# THE ARCHITCHER TS'



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

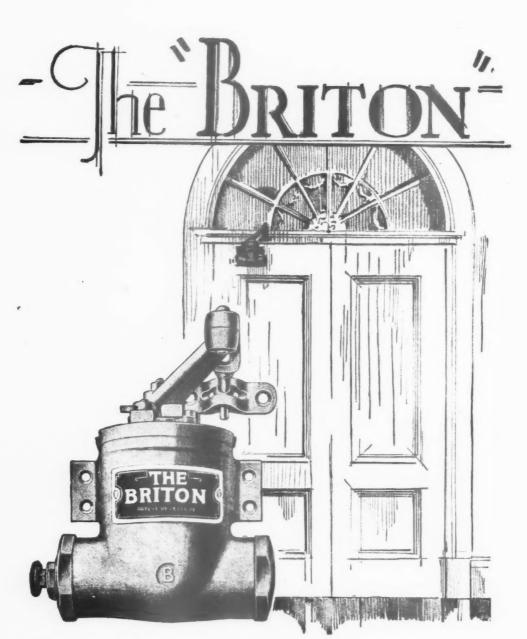
Architectural Appointments Wanted and Vacant

No. 2537] [Vol. 98] THE ARCHITECTURAL PRESS, War Address: Forty-five The Avenue, Cheam, Surrey. Phone: Vigilant 0087-9

Price 9d.
Registered as a Newspaper

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 ABT APRR	Architectural Association. 34/6, Bedford Square, W.C.1. Museum 0974 Association of Building Technicians. 5, Ashley Place, S.W.1. Victoria 0447-8 Association for Planning and Regional Reconstruction. 32, Gordon
ARCUK ASB	Architectural Science Board of the Royal Institute of British Architects,
BC BCGA; BEDA BIAE BINC BOE BOT BRS BSA BSI CEMA	Building Centre. 23, Maddox Street, W.1.  British Commercial Gas Assn. 1, Grosvenor Place, S.W.1.  British Electrical Development Association. 2, Savoy Hill, W.C.2. Temple Bar 9434 British Institute of Adult Education. 29, Tavistock Square, W.C.1. Euston 5385 Building Industries National Council. 110, Bickenhall Mansions, W.1.  Board of Education. Belgrave Square, S.W.1.  Building Research Station. Bucknalls Lane, Watford.  British Steelwork Association. 11, Tothill Street, S.W.1.  British Standards Institution. 28, Victoria Street, S.W.1.  Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1  Sloane 4522  Whitehall 5140  Whitehall 5140  Whitehall 5073  British Standards Institution. 28, Victoria Street, S.W.1.  Abbey 3333  Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1  Sloane 0421
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.
CSI DIA	Chartered Surveyors' Institution. 12, Great George Street, S.W.1. Whitehall 5322 Design and Industries Association. Central Institute of Art and Design, National
DOT EJMA	Department of Overseas Trade. Dolphin Square, S.W.1. Whitehall 7618 English Joinery Manufacturers Association (Incorporated), Secvelle House
FMB	40, Piccadilly, W.1. Regent 4448. Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1.
GG HC IAAS	Georgian Group. 55, Great Ormond Street, W.C.1. Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.
ICE IEE	Institution of Civil Engineers. Great George Street, S.W.1. Sloane 3158 Whitehall 4577. Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2.
IHVE	Institution of Heating and Ventilating Engineers. 21, Tothill Street, S.W. 1.
IRA ISE ISPH	Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172. Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29. Committee for the Industrial and Scientific Provision of Housing. 3, Albemarke
LIDC	Street, W.1. Regent 4782-3. Lead Industries Development Council. Rex House, King William Street, E.C.4.  Managing House 2855
LMBA MARS MOH MOI MOLNS MOS	Mansion House 2855  London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3767.  Modern Architectural Research. 8, Clarges Street, W.1. Grosvenor 2652.  Ministry of Health. Whitehall, S.W.1. Whitehall 4300.  Ministry of Labour and National Service. St. James' Square, S.W.1. Whitehall 6200.  Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.2.
MOT MOTCP MOW NBR	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Abbey 7711. Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611 National Buildings Record. 66, Portland Place, W.1. Welbeck 1881
NFBTE	All Souls' College, Oxford. Oxford 48809. National Federation of Building Trades Employers. 82, New Cavendish Street,
NFBTO	W.1. Langham 4041 National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby
NT	Street, W.C.1. Holborn 2770 National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham
PEP PWB	Palace Gardens, S.W.1. Sloane 5808 Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245. Post War Building, Directorate of. Ministry of Works, Lambeth Bridge House S.E.1. Reliance 7611.
RC RCA RS RSA SPAB	Reconstruction Committee RIBA. 66, Portland Place, W.I. Reinforced Concrete Association. 91, Petty France, S.W.1. Royal Society. Burlington House, Piccadilly, W.1. Royal Society of Arts. 6, John Adam Street, W.C.2. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646.
TCPA TDA TPI	Town and Country Planning Association. 13, Suffolk Street, S.W.1. Whitehall 2881. Timber Development Association. 75, Cannon Street, E.C.4. City 6147. Town Planning Institute. 11, Arundel Street, Strand, W.C.2. Temple Bar 4985.



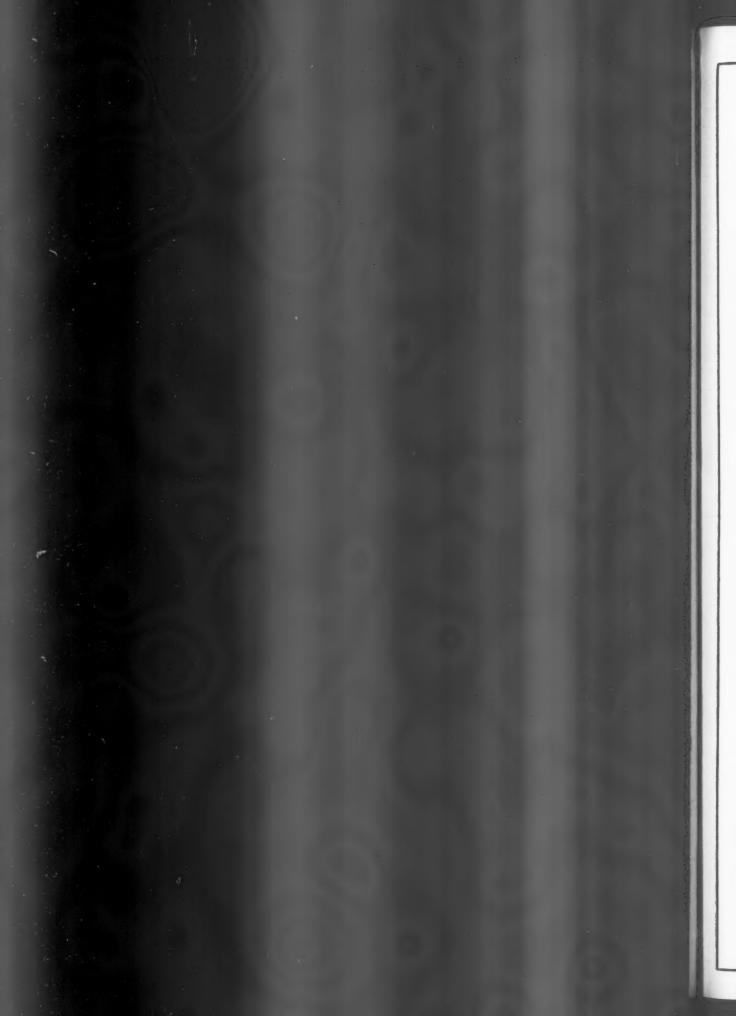
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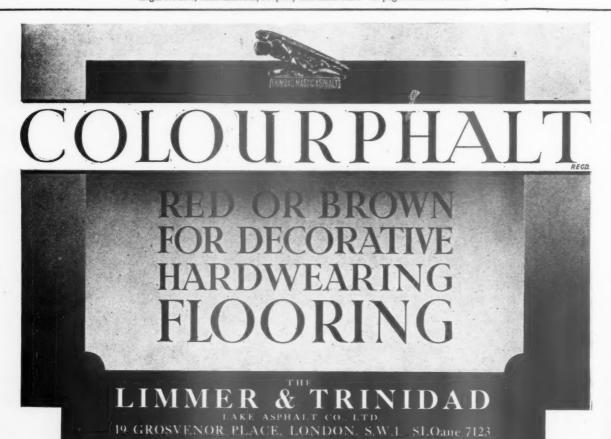
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## Alphabetical Index to Advertisers

	PAGE		PAGE						
Adam Dalam (NY and Tad		Francisco I ad	XV	Newman, Wm., & Sons Ltd	PAGE				
Adams, Robert (Victor) Ltd	XXX	Esavian Ltd.	XV		ii				
Aga Heat Ltd		Ewart & Son, Ltd.		Newsum, H., Sons & Co., Ltd	V				
Anderson, C. F., & Son, Ltd	XIV	Expanded Metal Co., Ltd	xxxi	Nobles & Hoare Ltd	XXX				
Anderson, D., & Son, Ltd		Expandite Products Ltd	XX	Parsons, C. H., Ltd.	viii				
Architects' Benevolent Society	XXX	Franki Compressed Pile Co., Ltd		Pilkington Bros., Ltd	xxvii				
Ardor Insulation Co., Ltd		Frazzi Ltd	xvi	Plastilume Products Ltd					
Ashley Accessories Ltd		Good Housekeeping Institute		Positive Flow Ventilators Ltd					
Associated Metal Works		Gray, J. W., & Son, Ltd		Prodorite Ltd.					
Bakelite Ltd		Greenwood's & Airvac Ventilating Co.,		Pyrene Company Ltd., The	ix				
Benjamin Electric Ltd	XIII	Ltd	xxxiv	Reinforced Concrete Association, The					
Boulton & Paul, Ltd	-	Gyproc Products Ltd		Ronuk Ltd	xxix				
Bowran, Robert, & Co., Ltd	xi	Harvey, G. A., & Co. (London), Ltd.		Ross, S. Grahame, Ltd	iii				
Braby, Fredk., & Co., Ltd	-	Henleys Telegraph Works Co., Ltd	XXV	Ruberoid Co., Ltd					
Braithwaite & Co., Engineers Ltd		Hickman (1928) Ltd	vi	Rubery Owen & Co., Ltd	xxvi				
Bratt Colbran Ltd	xxi	Hopton-Wood Stone Firms Ltd		Rustproof Metal Window Co., Ltd	xvi				
Briggs, Wm., & Sons, Ltd	xix	Horseley Bridge & Thomas Piggott		Sanders, Wm., & Co. (Wednesbury),					
British Reinforced Concrete Engineer-	24424	Ltd		Ltd	xxviii				
ing Co., Ltd.		Ilford Ltd.	XX	Sankey, J. H., & Son, Ltd	XXIX				
British Steelwork Association, The		International Correspondence Schools	2634	Sankey, Joseph & Sons, Ltd	70.00				
Broadcast Relay Service, Ltd	xxiv	Ltd	xxxiv	Sankey-Sheldon	xvii				
Brown, Donald (Brownall) Ltd	xxxii	Interoven Stove Co. Ltd	XXX	Scaffolding (Great Britain), Ltd	AVII				
Brush Electrical Engineering Co., Ltd.	AAAII	Jenkins, Robert, & Co. Ltd.	xxxi	Sharman, R. W.	xxxii				
Bull Motors (E. R. & F. Turner) Ltd.		Jicwood Ltd.	2221	Sharp Bros. & Knight Ltd	XXXII				
Cable & Wireless Ltd		Kerner-Greenwood & Co., Ltd		Silicate Paint Co., The	AAAI				
				Standard Range & Foundry Co., Ltd.					
Callender's Cable & Construction Co.,		Laing, John, & Son, Ltd	XXXV1		vii				
Ltd.		Leaderflush Ltd.	X	Stephens, Henry C., Ltd	XXX				
Caston & Co., Ltd	xxii	Lillington, George, & Co., Ltd	xviii	Stuart's Granolithic Co., Ltd					
Cellon Ltd.		Limmer & Trinidad Lake Asphalte		Taylor, Woodrow Construction, Ltd.	XXX				
Celotex Ltd		Co., Ltd	iv	Tretol Ltd.	XXXIII				
Clarke & Vigilant Sprinklers Ltd	XXXII	Lloyd Boards Ltd	XXXIII	Troughton & Young Ltd					
Colthurst Symons & Co., Ltd		M.K. Electric Ltd.	x	Trussed Concrete Steel Co., Ltd	XXIX				
Constructors Ltd.		McCall & Co. (Sheffield), Ltd		Tudor Accumulator Co., Ltd					
Copperad Ltd		McCarthy, M., & Sons Ltd	xxxii	Turners Asbestos Cement Co., Ltd	xii				
Davidson, C. & Sons, Ltd		McKechnie Bros. Ltd		Twisteel Reinforcement Ltd					
Dawnays Ltd		Matthews & Yates, Ltd		Wadsworth, William, & Sons, Ltd					
Durasteel Roofs Ltd	vi	Metropolitan Plywood Company		Walker, Crosweller & Co., Ltd					
Elgood, E. J., Ltd		Metropolitan-Vickers Electrical Co.		Wardle Engineering Co., Ltd	xxxiii				
Ellison, George, Ltd	xxxii	Ltd	xxxii	Wood Wool Building Slab Manu-					
English Joinery Manufacturers' Assoc.		Mills Scaffold Co., Ltd	XXXV	facturers Association	xviii				
En-Tout-Cas Ltd	xxxiii	Newalls Insulation Co., Ltd		Zinc Alloy Rust-Proofing Co., Ltd					
For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational									

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



## FAMOUS STAIRS OF OLD ENGLAND No. 3.



cvi

vii xii

xix xiii

xiii

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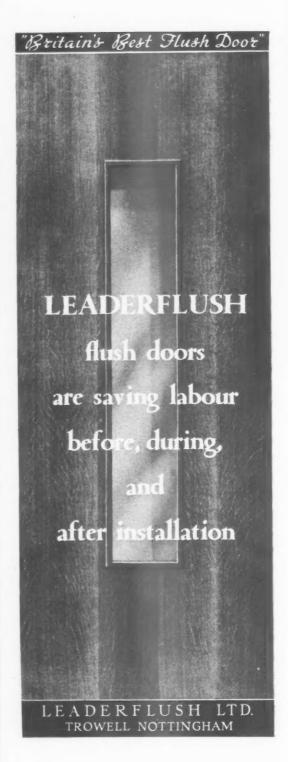


'guns' have joined up you're free to frolic. Even the oldest inhabitant has a wartime job that keeps him busy. So, who has time for rabbits, anyway? Certainly not we at M.K. With our entire resources employed in the war effort we have had to neglect our many friends in the trade. But when we've settled with Hitler we'll be back on the job. Yes, little rabbits will run again and the reputation of M.K. for fine quality switches, switch plugs and electrical accessories will be fully sustained in our standard products after the war.



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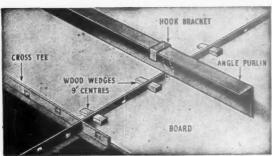
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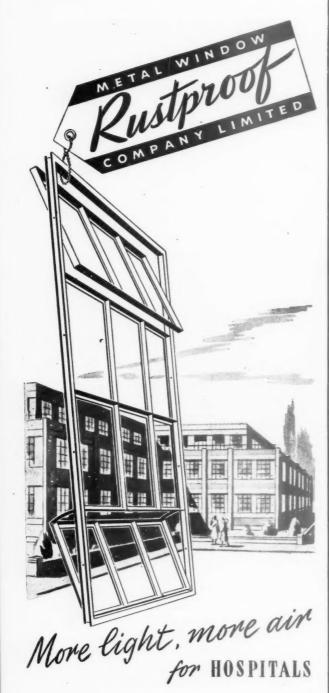
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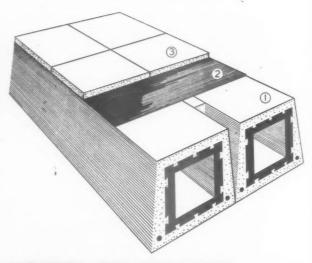
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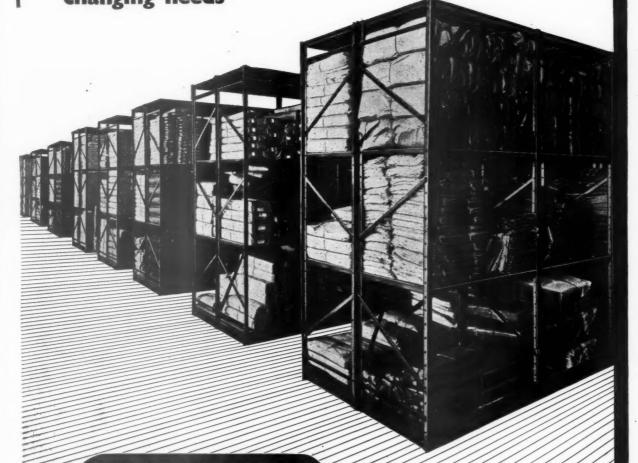
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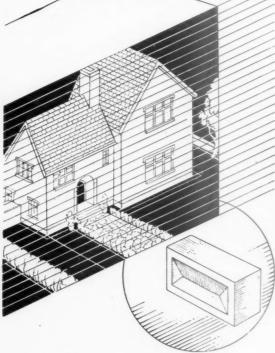
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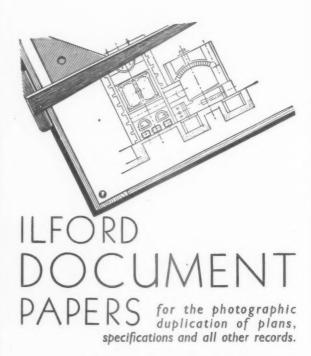
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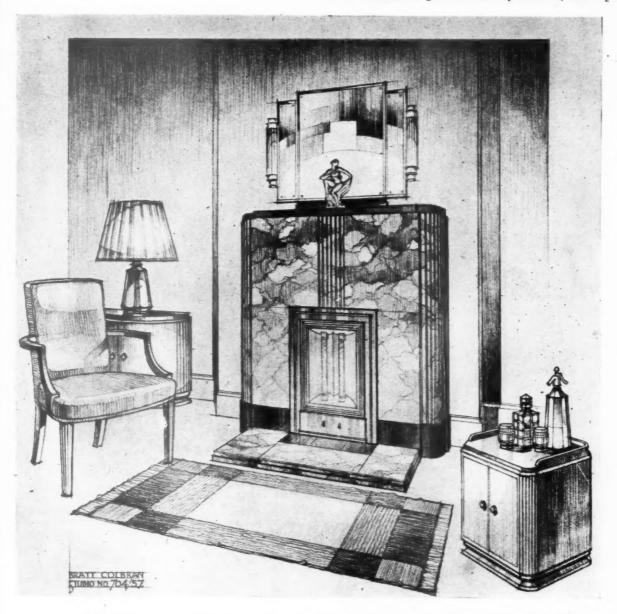
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# DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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.

BANGOR. TCPA Conference. At Powys Hall. 11 a.m. to 5 p.m. Chairman: The Mayor of Bangor, Mrs. Elsie Chamberlain. B. Price Davies on Planning a Town (with slides). Alderman Edgar Chappell on Welsh Planning Problems. Conference fee 3s. (Sponsor, TCPA.)

BOURNEMOUTH. TCPA Conference. Oct. 2

BRISTOL. Rebuilding Britain Exhibition. (Sponsor, RIBA.) SEPT. 15 to Oct. 6

CARDIFF. Rebuilding Britain Exhibition. (Sponsor, RIBA.) DEC. 20 to Jan. 17

CARLISLE. When We Build Again Exhibition. At Messrs. Binns Ltd. (Sponsor, TCPA.)

EXETER. Rebuilding Britain Exhibition. Oct. 18 to Nov. 8

GILLINGHAM. Homes to Live In Exhibition. At County Library. (Sponsor, BIAE.) SEPT. 9-11

HULL. When We Build Again Exhibition.

At Mortimer Gallery. (Sponsor, TCPA.)

SEPT. 9-11

Civic Diagnosis of the City of Hull: Exhibition.
At Mortimer Gallery. SEPT. 9-11

HYDE. Englishman Builds Exhibition. At Bayley Park, Hyde Park. (Sponsor, BIAE.)

LONDON. Recording Britain Exhibiton. At National Gallery, Trafalgar Square. Third and final exhibition of selected drawings under the Scheme for a Record of Changing Britain. (Sponsor, MOLNS and Pilgrim Trust).

Homes to Live in Exhibition. At Geffrye Museum, Kingsland Road, E.2. (Sponsor, BIAE.) SEPT. 18 to Oct. 2

County of London Plan Exhibition. At RA, Burlington House, Piccadilly, W. Nov. 3 to Dec. 1

LONGSDON. Homes to Live in Exhibition.
At the Women's Institute. (Sponsor, BIAE.)

SEPT. 14 to 21

MANCHESTER. Living in Cities Exhibition.
At University School of Architecture.
(Sponsor, BIAE.) SEPT. 9 to 14

MIDDLESBROUGH. When We Build Sept. 18-25

Conference on Planning for Living. At Grange Road Hall, Middlesbrough. Alfred Edwards,

M.P. for Middlesbrough East, is taking an active part in the organisation of the conference. The Mayor of Middlesbrough has been invited to attend and welcome the delegates. F. J. Osborn, Hon. Secretary of TCPA, the principal speaker at the morning session, will outline a programme for a National Planning Policy. Mrs. Jean Mann, former Chief Magistrate of Glasgow and Max Lock, Director of the Hull Regional Survey, will deal with aspects of the problems involved in replanning industrial cities. TCPA, in consultation with other bodies, has worked out a set of key principles in its National Planning Basis, as a platform for action when the time comes, and for preparation beforehand. The purpose of the Middlesbrough conference is to crystallise opinion on a policy having these broad objects, to ensure its application, and to discuss what can be done to get it better understood and accepted by the public. The exhibition When We Build Again is being shown at the Hall from September 18 till September 25. It includes a large scale model of a new town, prepared by Cadbury Bros., in conjunction with TCPA. **SEPT. 21** 

NOTTINGHAM. Englishman Builds Exhibition. (Sponsor, BIAE.)

SEPT. 9 to 18

SHEFFIELD. Rebuilding Britain Exhibition. (Sponsor, RIBA.) APRIL 4-25, 1944

SOUTHAMPTON. Rebuilding Britain Exhibition. (Sponsor, RIBA.) JAN. 28 to Feb. 18, 1944

STOKE-ON-TRENT. When We Build Again Oct. 18-23
TCPA Conference. Oct. 23

SWANSEA. Rebuilding Britain Exhibition. (Sponsor, RIBA.) Nov. 20 to Dec. 11

WARRINGTON. Living in Cities Exhibition. At Museum and Art Gallery, Bold Street. (Sponsor, BIAE.) SEP1. 25 to Oct. 9

WELWYN GARDEN CITY. TCPA
Conference. 11 a.m. to 5 p.m. Mrs.
Nicholl, Chairman of the Urban District
Council, will welcome the delegates. Sir
Theodore Chambers, Chairman of Welwyn
Garden City, will also be present. The
party will be conducted round the city.
Speakers: F. J. Osborn, W. F. Eccles and
R. L. Rice. Subjects will include the general
aspects of planning and the planning and
development of Welwyn. (Sponsor, TCPA.)

SEPT. 18

## NEWS

THURSDAY, SEPTEMBER 9, 1943 No. 2537. Vol. 98

News					173
Chairma	n of C	IAD			174
This Wee	ek's Le	ading A	rticle		175
Astragal'	s Notes	and T	opics		176
Letters					177
Recordin	ng Brita	ain Exl	hibition		178
Physical	Planni	ng: 6			179
Saarin	ed by	Eliel associ	and l	Eero with	100
			orge Wr	0	183
House Design			am, M Gropiu		187
Informat	tion Co	entre			189
Prices				X	xviii

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL'S starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

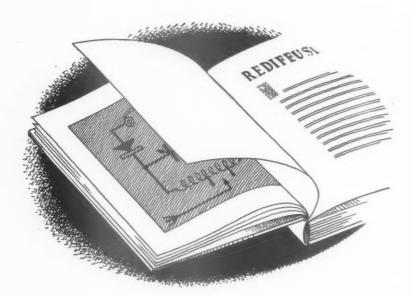
means spare a second for this it will probably be worth it.

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

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

A total 54,732 COUNTY the OFvisited LONDON PLAN Exhibition at the County Hall. The exhibition closed on August 28. It will be re-opened at the Royal Academy, Burlington House, Piccadilly, on November 3, for a period of one month.

Under the National Book Re-**OVER** coverv Drives 42. **BOOKS** *MILLION* have been collected. 2 0 70 This means that the target figure of 50,000,000 volumes by the end of the year is likely to be substantially exceeded, particularly as the counties of Lancashire and Yorkshire have still to make their contributions. The Lanca-shire drive begins on September 18 with a target of 15,000,000 volumes. To link up with this drive the Waste Paper Recovery Association has offered to donate £1,000 in cash prizes to the local authorities which collect the largest weight of waste paper and books per head of population during the month of September. The competition is divided into four sections—one for county boroughs, one for municipal boroughs, a third for urban districts and a fourth for rural districts, prizes totalling £250 to be given in each section.



# Opening of Chapter iii

25 years ago we touched with reverent fingers those curious boxes bristling with valves, coils and crystals, studded with dials and switches, linked up with dry cells and wet cells. Twice daily they would produce (if we were lucky) the magical voice of Savoy Hill in the headphones, "hello, everybody....this is 2 L.O...."

That was wireless in the George Stevenson stage: "brutal but it worked." Then science began to simplify and streamline. Valves went out of sight; coils disappeared from view; batteries no longer cumbered the carpet; headphones became a museum piece. Tuning reduced itself to the niceties of three knobs....one

knob. Reception had civilised itself.

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There was still a next step. The same programme still didn't necessarily sound the same way in two different towns—or even in two neighbouring houses.. It was still at the mercy of local conditions and individual apparatus. It might be pretty good or terribly bad.

Wired broadcasting opens Chapter iii. Rediffusion replaces aerial and receiver by direct line reception and a switch in the wall—just like the light switch. News and entertainment of unvarying quality can be laid on at will to any subscribing home in the area—just like the telephone service. Good reception is standardised as well as good transmission.



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## from AN ARCHITECT'S Commonplace Book

LONDON CLUB.—(continued). [From Buried Alive, by Arnold Bennett.] . . . when they had divested themselves sufficiently he led Priam forwards into another great chamber evidently meant to recall the baths of Caracalla. In gigantic basins chiselled out of solid granite, Priam scrubbed his fingernails with a nail-brush larger than he had previously encountered, even in nightmares, and an attendant brushed his coat with a utensil that resembled a weapon of offence lately the property of Anak. . . . They went up an overwhelming staircase of sombre marble, and through other apartments to the dining-room, which would have made an excellent riding-school. Here one had six of the gigantic windows in a row, each with curtains that fell in huge folds from the unseen into the seen. The ceiling probably existed. On every wall were gigantic paintings in thick ornate frames, and between the windows stood heroic busts of marble set upon columns of basalt. . . All was silent and grave; the floors were everywhere covered with heavy carpets which hushed all echoes. At a casual glance the place seemed unoccupied, but on more careful inspection you saw midgets creeping about, or seated in easy-chairs that had obviously been made to hold two of them; these midgets were the members of the club, dwarfed into dolls by its tremendous dimensions. A strange and sinister race! They could at best descry each other but indistinctly in the universal pervading gloom. . . . The whole establishment was buried in the past, dreaming of its Titanic yore, when there were doubtless giants who could fill those fauteuils and stick their feet on those mantelpieces.

Blaise Hamlet, near Bristol, DESIGNED BY JOHN NASH has been taken over by NT. In June last Mr. Donald Hughes, painter, poet, traveller and actor, of Bristol, acquired Blaise Hamlet at public auction for £2,325, hoping that Bristol Corporation would take it over to preserve the amenities of the Blaise Castle and Henbury estates. The corporation were unwilling to accept the charge, which has now been undertaken by NT. The hamlet consists of ten gabled cottages built to the memory of the Harford family. They were intended to be used as almshouses.

MOW has just made an Order to control from this month the INSTALLATION OF DISCHARGE LAMP lighting. The Order relates to the installation of new systems of gas or vapour discharge lighting of more than 10 watts, including low pressure mercury vapour fluorescent tubes, high pressure mercury vapour discharge lamps, high pressure mercury vapour fluorescent lamps, sodium discharge or similar lamps. The order provides that as from September 1 any private person or firm who wishes to instal discharge lamp lighting of this type must obtain a licence from MOW. Lamps or other apparatus required for replacement only will not be affected by the order. Application for licences under the order should be made to the Regional Licensing Officers of MOW.

Funds needed to PROVIDE PITHEAD BATHS for the whole of the coal mining industry have been discussed by Major G. Lloyd George, Minister of Fuel and Power, with the Mineworkers' Federation Executive Committee. The Welfare Fund Act of 1939 increased the welfare levy, collected on the output of coal, from \( \frac{1}{2} \)d. to \( \frac{1}{2} \)d. per ton, for the express purpose of expediting the provision of pithead baths. The period of the levy was limited to five years which will expire, unless it is extended by fresh legislation, this year. Meantime, the building of pithead baths has had to be almost entirely suspended owing to the prior

calls on building materials and labour for immediate war purposes, so that no further funds for building pithead baths are required, or could indeed be spent for some time to come. The Mineworkers' Federation nevertheless urge strongly upon the Minister that the output levy should be maintained at its present level of 1d. per ton in order that the miners may feel assured beyond doubt that the money required to complete the provision of pithead baths will be available when it is required. The Minister, in reply, said that there can be no question whatever that the intentions of Parliament in passing the Act of 1939 must be implemented and that the provision of pithead baths must be completed as speedily after the war as possible, and that he will consider further as to the best way of assuring the miners that all necessary funds for the purpose shall be available when they are required.

Last Thursday the Princess Royal laid the foundation stone of a MEMORIAL COTTAGES AT PAPWORTH Papworth Village Settlement, Cambridgeshire, represents the most comprehensive scheme in existence for the treatment and cure of tuberculous men and women. are to be built through the generosity of admirers of the late Mrs. Robert E. Strawbridge, of Philadelphia, whose life was spent largely in furthering Anglo-American amity. When she died, her friends, desiring to honour her memory in some permanent way, sub-scribed for the erection of the cottages. The money was sent to the Queen, who personally handed it over to Papworth representatives. A photograph of the Queen being shown the plans of the cottages by the architect, Mr. Amyas D. Connell, was published in the JOURNAL for April 1 last.

BSI has issued a notice concerning the use of the BSI MARK ON SALT-GLAZED PIPES. The notice says: An arrangement has recently been made between the BSI and manufacturers of salt-glazed pipes whereby those manufacturers who hold licences from the Institution to use the BSI mark on their pipes will attach a certificate to all invoices relating to pipes which are ordered as BS pipes or as BS tested pipes. These certificates will serve the purpose

of reminding the purchaser that the pipes covered by the invoice have been tested and found to comply with the requirements of the appropriate BS specification, and they will give him assurance that the quality of the pipes supplied has been controlled under conditions approved by the Mark Committee of the BSI.

\*

All members of the AA are invited to SEND WARTIME SKETCHES and photographs for exhibition in October. The exhibition, to be held at the AA from October 12 to November 5, will be of members' sketches (including a section for photographs) completed since the outbreak of war. All members are invited to send war-time sketches and photographs. These should be framed, or mounted, labelled, and delivered to 36, Bedford Square, not later than October 5. Members are requested to note that on account of the limited accommodation not more than two sketches will be exhibited from those submitted by each member.

At Thetford, Norfolk, the LARGEST FOREST IN IN BRITAIN has been made by the Forestry Commission. The Forest, already 52,000 acres in extent, will eventually extend to about 80,000 acres.

Speaking at Midhurst, Mr. Ernest Brown, Minister of Health, said it will be IMPOSSIBLE TO PROVIDE SUFFICIENT HOUSES - immediately after the war to meet the needs accumulated during the years, a lready four, when there has been no building. He said: It is inevitable that for some considerable time there will be a shortage of labour and materials which will hamper progress. But, while we must guard against over-optimism and under-estimation, of our



[From a painting by Anthony Devas.

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## Chairman of CIAD

It was fitting that the Central Institute of Art and Design should hold its annual meeting last Thursday at the RIBA. Both Institutes work in close co-operation; the RIBA is represented on the Council and many of the standing committees of the Central Institute. Formed shortly after the outbreak of war, CIAD has grown rapidly and now includes forty-three federated societies of professional artists, thirty-seven other societies and over three thousand individual subscribing members. To-day it is accepted by the Government and the public as the central body representing the graphic and the plastic arts. Mr. Charles Tennyson, C.M.G., who succeeded the first chairman, Sir Kenneth Clark, when he resigned to undertake important Government work, became associated with the development of the arts movement shortly after the last war. At that time, as Deputy Director of the Federation of British Industries, he started an Industrial Art Committee repre-The Board of Trade sentative of various industries.

appointed him a member of the Council for Art and Industry when this was formed in 1936 and when the National Register of Industrial Art Designers was started by the Board of Trade he was, on the recommendation of the Council, appointed chairman. Born in 1879, he was educated at Eton (King's Scholar) and King's College, Cambridge, where he took first class honours in 1902. Scholar in International Law, Cambridge; Arden Scholar, Gray's Inn 1904, he was called to the Bar in 1905, was Junior Equity Counsel to the Office of Works, 1909-1911, Assistant Legal Adviser to the Colonial Office 1911-19, one of the British delegates at the New Hebrides Conference in 1914, and is now Secretary to the Dunlop Rubber Company. He was awarded the C.M.G. in 1915. His publications include Cambridge from Within and the Shorter Poems of Frederick Tennyson. He edited The Devil and the Lady and Unpublished Early Poems, two books containing the work of his grandfather, Alfred, Lord Tennyson.

task, there is no need for pessimism, for we are in a far stronger position, both with respect to our housing resources and our experience, than in 1919. I see no reason why, when full supplies of materials are again available, and the building industry is restored to its full strength and skill, the combined operations of local authorities and private enterprise should not achieve further records, to the credit of both and the benefit of the nation.

The Abbey Road and the National BUILDING S'OCIETIES ARE TO AMALGAMATE.

A proposal to this effect has been approved by the directors, and will be submitted to shareholders of the two societies for ratification on September 17. The new organization

will be known as the Abbey National Building Society. It will have assets of £80,000,000, shareholders numbering 390,000 and nearly 140,000 borrowing members. The managing directors state that existing members may be assured that their interests as a whole will not be affected otherwise than beneficially by the union. The directors state: The great financial resources of the united society, wisely handled in the light of the combined experience and

technical knowledge at its disposal, cannot fail to make a far-reaching contribution to the efficiency and speed with which the housing problem can be met. Viscount Hailsham and Sir William McLintock are proposed trustees for the united society. It is proposed that Sir Harold Bellman (Abbey Road) be the chairman of the board, with Mr. Stanley C. Ramsey (National) as deputy chairman. Sir Harold Bellman and Mr. R. Bruce Wycherley (National) are designated joint managing directors.

A firm of building contractors have bought WENTWORTH FOR POST-WAR DEVELOPMENT.

Sir Lindsay Parkinson and Co., building contractors, have bought the entire share capital of Wentworth Estates, Sunningdale, Berkshire. The property, comprising nearly 700 acres of building land, has been bought for after-war development, which will be on the lines of the building which took place on the estate before the war. Wentworth golf courses, which occupy another 600 acres, with the club house and other amenities, will not be disturbed. The Daily Telegraph understands that it is intended to develop part of the land as a model village, with its own shopping centre and a number of modern features.

\*

The Council for the Preservation of Rural Wales is to be asked to try to stop an extensive scheme of TREE FELLING IN A BEAUTY SPOT in North Wales. The tree-felling scheme, already begun, is in the Abergwynant Glen beauty spot situated between Dolgelley and Arthog. According to The Times a representative of the firm carrying out the work stated that a considerable acreage of woodland in this area was to be cleared and a great deal of the timber was to be supplied to the Government and for Government contracts. Abergwynant covers an area of several miles in North Wales. The woodlands are situated on both sides of the main road from Dolgelley to Arthog and several paths through the woods lead up to the Cader Idris range of mountains.

MOW is investigating complaints that parts of HADRIAN'S WALL ARE FALLING through subsidence. Complaints were made, according to the Daily Telegraph, that the subsidence is caused by stone quarrying. MOW officials visited the scene—a section of the wall which runs along the high ridge above Cawfields Quarry, near Haltwhistle, Northumberland—and made a report. Action followed. The Ministry has been negotiating with the quarrying interests for some time, and it is thought the matter will be satisfactorily settled very soon. Mr. H. L. Honeyman, secretary of the Newcastle Society of Antiquaries, said several well-known people have seen recent damage and taken up the matter. The Society for the Protection of Ancient Monuments has also been approached. Mr. J. Swabrick, architect, says several hundreds of yards of the wall have disappeared with the land on which it was built. The cliffs have been levelled in the surrounding ground on the north side, he declared. Some of the wall had gone with the basaltic cliffs. The quarry companies claim that their opera-tions are not directly responsible for the partial collapses of the wall.

# WHO SHOULD HAVE THE CHILD?

THIS week we continue our consideration of the dispute between the Ministries of Health and Works on which should control post-war housing.

Last week we stated that rate of production of houses is going to dwarf all other aspects of post-war housing and that only a technical Ministry which gives its whole mind to the job and controls all materials and processes from the clay bed or the log to the last coat of paint can hope to succeed in the undertaking. Now MOW is in a position to do this. During the war it has had experience in controlling big building programmes, it has evolved a system of controlling the flow of materials which will in any case have to be retained even if in revised form during the post-war decade, it is carrying out a great deal of research into house building both on improved-old and quite new systems, and it alone has the great knowledge of the building industry and its members, in all their grievances, which might enable it to achieve a great success. But it cannot attain any success unless it has the power to guide very closely every detail of the design of every state-aided house. If MOH, MAF and 1001 local authorities claim the right to have a free hand to design their own houses in any materials and with any equipment they fancy, house production in the first two post-war years may exceed the 500 and 20,000 achieved last time, or it may not; probably not.

On the other hand the JOURNAL, though it has only a lay-man's knowledge of this matter, does not favour the suggestion that MOW should dispense with the agency of MOH in dealing with local authorities concerning their housing. There is more to housing than design and construction; and in finance, administration and supervision of any local authority "service" MOH's experience is unrivalled and should be fully used—particularly during a decade when the powers and areas of many local authorities may be undergoing changes. In brief, the JOURNAL believes that in post-war housing MOH should combine the parts of client and client's solicitor and MOW combine those of architect and contractor.

It is said against this view that schools, like houses, are buildings and the Board of Education deals direct with local authorities over schools. It is also said the public health is a technical service and yet MOH runs that service. The JOURNAL'S answer to both arguments is that post-war housing is going to be so big a problem, and success if attained at all must be attained so quickly, that no precedents of long-term steady-turnover services can be considered valid. As has been said, all reconstruction will be queued up behind housing. Any attempt to run the production of post-war houses in a wing of MOH will lead in quick time to a violent explosion and to the inhabitants of the rest of that Ministry standing in their shirts wondering what has hit them.



The Architects' Journal

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EMPLOYMENT OR LEISURE? Mr. Luke Fawcett, Secretary of the Amalgamated Union of Building Trade Workers, writes: "Your contributor, Astragal, may have a merry wit but is singularly obtuse in his understanding. He says in your issue for August 19: Vested interests may be supporting prefabrication. . . . On the other hand, vested interests are also opposing new methods of building-and, among them, strangely enough, are representatives of the building trades operatives. Just as the mythical 'General' Ned Ludd and his machine wreckers believed that the machine would deprive them of their livelihood, so do these neo-Luddites. Within the existing framework of society, this fear of being ousted from employment by mechanization is understandable, but it is the result of a peculiar confusion of mind. Thus Mr. Luke Fawcett, General Secretary of the Amalgamated Union of Building Trade Workers: 'The question of the permanent employment of the available building workers is the outstanding issue before the building industry.' Does this kind of statement really make sense? Once the objective is clear, other matters, such as full employment, fall into proper perspective.

The objective is—at least 4,000,000 new houses in the shortest possible time. It is not primarily work-for-the-sake-of-work -but houses.

"Astragal knows, surely, the distinction rational assembly, between the organization and use of the services of the building industry, as such, and the public tasks it has to perform. The objective-4,000,000 houses, say-can be achieved by an organized, wellordered, well-conditioned industry or by a badly organized, disordered and wasteful industry. Astragal knows that the one, big, serious endeavour hitherto made to meet the requirements of the post-war building programme, is in respect to creating a labour force of 1,250,000 building operatives. Other needs for carrying out the programme are in a state of complex evolution. Astragal knows that the statement he quotes from my address to the Building Congress was made in respect to the availability of building labour, and refers to the building industry as such, and not to the work it has, or may have, to do. And Astragal should know-as all with experience of the past working of the building industry must know—that 'the question of the permanent employment of the available building workers is the outstanding issue before the building industry.

"Bricklayers, masons, carpenters and other building workers may be more aware of this than others whose livelihoods are bound up with the building industry. But architects should not be unaware. Time was when the hat was being passed round for the thousands of architects who were unemployed. Of course, things are fair and fine now for all in the architectural profession, in the best of all industries, in the best of all possible worlds. Nevertheless, there are some, surely, who remember the tragedies of the slumps, and the pitiful waste of architectural ability, and the evils resulting from the lack of full employment. They may desire, as we who represent the operatives desire, continuity of employment, and the best use of their services. They may even desire a technique being applied to the building industry whereby their services are not wastefully frittered along in spasmodic employment. Because of that desire they will not be machine wreckers, neo-Luddites, dark iconoclasts opposed to progress. On the contrary.

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"Says Astragal: 'If unemployment results from the full use of modern technology, adequate buying power must be given to the unemployed to consume what the machine produces.' Must. I like that must. By means of the hat? By charity? I thought Astragal was dealing with matters within the existing framework of society.' 'Does this statement really make sense?' Is it not 'the result of a peculiar confusion of mind'?"

Mr. Fawcett raises an issue of tremendous importance. That isare we to build a society in which the individual is to have greater and greater leisure with finally that complete economic independence which machine production could so easily allow (the only kind of freedom that is worth a cuss to anybody), or one in which the individual is to be tied and regimented by the forced labour of a system whose moral roots lie in St. Paul's outmoded gospel of workfor-work's-sake, frankly called by the extremists, wage-slavery?

On the outcome of this issue depends the future social pattern of the whole world, and therefore the shape of the buildings and environment that will be its physical expression. This is, in fact, the fundamental, though as yet only half-consciously realized, moral issue



One of the drawings at the Recording Britain Exhibition, at the National Gallery. The Pantechnicon, Motcomb Street, S.W.1, by Kenneth Rowntree. The van on the left is the original design used when the building was erected about 1830. See also page 178.

in the modern world. A pretty deep philosophical matter, this, and one which architects and planners, perhaps more than most, can no longer afford to ignore as being outside their province. We have to face the fact—are we to plan for leisure or for "full employment"?

If you want a high state of culture, together with genuine personal freedom, you will have to accept the leisure which modern technology could provide, for both culture and freedom are impossible without it. In the high peaks of culture in the past only a fortunate minority, who were patrons of the arts, possessed leisure, the dirty work being performed by slaves, serfs or servants. To-day each one of us could have at his disposal those mechanical slaves measured in horsepower and kilowattage which produce the power equal to at least forty human slaves to every household in the British Isles.

But perhaps Mr. Fawcett and I are arguing at cross purposes, and he being, no doubt, a practical man having to face hard facts and deal with conditions as they are, is considering the matter from within the existing state of affairs, whereas I, contrary to Mr. Fawcett's belief, am considering it from a point far outside it. Certainly within the existing framework of society, full employment is desirable for the simple reason-NO WORK, NO MONEY. There should, however, be no question of charity, nor indeed of insurance, taxation or debt, in providing an adequate hivelihood not only to those who have been ousted from employment by the machine, but to every individual, whether building trade operative, architect, Mr. Fawcett, or anyone else. The payment should be made by the State as a right-if the goods exist.

Certainly my plea for unconditional leisure does not apply to present war-time conditions nor to those that will exist during the reconstruction period, when all will have to work pretty hard to rebuild the shattered world. But, for heaven's sake, let us avoid the dangerous and confused idea that

work is an end in itself and not merely a means to an end.

Another correspondent, an architectural student, writes rather differently:

"Dear Astragal: In the third paragraph of your Notes and Topics in the issue for August 19, you wrote something of profound significance. I allude to your reference to the issue of additional buying power. This was written for the first time (as far as I know, in 1919), and the then still small voice has been increasing in volume ever since. I am of the opinion that architecture will remain in the melting pot until this point is settled."

As a matter of fact, the first philosophical statement of this argument was made long before 1919. Remember the words: "Consider the lilies how they grow. . . ." More recently, in 1880, or thereabouts, the much neglected English writer, Richard Jeffries, said:

"This our earth produces not only a sufficiency and a superabundance, but in one year pours cornucopia of good things forth, enough to fill us all for many years in succession. only reason we do not enjoy it is the want of rational organization. I know, of course, and all who think know, that some labour or supervision will be always necessary, since the plough must travel the furrow and the seed must be sown; but I maintain that a tenth, nay, a hundredth, part of the labour and slavery now gone through will be sufficient, and that in the course of time, as organization perfects itself and discoveries advance, even that part will diminish. For the rise and fall of the tides alone furnish forth sufficient power to do automatically all the labour that is done on earth. Is ideal man, then, to be idle? I answer that, if so, I see no wrong, but a great good. I deny altogether that idleness is an evil, or that it produces evil, and I am well aware why the interested are so bitter against idlenessnamely, because it gives time for thought, and if men had time to think their reign would come to an end. Idleness—that is, the absence of the necessity to work for subsistence—is a great good. I hope succeeding generations will be able to idle. I hope that nine-tenths of their time will be leisure time; that they may enjoy their days, and the earth, and the beauty of this beautiful world; that they may rest by the sea and dream; that they may dance and sing, and eat and drink."

It's surely time to begin to enjoy life and to lay the ghosts of our puritan ancestors—to accept at last that vast cornucopia of wealth which is modern science. If there is any direct enjoyment in an existence which consists of laying one brick on top of another for eight hours a day for fifty years, when we can build walls in large sections under cover with perhaps one-tenth of the labour, then it is high time we redefined the meaning of the word—enjoyment.

ASTRAGAL



## LETTERS

Prof. C. H. Reilly,
O.B.E., F.R.I.B.A.
H. J. Reifenberg
Punch

#### Architects in Building Units

SIR,—I have read with interest the letter of Mr. Michael Thornely of Liverpool, in which he says he has not seen any suggestion that the architect should, after the war, become a member of a building unit consisting of a body of experts. Mr. Thornely goes on very wisely to point out the dire fate which is likely to overtake the architect in private practice, especially the younger ones, unless such groups are formed.

I would call Mr. Thornely's attention to an article of mine on the importance of Group Work which appeared in the JOURNAL on February 12, 1942. I would add that I put forward at the RIBA Reconstruction Committee a resolution that the RIBA should assist in the formation of such groups or units and that on March 4 this was referred to the Allied Societies who all, including Liverpool, appear to have turned it down with contumely.

C. H. REILLY

Twickenham

## Daylight Factors

SIR,—Mr. P. V. Burnett in his lecture on Natural Light, published in your issue for August 12, enumerates a number of methods for determining daylight factors. None of the methods he describes—with the one exception of the Waldram method—enables external obstructions of any shape to be given full consideration, which is of the greatest importance where the question of daylight is dealt with in connection with town planning or layout.

The Waldram method involves unfortunately quite an amount of tedious labour. This is especially the case where external obstructions are of a somewhat complex nature. Furthermore straight lines, with the exception of

verticals, appear as curves.

The following method which I have found in the course of some research work may, therefore, be of interest to some of your readers.

## AT THE RECORDING BRITAIN EXHIBITION



The third and final exhibition of selected drawings produced under the Scheme for a Record of Changing Britain is now at the National Gallery. Top left, church in the park at Normanton, Rutland, the western portico and tower of which were built in 1826; drawing by John Piper. Top right, the Round House, Veryan, Cornwall, one of the three Parson Trust's Houses; the present incumbent believes that they were built early in the nineteenth century by a lord of the manor who went to Africa and was impressed by the kraals; drawing by Barbara Jones. Above left, wooden houses at Carshalton dated 1758 by Barbara Jones. Above right, cottage porches at Canford Magna, Dorset; most of the cottages of this village have elaborate rustic porches, no two alike; drawing by Barbara Jones.

It is extremely simple in application and allows for full consideration to be given to windows and external obstructions of any shape.

A grid is drawn on the celestial sphere consisting of equally spaced meridians and of parallels spaced to divide the hemisphere into horizontal zones of equal daylight factors. This grid is projected upwards on to a horizontal plane through the centre of the sphere. We obtain a diagram of the hemisphere, consisting of concentric circles and radial lines. The small areas enclosed between them (the units of the grid) become larger towards the edge, but each unit represents the same amount of daylight factor.

when plotting the diagram the radii of the concentric circles representing the parallels have to be calculated from a mathematical formula.\* This is, of course, not a matter for the individual architect, who could be supplied with the diagram as it is always the same.

To obtain an obstruction diagram we project any obstructing outlines upwards on to a horizontal plane through the point of reference, this plane having the same distance from the point of reference as the projection plane in the hemisphere diagram had from the centre of the hemisphere. This is usually very simple. All straight lines remain straight. Horizontals remain exactly as they are in plan changing only their scale according to their height above point of reference. Verticals can be simply ruled in as radials through the point of reference.

If the two diagrams are superimposed the daylight factor can be determined by counting the number of units of the hemisphere diagram enclosed between the obstructing outlines both of exterior objects and windows. Having, e.g. divided the hemisphere into 100 meridians and 50 parallels, each unit represents a daylight factor of 0.02 per cent.

Only slight alterations of obstruction diagram are necessary if the point of reference is shifted to another place. This is of great advantage if contours are to be planned by means of a grille.

neans of a grine.

H. J. REIFENBERG.

\* Footnote.—Two different diagrams can be applied. If we define the daylight factor as the ratio of the area of visible sky to the area of the whole hemisphere we have, in calculating the radii of the concentric circles, to apply the formula:

(I) 
$$R_n = \sqrt{(p+n)(p-n)}$$

where R is the radius of the nth parallel in the diagram and (p) is the number of horizontal zones into which the hemisphere has been divided. It is another matter if our aim is to find the relative brightness on the horizontal working plane, a method which might be preferable for office buildings. In this case the angle of light incidence has to be taken into account for every point of the hemisphere. The respective formula to be applied is:

(II) 
$$R_n = \sqrt{\frac{p-n}{n}}$$

It is, of course, impossible to explain things more in detail in a short letter.

#### Architects' Salaries

SIR,—One can only agree with Judex in his untiring efforts to draw attention to the low salaries offered by many public authorities. But why has not the architectural profession put its own house in order first by attending to the wages paid to assistants. An average assistant has a good preliminary

education and several years specialized training. This apparently entitles him to an income equal (or less) to that of an everyday clerk or not more than half that of a skilled manual worker. For instance, a recent advertisement offers £3 to £5 per week for an architectural draughtsman of RIBA finals standard. This is less than a man can earn sweeping a factory floor these days.

Do architects receive low salaries because the remainder of the populace thinks that such salaries are in keeping with an architect's value? Judex states that in plans of reconstruction the architect will be a key man. He should be, of course, but seeing how he has buried his head in the sand whilst engineers have been advancing with new materials and methods, I can only doubt it. The JOURNAL recently informed us that houses must be machine-made after the war. What, may I ask, do architects know about manufacture by machine? Not much I fear while the architect's whole outlook is fogged with traditional nonsense handed out by a bunch of art cranks.

PUNCH.

## PHYSICAL PLANNING

6

## index

The bogies

- 5. Freedom
  Dr. Karl Mannheim
- 6. Democracy E. M. Nicholson
- 7. Democracy Harold Laski
- 8. Economics F. Schumacher
- 9. Land Ownership Part I. E. S. Watkins
- 10. Land Ownership Part II. E. S. Watkins

Problems

- 11. Local Government Part I. Dr.W. A. Robson
- 12. Local Government
  Part II. Dr. W. A. Robson

Mr. E. M. Nicholson, author of this week's article, was, until the outbreak of war, general secretary of PEP, a research organization concerned with every aspect of political and economic planning. He was a member of the National Planning Committee of the TPI, whose report was submitted in evidence to the Barlow Commission.

We are still debating whether to have planning or not. If the question could be put differently the public might be persuaded to make up its mind and let experts get down to business. Mr. Nicholson, author of this week's article, blames the planners for failing to put the question in terms which mean something to Mr. Everyman and his wife.

Planning means thinking. Ask the Englishman "Do you want planning?" and of course he's inclined to say "No, I haven't time." He is feverishly engaged in trying to win a war and the best he can be expected to do is shrug his shoulders and answer "wait." In the meantime the thinking which could and should be done by a handful of people remains undone. If propagandists could talk more in terms of results, show him a programme to approve or reject, his reaction might be less negative.

The trouble at the moment is that the electorate and the planners are completely out of touch with each other. They have no common language. The public has heard just enough about planning from mass observers, housing estates managers and the BBC to begin wondering what it wants. But people who set out to answer this question from a particular point of view, whether they are housewives, schoolmasters, traffic experts or youth leaders, and express their answers in concrete terms—which is the obvious way to express them—are up against the trouble that as often as not they are just presenting the planners with so many concrete obstacles to efficient organization. And so no objectives emerge which can be generally agreed upon. Planners, on the other hand, may be better able to see the problem as a whole. They are trained to analyse needs and are accustomed to regard the parts they work with as malleable. But unfortunately the technical jargon they use to make themselves clear to each other means very little to the average man whose head spins when the word circulation is mentioned and who finds difficulty in relating angles of light, densities, zones and open spaces to his private life. Attempts have been made to give meaning to these concepts by using photographs, diagrams and drawings to show how planners make use of them to give different results. But the average man has not been trained to think with his eyes. He comes away with a confused idea that planning will result in more flats, more roads, more trees, more houses, more grass, more architects, without understanding at all how these miracles are to be performed, and wondering why the little villa he has privately decided he wants doesn't figure anywhere in the exhibition.

Mr. Nicholson suggests that physical planners are making use of the wrong tactics. That they should stop trying to educate the public in the technique of three-dimensional design and concentrate on producing something more on the lines of the Beveridge Report which has made economic planning a live issue by expressing social security in terms of services and hard cash. The results of Physical Planning cannot be expressed in quite the same way. But means might be found of stating the plan requirements of men, women and children in quantitative terms which can easily be understood.

THE BOGIES Democracy is a word that has been taken for granted since we began to export our political institutions. We expect to find a certain familiar set-up in any democratic country, European or transatlantic. Now that we're faced with the need to organize the resources of the British Empire and of the world in order to make the best of what's left to us after this war, and prevent another, the conception of democracy we exported so many years ago comes back to roost with us and gets in the way. It is Bogie Number 2. We need new social and economic techniques. We need new institutions. The sacred machinery of legislation, executive and judiciary, may even have to be modified in some respects. It is thus not difficult to work up a scare that Planning is undemocratic, and so we can't have it. In point of fact it has always been admitted here that parliament can do anything but turn a man into a woman. There is nothing to prevent the Mother of Parliaments from doing anything that may be necessary to make planning possible—nothing except the apathy of the electorate. Mr. Nicholson blames planners for this. They don't seem to realize that from the point of view of the electorate planning is an unpleasant activity and needs at this stage to be justified rather than explained.

BOGIE NUMBER TWO



# DEMOCRATIC

by E. M. Nicholson

## LOOKING FOR TROUBLE

To plan or not to plan is a policy decision, but once a decision to plan has been taken, planning is an instrument for carrying out whatever ends are laid down by the framers of policy. In deciding to plan, therefore, we are choosing to use a certain type of method and to create a certain type of mechanism, but we are not answering the question for what purposes that method and mechanism shall be employed. Far from disposing of major questions of policy by choosing to plan, we are raising them on a much larger scale and with much greater urgency. It is mischievous and misleading to suggest to people that planning in itself is an answer to their problems, although planning can assist in seeing that problems are faced. The planner in fact is a man who goes out looking for trouble, as opposed to the non-planner who sits down waiting for trouble to come and hit him. If planning is

to have a chance after this war it will be because people now know from bitter experience that more trouble can be collected by the second method than by the first.

#### INHERITED LIABILITIES

Planning is concerned with known resources consciously controlled, and it accordingly involves finding facts and making people aware of them, where previous generations have trusted blindly to the interplay of economic and other forces. An unplanned society can tackle its problems as and when it pleases at the price of a low uncertain income in terms of human welfare and a mounting social overdraft of chronic troubles such as unemployment, war, and dissi-pation of resources. A planned society on the other hand needs a far larger social working capital of reliable information, of trained personnel, of efficient institutions, and of educated public opinion. To switch from an unplanned to a planned society therefore requires immensely greater efforts than should be needed to maintain a planned society once it has been established, partly because planning is in practice only given a chance when the hopeless breakdown of the unplanned alternative has become clear to all, and partly because the burden of initial surveys, initial training and the creation of so many new mechanisms diverts so much energy. Getting agreement about doing things and getting organized to do them is far more than half the battle: given the agreement and the organization almost anything which is practicable at all can now be done with relative ease, as wartime experience has repeatedly proved.

The liabilities which postwar planning will inherit are thus pretty formidable — a world of often wasted and partly devastated resources, still astonishingly ignorant of many of the factors conditioning an advance of civilization, and accustomed to take short, narrow and distorted views of its problems. It is important that this legacy should not be allowed to be forgotten, for, while any major part of it remains, the potential benefits of planning must remain to that extent out of reach.

In thinking about planning and democracy the importance of distinguishing between the fully-fledged phase and the embryonic one, which we seem to be entering, is clear. In this embryonic phase the habits and achievements of the past, both good and bad, will overshadow the scene, and the fundamental problems of planning and democracy will be seen in a distorted form for many years. During this transition period planners will no doubt have to go on facing the familiar argument that planning and democracy are incompatible. This argument will, like other arguments from the same quarter, be disposed of in the fullness of time by results. Meanwhile it may be pointed out that planning, being a means and not an end, can be used equally for purposes which promote, destroy or are neutral to democracy.

Like aircraft and other potent modern inventions planning can readily become a curse if we neglect to turn it into a blessing. As an instrument for assisting the efficient use of power, planning has certainly appealed strongly to dictators, but history is confirming the truth of the view that attempts to plan from the top downwards represent the weakest as well as the least justifiable of the ways of using planning. A vigorous enduring use of planning can only come about when knowledge of, and responsibility for, the plan are very widely shared among the people affected by it. Apathy or suspicion are fatal to effective planning over long periods, and although politically immature populations can often be made by clever and continuous propaganda to give fairly active support planning over which they have no control, recent experience appears to show that unless an increasing measure of genuine responsibility is devolved, support gained in this way has little lasting value.

#### PLANNERS NEED DEMOCRACY

It is not enough then to say that planning is quite compatible with democracy. Genuine and enduring planning actually demands more democracy, especially economic and social democracy, and if democracy did not exist the far-seeing planner would have

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had to create it in order to make planning either enduring or endurable. It is proper for the planner to assess technical (including economic) possibilities and to state the advantages and disadvantages of alternative choices, but the responsibility for deciding between these choices is essentially political, and it is clearly more satisfactory for the planner that such decisions should be made democratically with the active interest and support of his clients, the people who will have to make the plan work, rather than that the last word should rest with some oligarchy or dictator, whose mere existence would reflect the backwardness of the people on whom the success of the plan must rest.

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It is often assumed by opponents of planning that there is in the world a limited stock of liberty, and that every extra bit of planning means an equal cut in the amount of liberty left. Persons who suffer from this delusion simply do not understand what liberty is. Some kinds of planning restrict liberty, others greatly expand it by enabling people to choose and enjoy much that would otherwise have been closed to them. The higher and freer the civilization the more planning it demands, and the better use it makes of it. Only a squalid and half-hearted type of democracy would fear more planning as a threat to its cherished prejudices: a democracy which wants more human welfare and more control over its destiny inevitably wants more planning because planning alone can give it these things.

Some of the opposition to planning in the name of individualism is no doubt inspired by conscious unconscious fear that planning will in fact accelerate the education of the people, and the sharing of power and privileges among much wider groups. In modern Britain such a fear is much more likely to prove well founded than the fear that planning will Fascist promote tendencies, necessary as continual vigilance on that point is.

# FAILURE OF PLANNING **PROPAGANDA**

If planning demands more

democracy we should be clearer in our minds how the two are to be linked at every stage. First more thought is needed on the social and economic implications of planning, and of the decisions which it entails. Physical planning is directly concerned with the shell or the framework of human life. It cannot come alive except by expressing the spirit and purpose of the civilization which it serves, and it cannot do that either by ignoring fundamental issues or by seeking to answer them on its own account. If the plan is to be brought into a genuine relationship with its parents' civilization, planners must define and submit to the verdict of the community the principles underlying their proposals and the pros and cons of various alternative courses. It can hardly be said that the principles governing physical planning have even yet been stated with anything approaching the clarity and comprehensiveness attained, say, in the field of social security by the Beveridge Report, and in the field of nutrition as a result of much brilliant research brilliantly related to the life of the people. Presentation also has lagged behind, and a task of education fully comparable with that recently done for diet by the Ministry of Food still lies ahead in the field of planning. Recent exhibitions such as the Exhibition of the County of London Plan can only touch a small if influential minority, and for the mass of the people planning, in spite of all that has been said about it, is still something shapeless and remote from their daily lives.

# PRINCIPLES MUST BE **STATED**

Clear and simple statements of planning principles and problems, broadcast through effective use of pictures, charts and the spoken and written word, are essential in order to bring to an end national illiteracy in planning and at the same time to subject planning itself to the healthy and sometimes brutal judgments of public opinion. On such a basis political parties and voluntary societies can concentrate on the various aspects and trends which they wish to

promote or to oppose, and discussion can proceed before an informed and fully representative body of citizens of all classes instead of among specialists and pressure groups whose struggles can hardly be comprehended by the common man. There is no reason why discussion of planning issues should not become at least as widespread and as intelligent as the recent discussions on Beveridge. Given such informed discussion, not just among small minority groups, but everywhere, planning could emerge (no doubt in a much altered form) as a living and growing element in the national

# PLANNERS AND PEOPLE IN A DEMOCRACY

The artificiality and instability of a good deal of planning effort during the past twenty years is largely traceable to its feeble contacts with the life of the people. In order to deal with such problems as location of industry or the creation of communities it is necessary either to be a dictator or to be intimately linked with and trusted by the people affected. So far planning has been neither, and the results have been frustration for the planner and disillusionment among those who suffer from continuing waste and muddle. There has been a blind flight from the industrially depressed north and west to the more prosperous midlands and south-east, from the older to the newer built-up areas, and from the towns to the country, with ever larger numbers of people trying to escape from the results of failures to plan, and creating more trouble in the process. This disintegration of society has gone too far to be dealt with merely by a better arrangement of buildings and roads and open spaces. If the fall of population is to be reversed, and if people are to find the decent pattern of life for which they are groping, a great work of regeneration as well as recon-struction will have to be carried through and in this work the planner must take his part as an equal. All that has been thought and done so far can only be regarded as preliminary to the main task. That task cannot wait.

We have a diary of forthcoming events, mostly concerned with planning, at the front of the paper. At the back we have a section of the Information Centre headed Physical Planning. Why then do we need a third section devoted to the same subject and headed **CURRENT EVENTS?** 

Because we need to be kept aware of happenings which are making planning history week by week.

The latest important events in the planning world has been the summer school of the Town Planning Institute, held at Birmingham University and attended by over two hundred town planning officers, mostly Borough engineers. officers, mostly borough engineers. The great Hall of the University was devoted to what was perhaps the largest exhibition of town planning survey which has ever been held in this country. addition to the Hull survey there were Oxenbury's survey of East Suffolk, work of the West Midland group, Payne's survey of Gloucestergroup, Payne's survey of Gloucester-shire, maps and a war-time regional survey scheme of the Association for Planning and Regional Reconstruction, maps from the Ministry of Town and Country Planning and from the Schools of Architecture. The following papers were read, the full texts of which will be published shortly: shortly:

A Review of Town Planning Legisla-tion: G. L. Pepler, Chief Technical Advisor, MOTCP. Nearly threequarters of the country are now covered by town planning scheme. Economics and Planning: G. Horwill. Government must continue controls after the war. Planned control of imports and exports between the five principal countries between the five principal countries would solve the major problem. Geography and Planning: Professor E. G. R. Taylor. Agriculture and Planning: Dr. Dudley Stamp, Chief Advisor on Rural Land Utilisation—Ministry

of Agriculture.

Dispersion of Industry: Professor
Sargant Florence.

Social Surveys and Planning: and Planning:

Alexander Farquharson. National Maps for Planning
Purposes: Dr. Willatts, Maps
Officer, MOTCP.
The Work of the West Midland

Planning Group. Recreation and Planning: John Dower.

Roads and Planning: T. G. New-comen. Ministry of War Transport. Replanning Birmingham: H. J. Manzoni, City Engineer, described and displayed the new city plans. Post-War Housing: F. Collin Brown, Chief Housing Inspector, Ministry, of Health Ministry of Health.

The External Appearance of Buildings:

Thomas Sharp.

Public Opinion and Planning: F. J.

Osborn.

Replanning Southampton: H. T. Cook, Town Planning Officer. In addition to lectures there were daily discussion groups.

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WAY OF THE LAND. Sir George Stapledon.-Faber & Faber, 1943, 12/6.

# SOCIAL AND ADMINISTRATIVE PLANNING

# Cheap Books

BEVERIDGE REPORT-WHAT IT MEANS. Labour Research Department, 1943, 3d.

HEALTH OF THE FUTURE. Aleck Bourne.-Penguin, 1942, 9d. HOUSING AND PLANNING AFTER THE WAR. Labour Party, Transport House, 1943, 2d.

HOUSING THE 1950 POPULATION. No. 3, 1942. A.P.R.R.—Broadsheet

INTERIM REPORT ON THE REFORM OF LOCAL GOVERN-MENT STRUCTURE. National Association of Local Govern-ment Officers, 1943, 6d.

LOOKING AHEAD-A PLAN FOR YOUTH. Conservative Sub-Committee on Education. Organisation, 1942, 3d. Conservative and Unionist Party

MEDICAL PLANNING COMMISSION—DRAFT INTERIM RE-PORT. British Medical Association, 1942.

REGIONAL GOVERNMENT—REGIONALITER. Research Series No. 63.—Fabian Society, 1942, 6d.

SOCIAL SECURITY—THE STORY OF BRITISH SOCIAL PRO-GRESS AND THE BEVERIDGE PLAN. Sir Ronald Davison.— Harrap, 1943, 1/6.

# More Expensive Books

OUR TOWNS—A CLOSE-UP. Women's Group on Public Welfare.— Oxford University Press, 1943, 5/-. PEOPLE'S HOMES. Mass Observation.—John Murray, 1943, 10/-. PLAN FOR BRITAIN. Essays by Cole, Bevan, Griffiths, Easter-brook, Beveridge, Laski.—Fabian Society, Routledge, 1943, 6/-.

# GOVERNMENT PUBLICATIONS FROM H.M.S.O.

BEVERIDGE REPORT IN BRIEF, 1942, 3d.

COMPENSATION AND BETTERMENT-FINAL REPORT. Cmd. 6386 (Uthwatt Report), 1942, 2/6.

DISTRIBUTION OF THE INDUSTRIAL POPULATION. Cmd. 6153 (Barlow Report), 1940, 5/-

EDUCATION RECONSTRUCTION. Cmd. 6458, 1943, 6d.

HYDRO-ELECTRIC DEVELOPMENT IN SCOTLAND. 6406 (Cooper Report), 1942, 9d.

LAND UTILISATION IN RURAL AREAS. Cmd. 6378 (Scott Report), 1942, 2/

SOCIAL INSURANCE AND ALLIED SERVICES. Cmd. 6404 (Beveridge Report), 1942, 2/-

TOWN AND COUNTRY PLANNING ACT, 1932. 1/6.

TOWN AND COUNTRY PLANNING ACT, 1943. 3d.

TRAINING FOR THE BUILDING INDUSTRY. Cmd. 6428. 1943, 1d.

WORK OF THE COMBINED RAW MATERIALS BOARD TO JANUARY, 1943. 1943, 2d.

# PERIODICALS

PLANNING. (Broadsheets issued by P.E.P.) Annual sub. £1. AGENDA. A Quarterly Journal of Reconstruction. London School of Economics and Political Science, £1 ls. per annum.



# TABERNACLE

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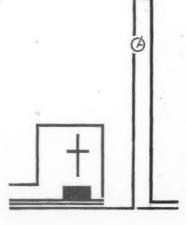
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CHURCH OF CHRIST

ELIEL & EERO SAARINEN, ASSOCIATED WITH

E. D. PIERRE & GEORGE WRIGHT



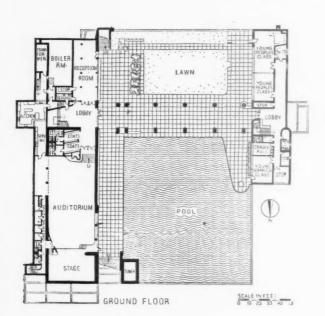
The Tabernacle Church of Christ is almost unique in the annals of American church building in that it was designed by a distinguished firm of modern architects with the full co-operation of an intelligent building committee which had ample funds at its disposal. "We attach importance," wrote the committee to the architects, "to our effort to preach and practice Christianity and nothing else, for we believe that in it lies the hope of the world. . . . There are a few

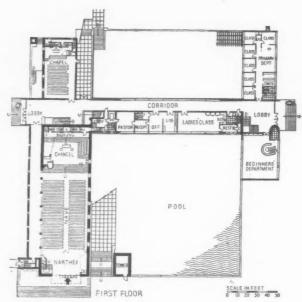
elements in our belief that we would like to have emphasised in the church. Because the gospel of Christ's death, burial and resurrection lies at the heart of our faith, we would like it illustrated in some way in the architecture of the building. . . We are asking you to build a church which will interpret the spirit of Christ and of the gospel and which will also promote these ideals and assure their perpetuation among us. . . . A costly church can be

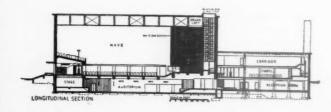




Left, looking south-west across the pool. Above, the west front. Facing page, top, the narthex. There are three doors in the wood and glass screen, two opening into the church and a third going to the side corridor which connects with the chapel and Sunday school. Bottom, inside the church, looking towards the chancel.



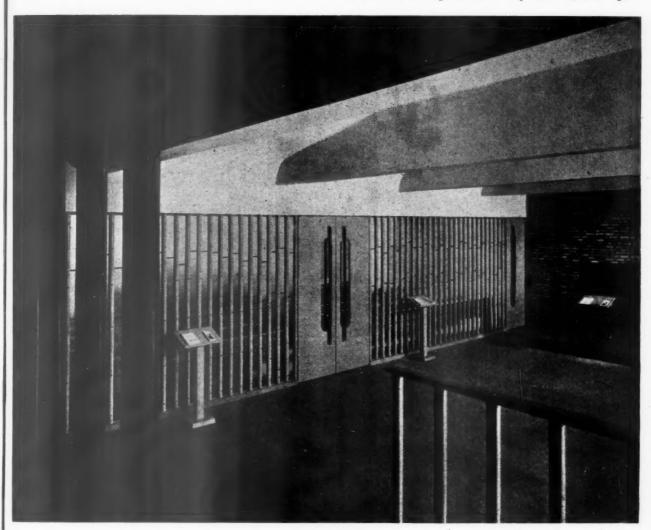




ELIEL & EERO SAARINEN

IN ASSOCIATION WITH

E. D. PIERRE & GEORGE WRIGHT



justified, in our opinion, only so far as it inspires and stimulates people in living better lives. We are willing to pay for a church which is designed to achieve this end, but we are not willing to pay for luxury and display. . . . We are all sensitive to our surroundings and to participate in a communion service in a place designed to interpret the meaning of that service is to help tremendously in accomplishing the purposes for which the Lord's Supper was established. . . . A church which embodies and illustrates the truths of Christianity should be a monument in which the affection and inspiration of many generations of Christians are centred. That is why we choose to spend our money in this way. . . . So now you see why we want to build our new church and what sort of a church we want you to build." The architects' reply to the

The architects' reply to the building committee outlines the scheme developed to meet the











programme. "In accordance with your wishes our endeavour has been to design not a mere church, but a church expressing the religious aims of your congregation. Indeed, it is essential to establish such a true relationship between the people themselves and the design of their church. . . . We have divided the church group into four major features: first, the east wing, containing the church proper, the chapel and the auditorium; second, the west wing, containing one portion of the Bible school; third, what may be called the connecting bridge between the east and west wings, containing in its two upper floors the remaining portion of the Bible school and having its lower part formed into an open loggialike feature; and fourth, the tower. The church has been divided in this manner to achieve a satisfactory balance of masses and a lively, yet restful skyline."
From the time the architects'

sketches were displayed the church has provoked discussion and stimulated endless questions. Why is there no stained glass? Is this design particularly appropriate to our church? Why are the roofs flat? Is it true that the church has been designed more for future appreciation than for present understanding? Why is the tower to be built apart from the main structure? What is the purpose of the large pool? To these and other questions the architects gave their answer. The roofs are flat because the interiors demanded flat roofs. There is no imitation of historical styles because any honest, fundamental approach has to be contemporary. The illustrations are from the Architectural Forum.

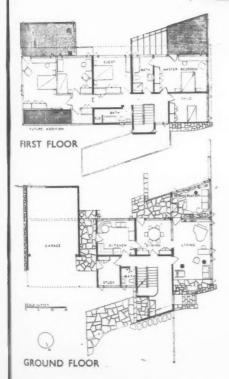
Top, the chapel is oriented in the same manner as the church proper. Left, west lobby on first floor. The balusters are carried right through from one run of stairs to the one above and project beyond the handrails for emphasis. They also serve to carry the indirect lighting fittings. Bottom left, basement auditorium, used for dinners, amateur theatricals and entertainments. Right, basement classroom.

TABERNACLE

OF CHRIST

GROU





# H O U S E AT FRAMINGHAM, MASS.

# DESIGNED BY WALTER GROPIUS

This timber house maintains the white crispness of its New England neighbours. Its plan is based on a square framing unit, evident in the dining room and kitchen, two units forming the living-room area. This method allows the use of long strip-fenestration without running into complicated lintol problems. The design has a simplicity and directness that belies the difficulties presented by the site. Among them was

the presence of two fine elm trees which were preserved by twice shifting the proposed position of the house to avoid trunks and roots.

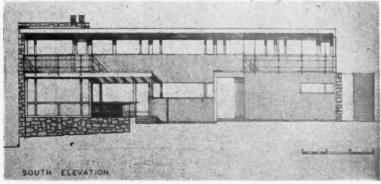
Another problem arose from the orientation of the best view, which is in a west-north-west direction towards a large pond. While the living-room overlooks this pond, a conservatory projects southwards to capture the sun. Windows along the west wall catch the



North elevation showing additional rooms to be extended over garage.



View of north side from approach drive.



Garden elevation as it will be after extension of first floor.



Living room showing stone chimney wall.



The open stair creates a spacious hall.

prevailing breeze to cool the living area in summer.

The house has been designed for future expansion on the first floor, to provide the owners' children with sunny sleeping and play areas. At present they have to use the guest room for nursery. The living space is sub-divided by transparent glass screens.

The main structure is of framed white pine, covered with vertical pine boarding and sheathing, building paper, asphalt felt and rockwool. Interior walls have a lath and plaster finish. The roof is covered with 5-ply tar and Bedroom walls gravel. are with wall-paper, hall covered walls with clapboards and bathrooms with tiles. Hall, kitchen and bathroom floors are covered with linoleum. Heating is by the forced hot-water system with thermostatic control. (From The Architectural Forum.)

DESIGNED BY WALTER GROPIUS

HOUSE AT FRAMINGHAM, MASS.

# Thermoplastic

For many years the HENLEY Research Laboratories have conducted investigations into the possibilities of using Thermoplastic Compounds for electric cable insulation and sheathing. Since the War their efforts have been intensified because of the vital necessity of conserving rubber, and their resources have been concentrated on the practical development and application of reliable alternatives.

Considerable quantities of HENLEY Thermoplastic (P.V.C.) Cables have been supplied for special purposes, and types suitable for general trade requirements are now being introduced complying with Amendment No 3, June 1943, to B.S. 7/1939.★

Stocks of Thermoplastic (P.C.V.) Cables, Wires and Flexible Cords are now available at our Branches.

> ★ Polyvinyl Chloride (P.C.V.) Cables have been officially recognised as permissible alternatives to vulcanised rubber cables, both by Government-Departments and by the British Standards Institution.

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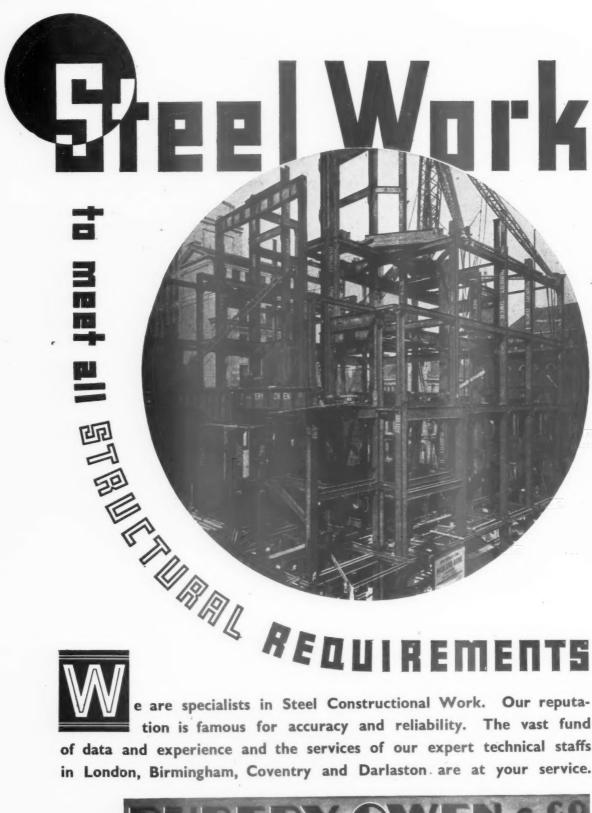
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From Moderation of the Communication of the Communi

e are specialists in Steel Constructional Work. Our reputation is famous for accuracy and reliability. The vast fund of data and experience and the services of our expert technical staffs in London, Birmingham, Coventry and Darlaston are at your service.

LONDON

# 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.

Planning in Portland

POST-WAR DEVELOPMENT IN PORTLAND, MAINE. (American Society of Planning Officials' News-Letter, June, 1943). A co-ordinated post-war programme for Portland and its metropolitan area. Four Committees have been set up.

Economic Committee :

Scope.—(a) Immediate Post-War; (b) Long

Objectives .- (a) Industrial future, needed conversions and expansions; (b) Commercial and transportation future (including land, air, and marine traffic and terminals); (c) Construction Needs; (d) Employment Goals; (e) Population Changes; (f) Capital Formation; (g) Consumer Needs; (h) General Economic Policies and Plans.

Technical Leadership.—Chamber of Commerce with co-operation of industrial, commercial and labour organisations, technical aid of Bonneville Power Administration, National Resources Planning Board, Northwest Regional Council, Colleges and existing

research groups.

Area Planning Committee: Scope.—(a) Immediate Post-War; (b) Long

Objectives.—To develop (a) a generalised land use and development pattern; (b) a plan for housing conversion and construction both private and public; (c) general physical plan for transportation, terminals, utilities: (d) To propose more immediate projects.

Technical Leadership.—City Planning Commission with co-operation and aid of City Departments, National Resources Planning Board, State Highways Department, C.A.A., counties and cities in metropolitan area, etc.

Note: These studies should include the city and metropolitan area.

Public Relations Committee:
Scope.—Present through immediate post-

war period.

Objectives .- (a) To develop an effective public information and education programme; (b) To develop means for accomplishing plans and programmes.

Technical Leadership.—Newspapers, radio stations, public officials, civic groups, Northwest Regional Council, Schools.

Works Programme Committee:

Scope.—Six-year period.

Objectives.—(a) Programming of public works projects with priority schedules and financial planning; (b) Joint public and private programme; (c) Private projects.

Technical Leadership.—City departments.

Technical Leadership.—City departments, National Resources Planning Board, Banks, Chamber of Commerce, construction industry,

labour organisations.

1223 School of Design

PLAN FOR A SCHOOL OF TECHNOLOGICAL DESIGN. Norbert Dutton (Staple House, June, 1943, 1s. 6d.). The need for a

PHYSICAL PLANNING new educational policy in the training of designers for industry: and a proposal for its realization.

Britain's post-war export trade will depend largely on good design. Industrial design means design for mass-production; the contemporary designer is not a craftsman, but a

The practice of design should not be segregated in watertight compartments, when the products of design are in fact closely related; and in any system of education, training in the basic principles of design must precede training in their application to any specific

purpose or industry.

Architectural training includes a groundwork in the principles of design; it does not, however, follow that all industrial designers should be

trained as architects.

Modern technology imposes the need for a scientific approach to design training. such an approach the art schools, perpetuating an obsolete tradition in design, have neither the facilities nor the vision. It is therefore the facilities nor the vision. It is therefore proposed to establish a model School of Technological Design. After completing the basic course (3 years) students would be equipped to enter industry as draughtsmen or junior designers; or they could enter an advanced course for a further 2.2 years. 2-3 years.

The purpose of the basic course is to produce a mentality capable of solving problems in design; it comprises training in the technique of the design process, and development of the qualities of draughtsmanship, perception, planning and technical understanding.

Advanced instruction is grouped into three alternative and parallel courses; design for construction (the architectural course), design for machine production (the industrial design course), and two-dimensional, or graphic, design. Each of these three courses is wider in scope than any existing curriculum in design training.

The instructors would be practising designers and architects who have achieved eminence in their respective fields, and special facilities would be required to permit the completion of so wide a curriculum within a reasonable period. Training should be under realistic conditions, and should take account of con-temporary technological developments.

# STRUCTURE

Prefabrication in Timber

PREFABRICATION IN TIMBER. A SURVEY OF EXISTING METHODS, PART I. C. Sjostrom, A.R.I.B.A. (Issued by The English Joinery Manufacturers' Association, June, 1943). Methods of prefabrication in timber considered in all its aspects. History, physical and structural properties, building elements, construction, plywood construction, transport, finishes, cost and maintenance, utilisation of waste products,

timber resources, attitude of trade

unions and the public.

With the public's attention focused on housing schemes and prefabrication a comprehensive survey of what has been done and what can be done in timber is very instructive. The physical and structural properties of timber make it an ideal material for low-cost housing. The installation of machinery necessary for the factory production of building units is comparatively easier and quicker than with most other materials. A great deal of research and commercial enterprise has increased its adaptability for many different purposes. The designer and technician should possess a proper knowledge of qualities and limitations of timber. A brief account is included on methods of seasoning, one of the factors determining the quality. The behaviour of timber may be greatly influenced by treat-ment and it will depend on the desired lifetime of a building whether the additional expenditure is warranted. The building expenditure is warranted. The building elements of the structure (walls, floors, roofs, windows, doors, fittings) are examined with a view to the following requirements: 1. Structural rigidity; 2. Thermal insulation; 3. Sound insulation; 4. Resistance to deterioration; 5. Resistance to fire; 6. Resistance to penetration of water; 7. Aesthetically pleasing surfaces; 8. Resistance to fracture; 9. Resistance to house vermin.

Prefabricated timber construction in different countries has generally followed traditional prototypes in details of construction and only types suitable to conditions prevailing in Great Britain are dealt with. The construction analysed is of three main types. (a) Espain types. (b) Solid temptical types: (a) Frame type; (b) Solid structural wall type; (c) Structural panel type. Each of these types has been employed in actual housing schemes, and structural units, methods of assembly, mode of erection are described

in detail.

From an architect's point of view, the greater freedom in design allowed by a particular system generally went with a corresponding loss in efficiency and higher costs. A number of ingenious designs of wall panels has been developed, mostly in Sweden and in America, each system determining the extent to which prefabrication can be carried. Houses built of such units are mostly demountable. The most important system—probably the most important structural development since the invention of reinforced concrete—is the stressed skin principle of construction. The panel consists of studs with two sheets of plywood glued to both sides. The rigid plywood glued to both sides. The rigid attachment of the coverings to the studs by means of glue gives high resistance to shear between the studs and the coverings, thus causing one covering to act in tension and the other in compression when subjected to load. The whole panel acts as a box girder, permitting the use of very light and thin materials. The strength and moisture resistance of plywood depends largely on the glue. Synthetic resin glues show the greatest promise for further development.

The light weight and economy of materials, combined with structural rigidity, make this system ideal for factory production of building

sections.

Comparatively small units (8 ft, by 4 ft.) make handling easy and give flexibility in planning and design. The extensive use of plywood would facilitate shipping and road transport, a very important factor in calculating building costs. When judging the cost of prefabricated timber houses probable maintenance and fuel costs have to be taken into account.

Prefabricated houses have always encountered a certain amount of opposition by the Trade Unions, taking slightly different forms in different countries.

The outward appearance of the houses usually plays a determining part in making a scheme a success or a failure, and it is hoped that, given a lead, the public will learn to abandon sham values and will appreciate proportion, form, texture, colour and fitness for purpose of prefabricated timber houses.

### 1225 Mortar-Coated Piles

WOOD PILES WITH MORTAR COATING SAVE TIME AND MATERIAL. (Engineering News Record, November 5, 1942, pp. 72-74). New method of protecting untreated wood piles by a coating of sand and cement, shot on with pneumatic equipment to embed wire-mesh reinforcing. (Shotcrete).

A highly interesting kind of pioneer work was carried out by the Corps of Engineers, US Army, when a pier of strong durable construction was required at a date earlier than could have been built with either creosoted piles or reinforced concrete piles. After deciding on a construction of mortar-coated piles some quick experimental work was done with 30 untreated Douglas Fir piles of different

Reinforcement consisted of 2 by 2 in. electrically welded steel wire mesh. Experiments were made with various wire sizes at various distances from the outer surface of the wood and with various mixes of sand and cement coatings, in thicknesses of 1 to 3 in. After a curing period of three to seven days the test piles were subjected to a driving by severe hammering. Damages to the protective coating were then carefully examined and specifications based on the results laid down. The driving of the piles was done with a steam hammer striking 60 blows per minute. Damage to the coatings occurred on only a few piles and was ascribed to improper treatment, such as getting the wire mesh too close to the wood or use of too wet mixture.

Tests on the resultant structure showed that the coating gives the necessary protection with much more stiffness and less tendency to vibrate than in the case of creosoted piles. The total cost of the job (including expenditures for the experimental work) was 40,000 dollars less than the estimated cost for a creosoted pile structure.

### 1226 Mortar-Coated Piles

MORTAR-COATED PILES RESIST HARD TREATMENT. (Engineering News Record, March 25, 1943, pp. 73-75). Mortar-coated piles, employed in the building of a large wharf. Merit of such piles compared with other types also used in the structure.

New experience with the method of protecting untreated wood piles by a coating of Shotcrete confirmed all earlier conclusions regarding strength, rigidity and durability as

well as regarding saving in time and cost.

The new job was a large wharf built for military purposes in which 14,000 piles of different types were used: (1) untreated wood piles with sand-cement jackets, (2) creosoted piles, (3) precast concrete piles, (4) untreated wood piles with precast jackets. Coating of the untreated piles was applied in the same manner as described in Information Centre No. 1225 and experience showed that such piles do not require any special care in handling. The 2,500 piles with mortar coating ranged from 100 to 127 ft. in length. The hammer with which most of the driving was done struck 15,000 lb/ft. blows at the rate of 120 per minute (more than double the speed of the previous

In a test to determine what amount of blows a pile could take without shattering the jacket, a pile was struck 5,052 blows without developing the least indication of cracking or breaking the coating except at the top in the 2 ft. length closest to the hammer. The jacket increases the diameter and stiffens the original wood to such an extent that great rigidity is obtained. The structure offered an opportunity for comparing cost and relative merits of the different types of piles. Assuming 100 per cent. for the most expensive type, the relative costs of the four kinds of piles rate thus:

cent. Precast concrete, 20 in. square 100 Untreated wood, precast concrete iacket Untreated wood, mortar coating ... 31 30 Creosoted wood

It must however be remembered that creosoted piles, with a diameter 3 in. less than those with mortar coating, have a carrying capacity rated at not more than half of the mortar

coated piles.

When compared as to their resistance to hammering and the penetration that could be obtained, the mortar-coated piles proved definitely superior to the three other types, and it was only with such piles that the necessary penetration could be secured. With them a 90-day saving was made that otherwise would not have been possible. The actual cost saving was to the order of half a million

# 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.

# Students' Association

Q I would be very much obliged if you could inform me whether there exists in England any association of students of architecture on the same lines as the British Medical Students Association. Students of architecture at the Royal University of Malta would be very keen to join any such association and would be quite ready to consider the advisability of organising a branch in Valetta, with a view to encouraging an exchange of ideas between England's and Malta's future architects.

A We would advise you to get in touch with Mr. Donald Barron, Secretary to the International Sub-Committee of The Architects Students Association, 8, Honeybourne Road, London, N.W.6.

# Pre-Cast Concrete

As makers of concrete products of all kinds during the last 20 years by various methods of manufacture including spinning, it occurs to us to enquire if you have any publication dealing with the use of concrete in pre-fabricated units, slabs, cast stone and concrete lamp

With regard to the latter, there may be a publication on its own showing various features

Certain manufacturers of pre-cast concrete units have (or had before the war) catalogues showing their own products, but we do not know of any general publication giving illustrations of the various products made.

Concrete Publications Ltd., of 13, Dartmouth Street, London, S.W.1, publish a large number of books on concrete, and you could obtain a catalogue of their publications on request. In particular we think that the following two books published by this firm might be of use to you :

Concrete Products and Cast Stone, by H. L. Childe, price 8s. 6d., by post 9s. 1d.

Moulds for Cast Stone and Precast Concrete, by F. Burren and G. R. Gregory, price 4s., by post 4s. 1d.

With regard to concrete lamp columns, there of course, a BSI Specification for Street Lighting Columns, obtainable from the British Standards Institution, 28, Victoria Street, London, S.W.1.

# Portable Exhibitions

Q Can you tell me what small and easily portable exhibitions are available (on reconstruction and so on) so that I can organize a few for members of the Forces in my unit? Please send me addresses of promoters, etc. Are there any public or private bodies, too, which loan 16 mm. or 8 mm. films—even for self-advertisement?

A We give below a list of exhibitions that are available from the Housing Centre. The secretary will be pleased to give you any further information and assistance.

With regard to films, we are not sure what type of film you have in mind. The secretary of the give you any information on reconstruction that is available. Housing Centre would probably be able to

If you would be interested in films sponsored by manufacturers connected with the building trade, we should advise you to get in touch with the Building Centre, 23, Maddox Street, London, W.1, and also the leading manuand non-trading organizations concerned.

HOUSING CENTRE EXHIBITIONS
1. Hundred Years of Housing. Charge for hire 10s. 6d.

2. New Homes for Old. Charge according to the number of posters sent, plus carriage.

3. Rural Housing. Charge for hire, 10s. 6d., plus return carriage.
4. Octavia Hill Centenary. Four Sections:

(a) Octavia Hill's Diverse Interests.

(b) Her Housing Ideals. (c) Growth of Her Housing Movement.

(d) Her Own Life.

Charge for hire, 10s. 6d., plus return carriage. 5. Housing in Great Britain. Charge for hire,

10s. 6d., plus carriage.

6. The Homes They Come From. Charge for hire, 10s. 6d., plus carriage. 7. Your Inheritance.

(a) Introduction.

(b) Development of Town and Countryside.

(c) Reconstruction.

Charge for hire, 10s. 6d., plus return carriage. 8. Home from Home. 10s. 6d., plus carriage. Charge for hire, 9. Twenty Women at Home. Charge for hire,

10s. 6d., plus return carriage.
10. Living in the Country. Charge for hire,

10s. 6d. 11. Good Neighbours. Charge for hire, £1 1s. for the first six months, afterwards 10s. 6d.

# HOUSING CENTRE SLIDES

Slides and photographs on housing and town planning subjects can be loaned to groups equipped with lanterns and epidiascopes. Charge for hire, 2d. each.

# HOUSING CENTRE FILMS

1. Rural Reconditioning. 16 mm., silent; one reel; time for showing, 20 mins.

2. Rehousing in Britain. 16 mm., silent; one reel; time for showing, 20 min.

# NOTE

The charges for hire quoted above are for a period up to seven days. Return postage is charged and carriage both ways when material has to be sent by rail.

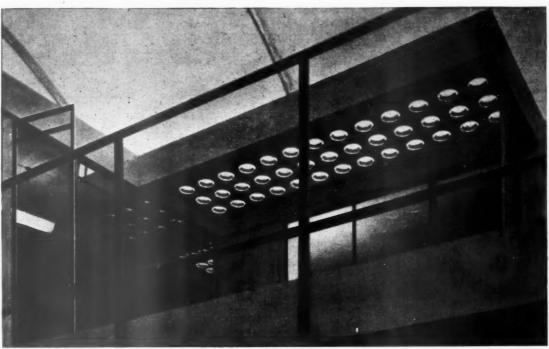
For a discussion group. The Centre has a set of slides of the exhibition Your Inheritance;

of slides of the exhibition four innertunce; charge for hire, 10s. 6d. for seven days.

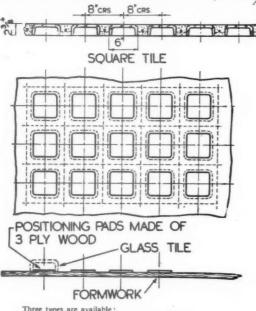
Gramophone record. A short introduction by Dr. L. Dudley Stamp, Vice-Chairman of the Scott Committee, to the exhibition Living in the Country, on a 12 in. gramophone record, is now available; charge for hire, 5s.

# FACTS ABOUT GLASS FOR USES "Armourlight" ARCHITECTURAL STUDENTS -No. 9

# **Toughened Lenses**



A sun balcony in reinforced concrete, by courtesy of Lenscrete Ltd.



"ARMOURLIGHT" Toughened Lenses are specially designed for translucent concrete construction. They have an exceedingly high resistance to mechanical loads and severe thermal conditions, and will withstand an impact test approximately 10 times as great as an annealed tile of similar shape and of twice the thickness.

"ARMOURLIGHT" Toughened Lenses are used in the construction of flat, domed or arched roof lights and canopies. They can also be fitted in precast reinforced concrete panels for vertical light construction.

The introduction of "ARMOURLIGHT" Toughened Lenses in solid reinforced concrete balconiès to flats, permits a certain amount of light to be transmitted to the windows below.

This is published by Pilkington Brothers Limited, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in architecture.

LONDON OFFICE AND SHOWROOMS AT 63 PICCADILLY, W.1. • TELEPHONE : REGENT 4281 where architectural students may get advice and information on all questions relating to the properties of glass and its use in building.

# PRICES

BY DAVIS AND BELFIELD, CHARTERED QUANTITY SURVEYORS

There has been no alteration in the prices of the Basic Materials given below, during August. Rates of Wages have not risen since 2nd April, 1943.

BASIC MATERIALS		Increase over pre-war prices at end of									
	Jan., 1943	Feb., 1943	Mar.,1943	April, 1943	May, 1943	June, 1943	July, 1943	Aug., 1943.			
and over	Per cent +41·46 +71·01 +29·19 ons +37½ +42½ +47·5 +43·53 +65·22 +26½ +44·70	Per cent. +41.46 +71.01 +29.19 +37½ +42½ +47.5 +43.53 +65.22 +26½ +44.70	Per cent. +41·46 +71·01 +29·19 +37½ +45 +47·5 +43·53 +65·22 +26½ +46·21	Per cent. +41·46 +88·41 +29·19 +37½ +45 +47·5 +47·5 +43·53 +65·22 +26½ +46·21	Per cent. +41·46 +98·41 +29·19 +37½ +45 +47·5 +47·5 +43·53 +65·22 +26½ +46·21	Per cent. +41·46 +88·41 +29·19 +43·75 +45 +47·5 +43·53 +65·22 +26½ +46·21	Per cent. +41·46 +88·41 +29·19 +43·75 +45 +47·5 +43·53 +65·22 +26½ +46·21	Per cent. +41·46 +88·41 +29·19 +43·75 +45 +47·5 +47·5 +43·53 +65·22 +26½ +46·21			
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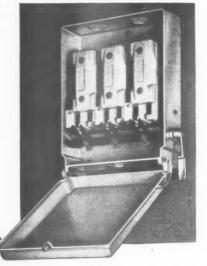
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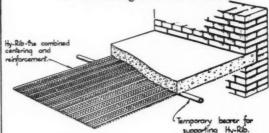
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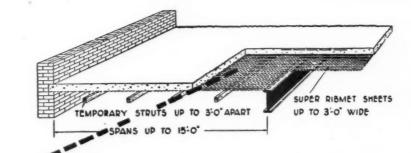
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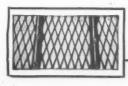
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The School of Architecture and Department of Town and Country Planning of Edinburgh College of Art will reopen on FRIDAY, 1sr OCTOBER, 1943. The Head of the School will interview new students from Monday, 27th September. Further information may be obtained from the Registrar and Secretary, Edinburgh College of Art, Lauriston Place, Edinburgh, 3.

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R. O. HARRIS, A.R.I.B.A., a. County Architect.

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COUNTY BOROUGH OF CROYDON.

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# Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant' and "Wanted" will be found under later headings, and are subject to the charge given under each heading.

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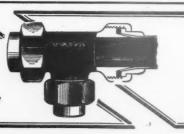


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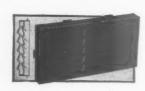




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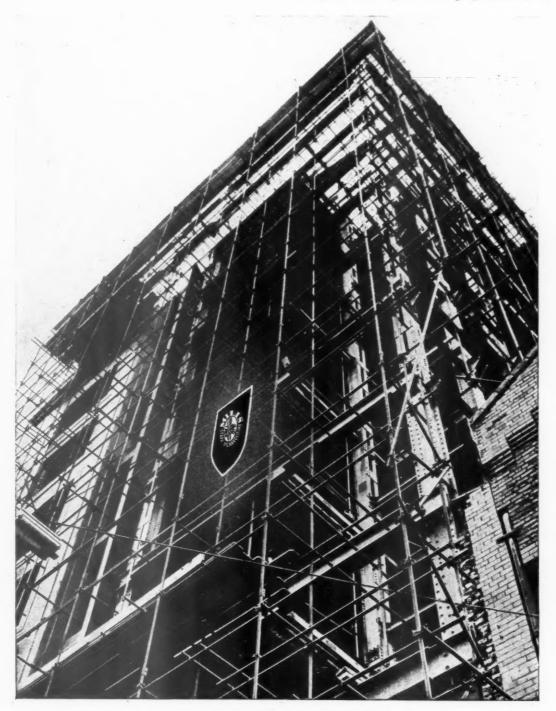
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# TEMPLE OF MARS IN MERIDA, SPAIN.

Close to the old cemetery of this town there was in the Roman era a temple consecrated to Mars, from which were taken the materials which were used for the adorning and restoration of a hermitage or sanctuary dedicated to the virgin and martyr Saint Eulalia, a daughter of the town of Merida, in the exact place in which tradition indicates that this young Christian girl suffered martyrdom. From the old temple were used the architrave, frieze and cornice, and six columns, two cylindrical and four square, the first being of varied marble with bases and Corinthian capitals, and the second, of jasper, but without bases or capitals. On the frieze can be read the inscription: MARTI-SACRVM-VETTILIA-PACVLI (Temple consecrated to Mars by Vettilia, wife of Paculo).

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