the congested centre of a large town is estimated at 20,000 persons. By placing the sieve maps over the Ordnance Survey of the region, those districts which are unsuitable might be immediately eliminated, such as areas having a high degree of natural beauty, good agricultural soil, steeply sloping land or areas where the subsoil is damp or liable to subsidence. That will leave certain defined districts where urban development may be contemplated. To each of these may now be applied the sieve maps of the services and these will further narrow the issue, which will ultimately be presented as a simplified choice between a few well-defined plots of land.

There are, of course, many other considerations which have to enter into the making of a regional zoning plan, such as the possibility of mining, the requirements of the national plan, the limitation of built-up areas, co-ordination with the plans of adjoining regions and any physical features which may influence the location of particular industries.

From that stage, the development of the regional plan depends mainly on considerations of an engineering character because it involves the supply or expansion of services to the proposed urban communities which cannot be established without them.

Local or Town Planning.

Local planning or town planning should follow the preparation of the regional plan; although, as pointed out before, it has been necessary in many areas to go ahead with the preparation of local plans. Those again should be based on a survey, but the items of the survey will be very different in emphasis. Whilst services will normally be available and geology, soil quality and contours are of little importance, road traffic is of primary importance and the larger the town the more important it becomes because of the density of population. The correct siting of industry and the provision of adequate housing accommodation are also essential. It is the function of local planning to foresee building development and to control it in time and space so as to achieve orderliness at all stages.

Necessity for Co-ordination.

From each stage of construction—national, regional and local—the science of engineering is interspersed with the work of other specialists. The whole should be co-ordinated by one person or group of persons working in harmony. In practice, that is best achieved by a single co-ordinator who should have had a thorough training in one of the basic professions of engineering, architecture or surveying and, in addition, should have had a long experience of the actual work itself in all its aspects. Men who have had the necessary experience can, with a few notable exceptions, be found in the service of the many local authorities throughout the country and the majority hold executive appointments as municipal or county surveyors.

HC

G. Stephenson

October 17, at 13, Suffolk Street, S.W.1. Meeting of the Housing Centre. Lecture on SITE PLANNING AND LAYOUT IN RELATION TO HOUSING, by Gordon Stephenson. Chairman, Reginald Browne.

G. Stephenson: The relationship of housing and town planning is not generally seen, but is nevertheless very important. The location of housing is important in relation to transport, industry and provision of open space; it should be considered regionally rather than as a local problem. Density is another matter where housing has a direct relation to town planning. When reconstruction is undertaken there is a marked tendency to have enormously high densities in the centre of the town scaling down to very low densities further out. This is because the work is undertaken piecemeal, the reconstruction of the central area being regarded merely as the pulling down of some houses and replacing them with blocks. An area of several acres should be dealt with at one time so that there may be a variety of houses and densities within the one general overall density.

The most controversial part of the Dudley Report deals with neighbourhood planning, but there is general agreement that residential areas should be considered as units within a town, and there are certain factors which suggest a size for such units. Because people shop almost daily there should be a reasonably good shopping centre within easy reach. Schools should be properly related to housing. Churches, clubrooms, community centres, etc., should have a place in a residential neighbourhood, and should be thought of when the guiding plan for development is prepared. There should

be an adequate provision of open space whether the residential neighbourhood is in the centre of the town or on the outskirts. The appendix of the Dudley Report suggests that the neighbourhood should have ten thousand people, and that in the centre of towns the highest density should be about one hundred persons per acre. That gives the possibility of providing a complete cross section of dwelling types, roughly 75 per cent. in houses and 25 per cent. in flats, and with variations within each of those two major groups. Our open space system should be revised so as to be closely related to the houses. Small open spaces should be frequently provided so that very young children can use them, and there should be a possibility of open spaces leading from all homes to the schools. Main traffic roads should never cross residential areas, but pass between them: eventually it will be possible to form buffers of open space between most traffic roads and residential areas.

One section of the Report deals with the arrangement of buildings so that every habitable room should at some time of the day have the sun shining into it. Aspects between north-west and north-east should be avoided. Real difficulties arise in the daylighting of flats. In the London area blocks exist, built fairly recently, where rooms on the lower floors have to be lighted artificially most of the day. The closed courtyard is the worst type of plan for the adequate daylighting of flats.

The terrace house is by far the most satisfactory form of dwelling—not the old fashioned type, but the modern one, of which a few examples exist.

When developing a new housing estate trees should be spared as far as possible, but it should be remembered that old trees are sometimes dangerous. As the best agricultural soil tends to be more and more protected from being built upon, the top soil of such sites as are available for housing becomes precious. It should be removed from the house site and put on one side to be afterwards laid on the garden. Footpaths should be five or six feet wide so as to allow two perambulators to pass each other.

EDA

Model Kitchens

The British Electrical Development Association has issued a booklet called **ELECTRIC KITCHEN PLANS FOR LOW-COST POST-WAR HOMES**, intended primarily to assist housing authorities and all others responsible for house design.

The booklet is the outcome of scientific study of the needs of the housewife and the functions and work methods of the kitchen. Experts on the panel from whom the Association sought advice include Frederick Gibberd, Howard Robertson and Louis de Soissons.

The objects of the task were to design all-electric kitchens which were the best-planned and easiest to work that human ingenuity and knowledge could devise, at a cost which lined up with the probable cost of the dwelling.

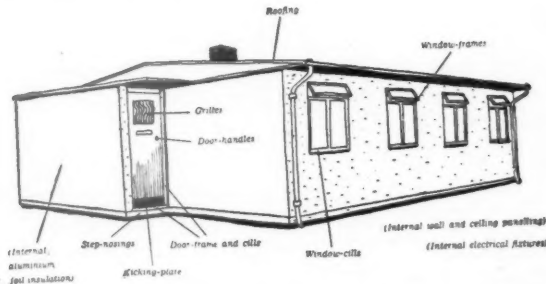
Plans of four types of kitchen are included in the booklet, two for houses and two for flats. Equipment includes cooker, refrigerator, water-heater, space-heater, shadowless (fluorescent) lighting, wash-boiler or washing machine, clothes drier, clock, and plug points for kettle, iron, mixing machine, and other accessories.

Full-scale working models of the kitchens are being built in London, and will soon be open for inspection by local authorities and other official representatives.

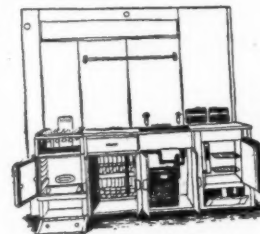
Post-war Priority No. 1 — HOUSING

ALUMINIUM and the Emergency Factory-made House

Sir Stafford Cripps, Minister of Aircraft Production, has formed a committee to carry out research into the application of aluminium and its alloys in factory-made houses. This will help to relieve the housing shortage; it will absorb skilled labour, and keep factories busy. Specialists agree that the aluminium industry could produce materials for 1,000 houses a week.



Here are a few of the more obvious uses for aluminium in the factory-made house. But apart from these, there are scores of interior uses, such as kitchen and bathroom equipment, ventilators, door and window-frames and architraves, skirting and cornice strips, and so forth. The lightness and strength of aluminium alloys together with their remarkable properties, good looks, resistance to corrosion, and colour finishes, suggest new techniques of construction and architectural design.



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	Jan. 1944	Feb. 1944	Mar. 1944	Apr. 1944	May 1944	June 1944	July 1944	Aug. 1944	Sept. 1944	Oct. 1944
Portland cement	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46	Per cent. + 41.46
2-in Unscreened ballast ..	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70	+ 108.70
Fletton bricks (at station) ..	+ 29.73	+ 29.73	+ 29.73	+ 29.73	+ 29.73	+ 32.43	+ 32.43	+ 32.43	+ 34.59	+ 34.59
Stoneware drainpipes (British Standard) (2 tons and over)	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75	+ 43.75
Roofing tiles	+ 45	+ 45	+ 60	+ 60	+ 60	+ 60	+ 60	+ 65	+ 65	+ 65
Steel joists (basic sections ex mills)	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5	+ 47.5
Lime greystone	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53	+ 43.53
Sheet lead	+ 65.22	+ 65.22	+ 65.22	+ 65.22	+ 65.22	+ 73.91	+ 73.91	+ 73.91	+ 73.91	+ 73.91
Iron rainwater goods and soil pipes	+ 32.5	+ 32.5	+ 32.5	+ 32.5	+ 32.5	+ 32.5	+ 32.5	+ 40.5	+ 40.5	+ 40.5
White lead paint	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 46.21	+ 43.18
RATES OF WAGES (Central London Area)										
Labourers	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98	+ 26.98
Craftsmen	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43	+ 21.43

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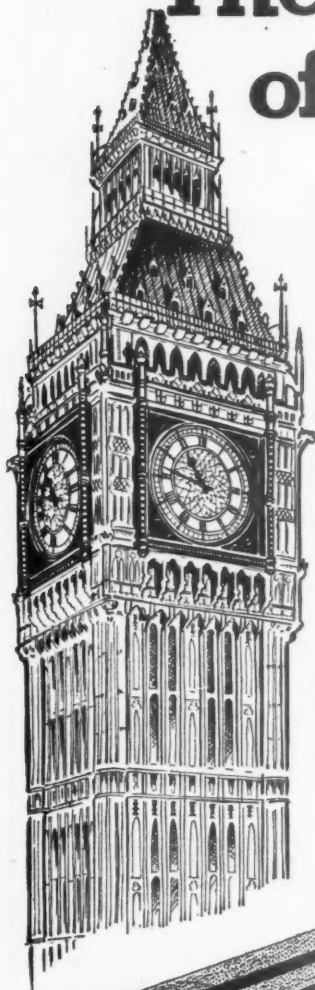
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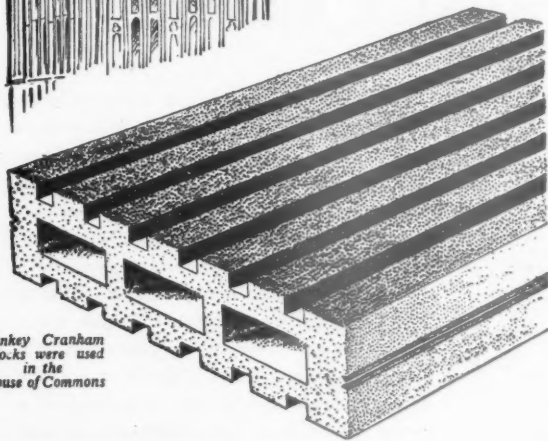
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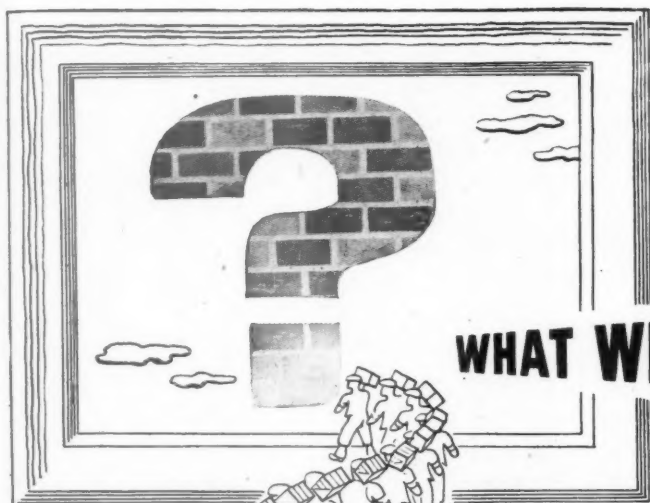
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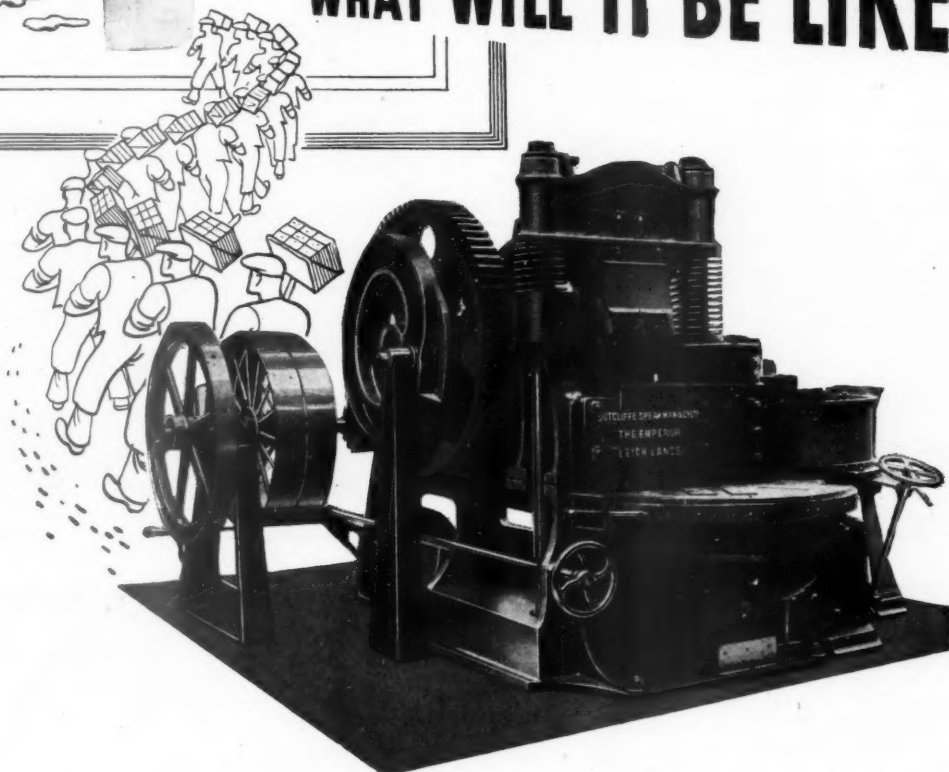
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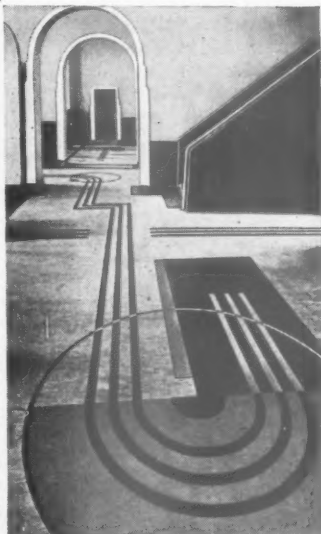
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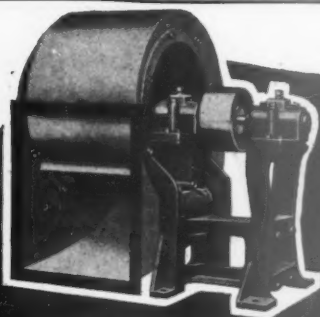
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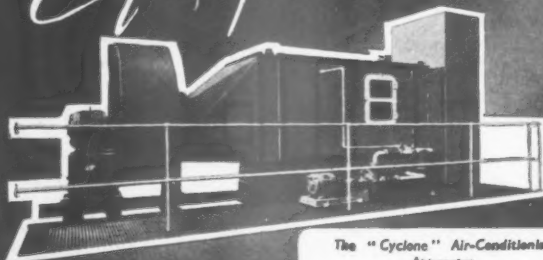
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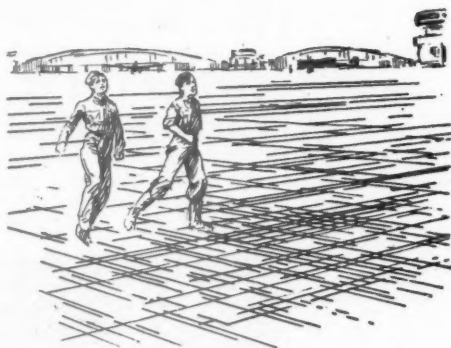
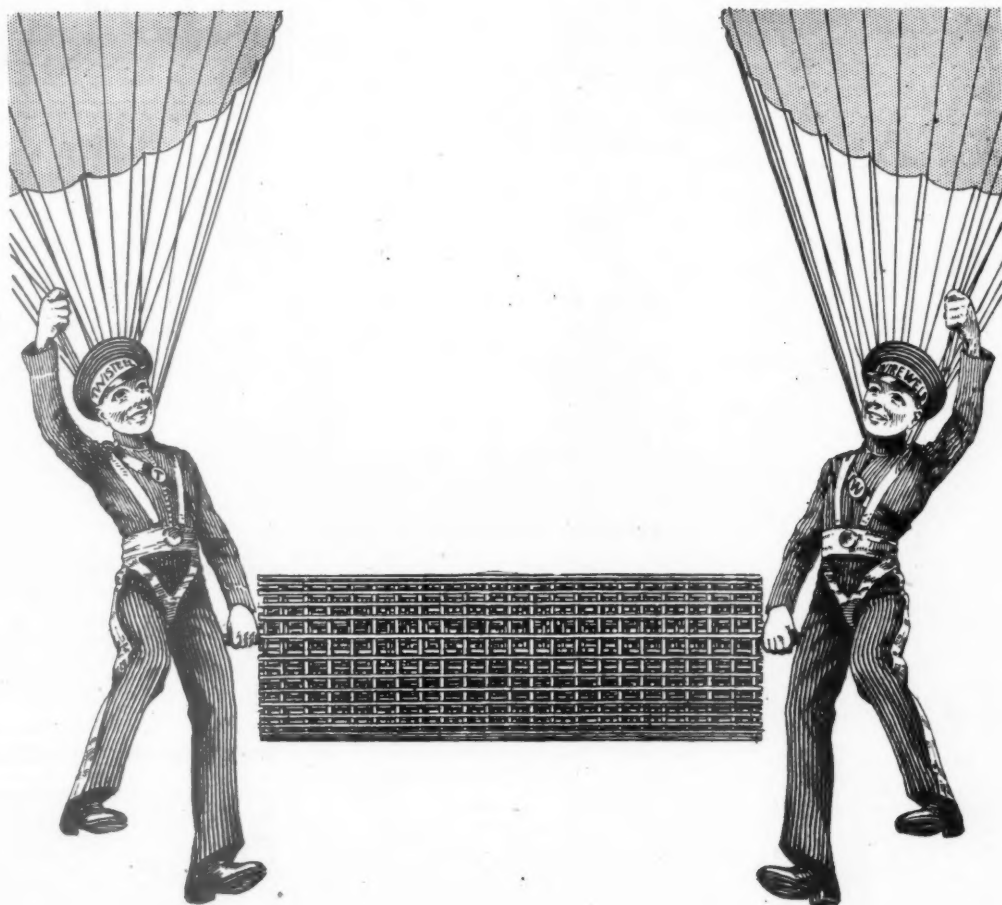
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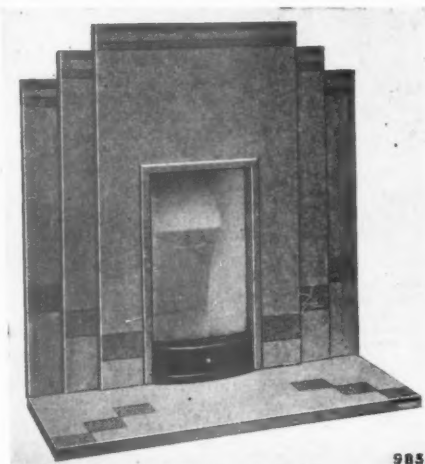
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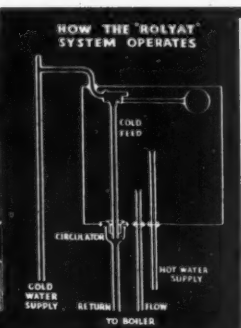
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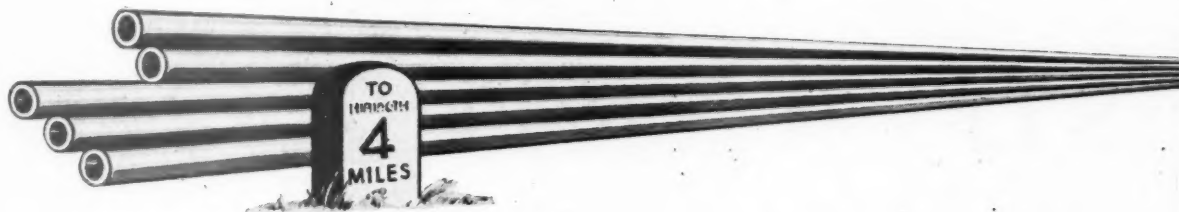
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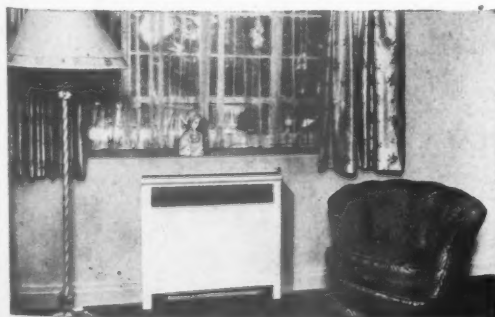
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Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Accrington Brick & Tile Co.....		Evertaut, Ltd.	xiv	Midland Woodworking Co., Ltd.....	
Aero Pipe & Glass Co., Ltd.....	ix	Ewart & Son, Ltd.		Mills Scaffold Co., Ltd.	xlvi
Aidas Electric, Ltd.....		Expandite Products, Ltd.		Nobles & Hoare, Ltd.	xxxviii
Allied Ironfounders, Ltd.....		Fordham Pressings, Ltd.		Northern Aluminium Co., Ltd.	xxxviii
Anderson, C. F., & Son, Ltd.....	iv	Forrest, George, & Son, Ltd.		Oliver, Wm., & Sons, Ltd.	xlvi
Anderson, D., & Son, Ltd.....		Freeman, Joseph, Sons & Co., Ltd.	xxxix	P.I.M. Board Co., Ltd.	
Arkinstall Brothers, Ltd.....		Gaze, W. H., & Sons, Ltd.		Positive Flow Ventilators, Ltd.....	
Ash's Manufacturing Co., Ltd.....		General Cable Manufacturing Co., Ltd.	x	Prodorite, Ltd.	
Austin, F. (Leyton), Ltd.....	xxv	Gray, J. W., & Son, Ltd.....		Range Boilers, Ltd.	
Bailey, Sir W. H., & Co., Ltd.	xlvi	Greenwoods & Airvac Ventilating Co., Ltd.		Redfern's Rubber Works, Ltd.	xxxviii
Bemrose & Sons, Ltd.....		Hall, J. & E., Ltd.	xvii	Restall, Fredk., Ltd.	xxxiv
Bigwood, Joshua, & Son, Ltd.....		Hammond & Champness, Ltd.	xl	Rolyat Tank Co., Ltd.	xlvi
Black & Decker, Ltd.	xi	Hardtmuth, L. & C. (Gt. Britain), Ltd.		Rownson, Drew & Clydesdale, Ltd.	
Blackburn, Thomas, & Sons, Ltd.....		Harvey, G. A., & Co. (London), Ltd.	iii	Rustproof Metal Window Co., Ltd.	
Braithwaite & Co., Engineers, Ltd.	xlvi	Helliwell & Co., Ltd.	xxxvi	Sadd, John, & Sons, Ltd.....	
Briggs, William, & Sons, Ltd.....		Hills, F., & Sons, Ltd.	xix	Sankey, J. H., & Son, Ltd.....	xxxvi
British Electrical Development Assoc.		Hilton, James & Son. (Leigh), Ltd.....	xxxv	Sankey-Sheldon	vii
British Ironfounders' Assoc.	xxxii	Horseley Bridge & Thomas Piggott, Ltd.	iii	Scaffolding (Gt. Britain), Ltd.....	xxx
British Steelwork Assoc.	xxxii	Imperial Chemical Industries, Ltd.....		Sharman & Sons	xlvi
British Trane Co., Ltd.	xlvi	International Correspondence Schools Ltd.	xlvi	Sieglwart Fireproof Floor Co., Ltd.	
Brown, Donald (Brownall), Ltd.....		Invisible Panel Warming Assoc.....	vi	Smith, Henry	xlvi
Burgess Products, Ltd.	ii	Jenkins, Robert, & Co., Ltd.	xlvii	Standard Range & Foundry Co., Ltd.	xxii
Celotex, Ltd.	xxi	Jenson & Nicholson, Ltd.	xxxv	Steel & Gunton, Ltd.	xx
Chloride Electrical Storage Co., Ltd.....	xlvi	Johnston Bros. (Contractors), Ltd.	xlvi	Stott, James & Co. (Engineers), Ltd.	
Clarke, T., & Co., Ltd.	ii	Kautex Plastics, Ltd.	xxxviii	Sutcliffe, Spearman & Co., Ltd.....	xxxvii
Clarke & Vigilant Sprinklers, Ltd.	xlvi	Ketton Portland Cement Co., Ltd.	xlvi	Telephone Rentals, Ltd.	xiv
Colt, W. H. (London), Ltd.....		Lacrinoid Products, Ltd.	xii	Tentest Fibre Board Co., Ltd.	xv
Constructors, Ltd.	xxxv	Lighting Service Bureau		Tretol, Ltd.	xxvii
Copper Development Association		Loft Ladders, Ltd.	ii	Trussed Concrete Steel Co., Ltd.....	xxvi
Crittall Manufacturing Co., Ltd.	xvi	Magnet Joinery	viii	Tudor Accumulator Co., Ltd.	ii
Durasteel Roofs, Ltd.	xxxix	Main, R. & A., Ltd.	xxiii	Twistell Reinforcement, Ltd.	xii
Eagle Range & Grate Co.....		Mallinson, Wm., & Sons, Ltd.....		Uni-Seco Structures, Ltd.	xlvi
Easicle-Enamel (1938), Ltd.....	xxiv	Marley Tile Co., Ltd.	xviii	United Steel Companies, Ltd.....	v
Electrolux, Ltd.	xiii	Matthews & Yates, Ltd.	xl	Universal Asbestos Mfrg. Co., Ltd.	xxiv
Ellison, George, Ltd.	xlvi	McKechnie Bros., Ltd.	xlvi	Vulcan Products, Ltd.	
English Joinery Manufacturers' Assoc.		Midland Electric Manufacturing Co., Ltd.	xxviii	Waxed-Papers, Ltd.	xlvi
Esavian, Ltd.	xlvi			Warwick Rim & Sectioning Co., Ltd.	xx
Etchells, Congdon & Muir, Ltd.....	x			Wood Wool Building Slab Mfrs. Assoc.	
				Zinc Alloy Rust-Proofing Co., Ltd.....	xlvi

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PAGE

xlvi
cxviii
cxxxiii
xlii

cxviii
cxxxiv
xlv

xxxvi
vii
xxx
xlii

xliv
xxii
xx

xxxvii
xiv
xv
xxvii
xxvi
ii
xii
xliv
v
xxiv

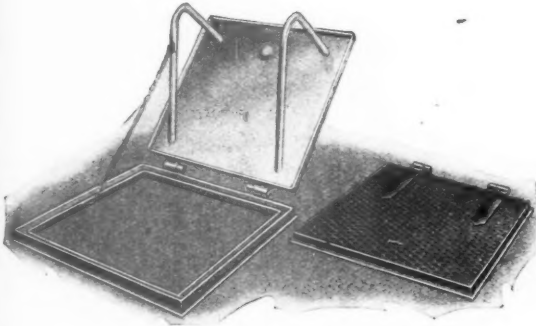
xlii
xx

xlvi

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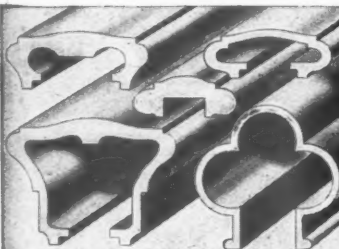
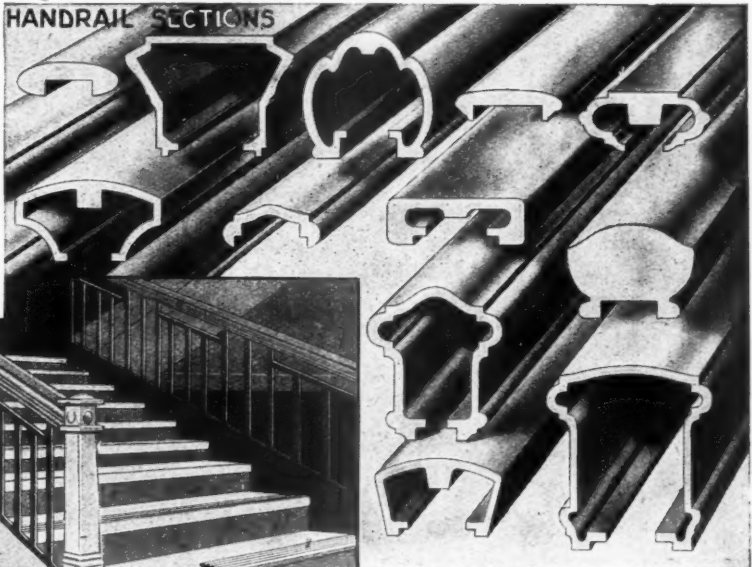
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