# ARCH THE

standard contents

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

DIARY NEWS

ARCHITECT'S Commonplace

ASTRAGAL

*LETTERS* 

PHYSICAL PLANNING

CURRENT BUILDINGS INFORMATION

CENTRE

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

INFORMATION SHEET SOCIETIES

INSTITUTIONS

PRICES

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No. 26041 [VOL. 100 THE ARCHITECTURAL PRESS War Address: Forty-five The Avenue, Cheam, Surrey. Phone: Vigilant 0087-9

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★ The war has both multiplied the number of Official Departments and encouraged Societies and Committees of all kinds to become more vocal. The result is a growing output of official and group propaganda. A glossary of abbreviations is now provided below, together with the full address and telephone number of the organizations concerned. In all cases where the town is not mentioned the word LONDON is implicit in the address.

Architectural Association. 34/6, Bedford Square, W.C.1.
Association of Building Technicians. 5, Ashley Place, S.W.F.
Association for Planning and Regional Reconstruction. 34, Gordon AA ABT Museum 0974 Victoria 0447-8 APRR

Square, W.C.1. E Architects' Registration Council. 68, Portland Place, W.1. Architectural Science Board of the Royal Institute of British Architects. Euston 2158-9 ARCUK Welbeck 9738 ASB

Welbeck 5721 66, Portland Place, W.1. Building Centre. 23, Maddox Street, W.1.

British Cast Iron Research Association. Alvechurch, Birmingham. Redditch 716

British Door Association. Shobnall Road, Burton-on-Trent. Burton-on-Trent 3350

British Ironfounder's Association. 145, Vincent Street, Glasgow, C.2. BC BCIRA BDA BIA

British Institute of Adult Education. 29, Tavistock Square, W.C.1. Euston 5385
Building Industries National Council. 11, Weymouth Street, W.1. Langham 2785
Board of Trade. Millbank, S.W.1. Whitehall 5140
British Steelwork Association. 11, Tothill Street, S.W.1. Whitehall 5073
British Standards Institution. 28, Victoria Street, S.W.1. Above 3333
Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1. Sloane 5255
Council for the Encouragement of Music and the Arts. 9, Belgrave Square, S.W.1. Sloane 6421 BIAE BINC BOT BRS

BSA BSI. CCA CEMA

**CPRE** Council for the Preservation of Rural England. 4, Hobart Place, S.W. Chartered Surveyors' Institution. 12, Great George Street, S.W.I. Whitehall 5322 Design and Industries Association. Central Institute of Art and Design, National CSI DIA

Gallery, W.C.2. Whitehall 2415 DOT

Department of Overseas Trade. Dolphin Square, S.W.1. Victoria 4477
English Joinery Manufacturers Association (Incorporated). Sackville House,
40, Piccadilly, W.1. Regent 4448
Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1. EJMA FAS

Federation of Master Builders. 23, Compton Terrace, Upper Street, N.1. **FMB** 

Canonbury 2041 FS (Eng.) Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1. Sloane 2837

Georgian Group. 55, Great Ormond Street, W.C.1.
Holborn
Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.
Incorporated Association of Architects and Surveyors.

75, Eaton Place, S.W.1. Holborn 2664 Whitehall 2881 HC IAAS Sloane 3158

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Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.

Whiteh Whitehall 4577 ICE Temple Bar 7676 IOB Museum 7197 Abbey 6172 Sloane 7128-29 IRA ISE LIDC

Whitehall 7264 London Master Builders' Association. 47, Bedford Square, W.C.1. Modern Architectural Research. 46, Sheffield Terrace, W.8. Ministry of Agriculture and Fisheries. 55, Whitefail, S.W.1. Ministry of Education. Belgrave Square, S.W.1. Ministry of Health. Whitehall, S.W.1. LMBA Museum 3767 MARS MOA Park 7678 Whitehall 3400 MOE Sloane 4522 MOH Whitehall 4300 MOI MOLNS

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Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Abbey 7711

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MOW Ministry of Works. Lambeth Bridge House, S.E.1. Natural Asphalte Mine-Owners and Manufacturers Council. Reliance 7611 NAMMC

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94, Petty France, S.W.1.

National Buildings Record. 66, Portland Place, W.1.

All Souls' College, Oxford.

National Federation of Building Trades Employers.

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9, Rugby Chambers, Rugby Street, W.C.1.

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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 NBR **NFBTE** 

**NFBTO** NFHS NT

PEP

**PWB** Reliance 7611 S.E.1.

Reinforced Concrete Association. 91, Petty France, S.W.1.

Royal Institute of British Architects. 66, Portland Place, W.1.

Royal Society. Burlington House, Piccadilly, W.1.

Royal Society of Arts. 6, John Adam Street, W.C.2.

School Furniture Manufacturers' Association. 13, New Square, Lincoln's Inn, W.C.

Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. RCA RIBA RSA SFMA

SPAB Holborn 2646

TCPA Town and Country Planning Association 28, King Street, Covent Garden, W.C.2. Temple Bar 5006 Timber Development Association. 75, Cannon Street, E.C.4. Town Planning Institute 18, Ashley Place S.W.1. TDA City 6147 Victoria 8815

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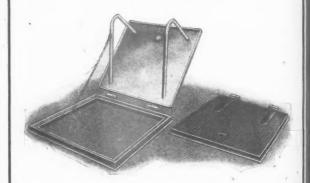
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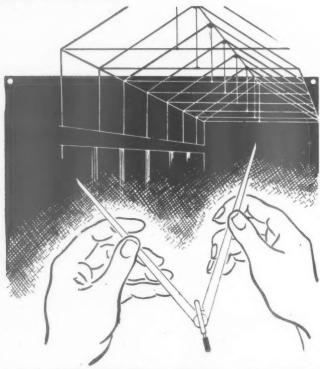




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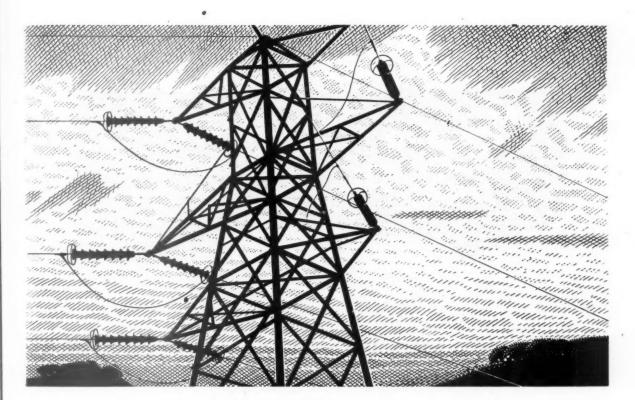
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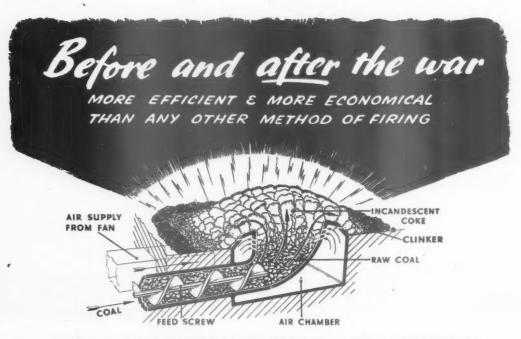
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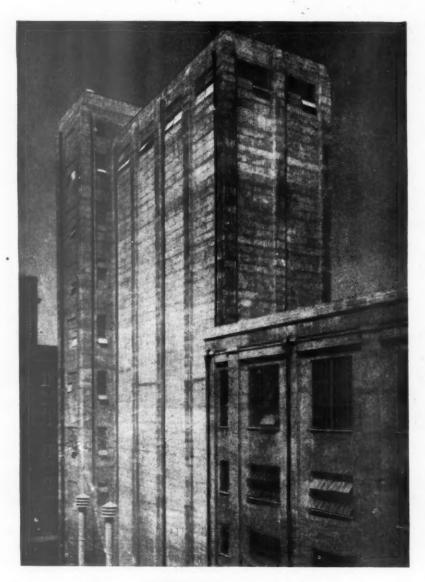
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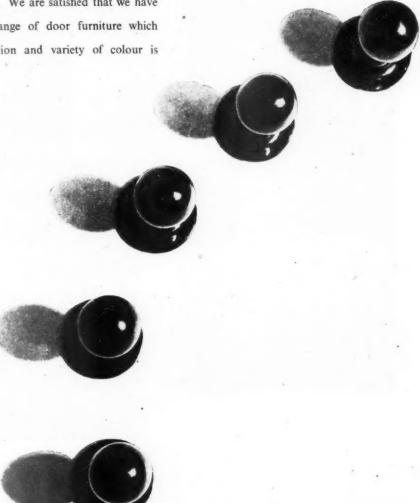
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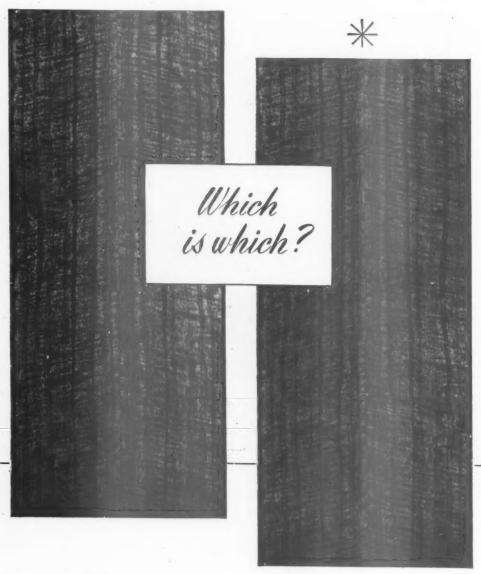


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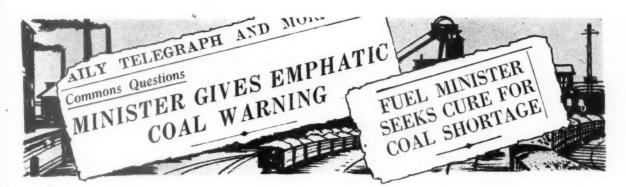
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economy is necessary to make fuel supplies cover existing demands. Soon, millions of post-war buildings will be designed, erected and will need heating. What can the BUILDING INDUSTRY do to help meet the situation which may then arise?

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

Q. When is a building "adequately insulated"?

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

Q. What does that mean?

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

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

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

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

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

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

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

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



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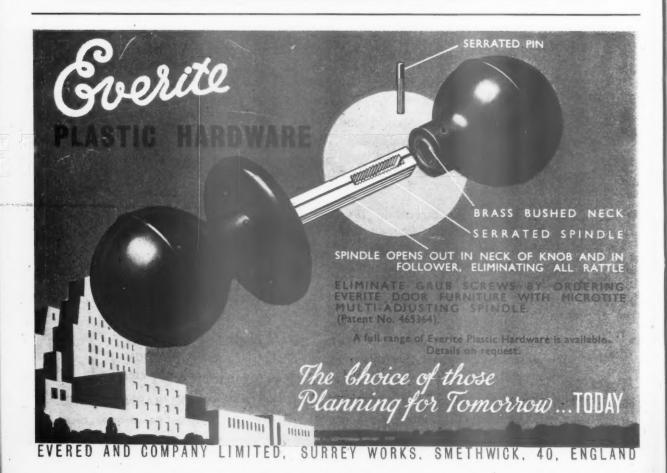
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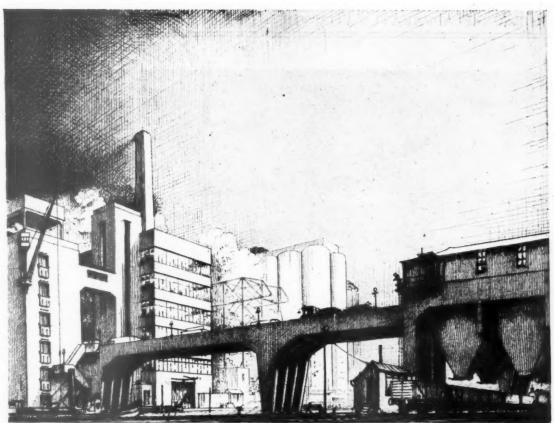
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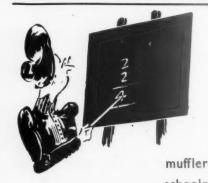
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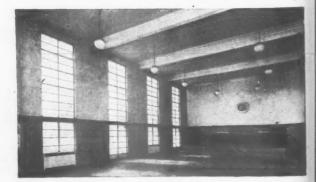
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## The way the wind is blowing...

The permanent houses of post-war, built to give greater comfort and to cost less to keep warm will call for liberal use of insulating materials. The 'Burt Report'—whose "value, to all concerned with post-war building, can hardly be over-stated" says The Builder—dwells at length upon the importance of sound and thermal insulation. It ranks them as numbers three and four of the seven "basic technical considerations which chiefly affect the consumption of labour and materials in house construction." American and Swedish influence is telling strongly in the same direction; and the thinking layman is coming to appreciate their importance.\* Celotex provides thermal and sound insulation in board form. It is permanent, rigid and has great structural strength. Its natural finish lends itself to the most pleasing decorative schemes.

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

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

# CELOTEX

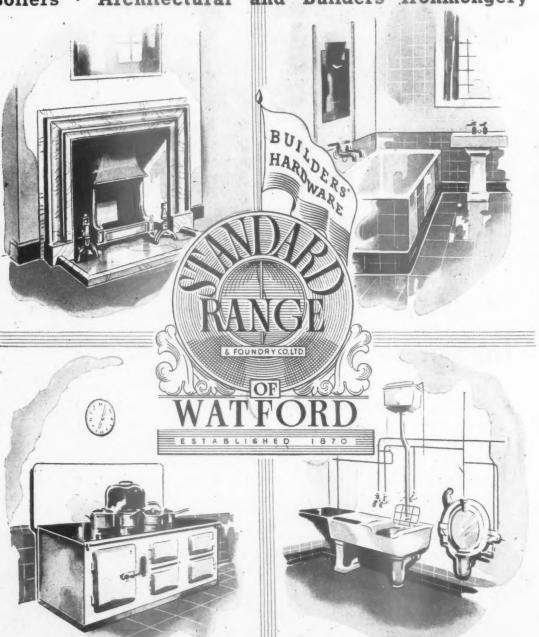
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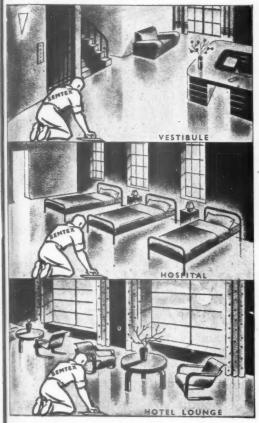
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In common with every other periodical this Journal is rationed to a small part of its peacetime needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee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



order. Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the Journal and made of raw materials now in short supply, are not necessarily available for export.

# DIARY FOR DECEMBER JANUARY AND FEBRUARY

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.

CROSBY. LIVERPOOL. The English Town: Its Continuity and Development. (Sponsor, TCPA).

Jan. 17-31

GATESHEAD. Rebuilding Britain. Exhibition. At Shipley Art Gallery. (Sponsor, BIAE). Dec. 21-30

LONDON. Competition for the best Design for an International Airport for London. Promoters The Aeroplane, Bowling Green Lane, London, E.C.I. Assessors: Austin Blomfield, M.A., F.R.I.B.A.; H. Roxbee Cox, B.S.C.; Air Vice-Marshal D. C. T. Bennett, C.B.E., D.S.O.; W. R. Verdon Smith; and Dennis H. Handover. Prizes: 1st, £500; 2nd, £100; 3rd, £50. Closing date December 31, 1944. Overseas entries must arrive at the offices of The Aeroplane by February 16, 1945.

Jacob L. Crane, of the United States Government. An American Looks at British Honsing. At the RIBA, 66, Portland Place, W.I. As Assistant Administrator of the National Housing Agency and Director of Urban Planning, Mr. Crane's position is equal to Ministerial rank in this country. Mr. Crane is a Member of the American Society of Civil Engineers, Member and Past President of the American Institute of Planners, Member of the American Society for Public Administration, and Member of the National Association of Housing Officials. He is in this country at the invitation of the Minister of Health and the Minister of Town and Country Planning. 5.30 p.m.

Jan. 2

Discussion. Lay-out of Road Intersections. Introducer, A. J. H. Clayton. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. (Sponsor, Institution of Civil Engineers). 5.30 p.m. JAN. 9

L. H. Keay. Post-War Housing. At 66, Portland Place, W.1. (Sponsor, RIBA). 6 p.m. Jan. 16

Applications of Electricity to Water Supply. Discussion. At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE). 5.30 p.m. JAN, 22

S. R. Raffety. Rural Water Supplies. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. (Sponsor, Institution of Civil Engineers). 5.30 p.m. Jan. 23

TVA Documentary Film. At a joint meeting of the Town Planning Institute and the Institution of Civil Engineers. At the Institution of Civil Engineers, Great George Street, S.W.1. 6 p.m.

National Federation of Building Trades Employers Luncheon At the Connaught Rooms. Chairman, J. G. Gray, the President. Guest of honour, Ernest Bevin, M.P., Minister of Labour and National Service.

G. Pierce Clingan, City Building Surveyor, Liverpool. National Building Regulations. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, Royal Society of Arts). 1.45 p.m. Jan. 3.1

H. M. Webb. Reconstruction under the Town and Country Planning Act, 1944. At Caxton Hall, Caxton Street, S.W.1. (Sponsor, TPI). 6 p.m. FEB. 1

Percy Smith, Master of the Faculty of Royal Designers for Industry. Beauty in Sign Painting and Civic Lettering. At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA). 1.45 p.m. Feb. 7

H. S. Goodhart-Rendel. The Work of the late Sir Edwin Lutyens. At 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m.

Wing-Commander T. R. Cave-Browne-Cave. Camouflage for the Concealment of Civil Factories. (Francis Cobb Lecture). At the Royal Society of Arts, John Adam Street, Adelphi, W.C.2. (Sponsor, RSA). 5.30 p.m.

F. N. Sparkes and A. F. Smith. The Concrete Road; a Review of Present-day Knowledge and Practice. At the Institution of Civil Engineers, Great George Street, Westminster, S.W.1. (Sponsor, Institution of Civil Engineers). 5.30 p.m. Feb. 27

SPALDING, LINCS. The English Town: Its Continuity and Development. Exhibition. At the East Elloe Post-War Housing Committee, Holbeach. (Sponsor. BIAE). DEC. 21-30

WORKINGTON. Town and Country Planning Association Conference. Speakers, Mrs. Jean Mann and George Bull, Town Clerk, Durham. Jan. 13

The English Town: Its Continuity and Development. Exhibition. (Sponsor, TCPA). JAN. 8-13

# NEWS

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

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

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

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

The order made by the London County Council for the COM-PULSORY ACQUISITION OF THE OXHEY SITE, Watford, has been confirmed by the Minister of Health.

The Minister of Health has confirmed, with minor modifications, the order made by the London County Council last December for the compulsory acquisition of the Oxhey site at Watford for post-war housing. A public local inquiry was held by direction of the Minister earlier this year. The council decided in October, 1943, to acquire this site for development as a cottage estate. It is a little over 921 acres, and lies 15 miles from Charing Cross.

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SHOP FRONTS AND INTERIORS. The use and application of new materials, developed during the stress of war, will play an all-important part in the rebuilding of new Britain.

**ARCHITECTURAL WOOD AND METAL WORK.** The entirely new standards in conception and manipulation which can now be employed will have a marked influence on the trend of new designs and the plans of modern architecture.

**SHIP FURNISHINGS.** Here, too, the standards already set by Parnalls in the famous trans-Atlantic liners of immediate pre-war years, will be but the basis for post-war design and treatment.

**RESEARCH AND EXPERIENCE** in all the above subjects are available within the framework of this organisation, and it is not too early to plan at once, having regard to the restricted means which will be available.

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#### From AN ARCHITECT'S Commonplace Book

VIRTUE OF THE FEATURELESS FACADE. [From Our Building Inheritance by W. H. Godfrey (Faber and Faber)]. Let us now return to the problem of the old buildings that line the main streets of the original town. They can be divided roughly into three classes. First there is a good proportion of first-rate houses, built by prosperous citizens and designed in the best manner of their respective periods. These are of a type that call for protection in any event. . . The second category includes buildings of a similar type but of less ambitious design. . . . This type of building deserves preservation because it is the backbone of the street, it contributes the more numerous class that sets off the richer examples. A third type is the almost featureless facade of plain brick or stucco that represents the irreducible minimum of design. In themselves these buildings have no outstanding merit, but in the grand assembly of the street they furnish the foil for all that is of greater interest. . . . Such buildings can be replaced without serious loss as long as their successors are equally self-effacing. Their contribution to the general effect is one of unobtrusiveness—a quality that needs to be maintained, and the value of which the modern designer should be the first to recognize.

Following is an appreciation of our late W. P. KEEN from Wilfred Salter, editor of the Parthenon, the Journal of the Incorporated Association of Architects and Surveyors. May a fellow journalist be allowed to pay may a reflow journalist be allowed to pay tribute to the memory of your late Assis-tant Editor, Mr. W. P. Keen? The death at so early an age of one of the most talented of our small band of architectural journalists is a loss to the whole building world; for, great as were Keen's achieve-ments, it is safe to say that his unrealized potentialities were even greater. His was a mind of singular swiftness, clarity and penetration; a mind that went unerringly to essentials. At all times, too, his great gifts were at the disposal of us, his more pedestrian confrères. He was the first to proffer help and the first to give it—regardless of the expense to himself of time and trouble. "Kidneys," as he was affectionately known to all of us, was the possessor of much charm. But under his gay, apparently carefree exterior, there lay a deep seriousness of purpose, persistent idealism and complete integrity. Few but his intimate friends however, were aware of the wells of spiri-tual conviction from which his whole life was constantly refreshed. Many of us had not, alas! seen him for some time. Yet we instinctively divined the gallant fight he was putting up against the ravages wrought by military service upon a constitution never strong and always overtaxed. It is sad to think that we shall never again hear that bright, challenging voice; yet the memory of it tempers our present sorrow with a strange sense of assurance.

Even Hitler has not been able to knock many of our prison buildings about seriously; and IT IS A GREAT PITY—Mr. Herbert Morrison.

Mr. Morrison, the Home Secretary, was

Mr. Morrison, the Home Secretary, was speaking at the annual luncheon in London of the National Association of Prison Visitors. He said: Why builders of public buildings should build to last for all time I do not know. There are many schools in London and in the provincial centres that have been built most painstakingly by architects and engineers of former school boards, and present local authorities have them built so conscientiously that the beastly things still stand up and are quite unsuited for their purpose at the present time. As for the men who built prisons, they are an extraordinarily painstaking body of people. Even Hitler has not been able to knock

many of their buildings about seriously; and it is a great pity. Now the problem is how to get the men and materials to build new prisons in view of the demand for housing. I believe that one of the biggest single elements in prison reform is to destroy the present buildings as quickly as possible, and to build better ones.

At Rickmansworth, the digging of gravel should be continued to FORM A CHAIN OF LAKES—Longstreth Thompson.

LAKES—Longstreth Thompson. Rickmansworth Urban District Council has approved on general lines a plan for postwar development prepared by Mr. Longstreth Thompson, past president of the Town Planning Institute. Mr. Thompson recommends that the digging of gravel in the district should be continued so as to form a chain of lakes that will enhance the beauty of the area. An official of the Council told the Evening Standard: Digging will probably begin immediately after the war ends. We already have three lakes. This plan will extend them to make a chain 1½ miles long in part of the Colne Valley from just outside the shopping centre down to West Hyde, near Denham film studios.

The Government of Northern Ireland proposes to renew for a further two years the NEW INDUSTRIES DEVELOPMENT ACTS, 1937 and 1942.

The Acts authorize the making of grants and loans to enable sites to be obtained and premises to be provided for new industries and the exemption of such premises from local rates. The extension of these powers granted by the 1942 Act expired on October 31. When the Bill for renewal was read a second time in the Northern Ireland House of Commons in November, Mr. B. Maginess (Parliamentary Secretary to the Ministry of Commerce) said that the powers conferred on his Ministry by the New Industries (Development) Acts, 1937 and 1942, have necessarily passed somewhat into abeyance. Now the situation is changing; final victory is assured, and while there must be no relaxation of the war effort, the problems of reconstruction have been engaging their earnest attention. To meet those problems measures more comprehensive than that now before the House will have to be considered. This is not a moment at which to let fall from their hands any instrument which might be of service in helping them to meet the problems of the reconstruction and diversification of industry when they came upon them.



Waterloo Bridge now open to six lines of traffic, its full width, as compared with three lines on the old bridge. The building of the new bridge was begun in October, 1937, and has continued despite the difficulties caused by war conditions. But for the war the bridge would probably have been completed in 1940. The present parapet railings are temporary.



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#### National Property

This week's issue shows a number of examples of the houses and other buildings acquired by the National Trust since the war started. Above is Dinton Park, Wiltshire. This strictly classical house was built for the Wyndham family by Jeffry Wyattville in the neo-Grecian style and finished in the year of Waterloo (1815). There is something very pleasing and satisfactory in the simple severity of the facade, the clean cut window reveals and correct portico. The material used is the local Chilmark stone of a beautiful white texture. The interior is quite unspoilt with an ambitious central hall and staircase in the typical Wyatt manner, under a circular lantern. Much of the furnishings in the house are contemporary, as well as the steel and brass fenders, mahogany doors with bronze locks and other Dinton Park, which is now let to the Young Women's Christian Association as a holiday home, was given to the Trust in 1943, with Hyde's House (see p. 467), by Mr. Bertram Philipps.

The building over Westminster Underground Station of a million pounds block of offices is one of the suggestions for the IMPROVEMENT OF THE HOUSE COMMONS. OF

The suggestion is contained in the report, just published, of the Lords and Commons Joint Select Committee on Accommodation.

In the report it is stated that Sir Henry Badeley, Clerk of the Parliaments, questioned about accommodation in the Victoria Tower, said that, so far as he knew, the higher rooms, "perilously near the North Pole," have never been occupied. There are some 62 rooms in the tower, 48 being used for storing documents. Eight rooms are occupied by Acts of Parliament. The higher ones are reserved for general election ballot papers. Messengers generally are badly housed, declared Sir Henry. Something ought to be done. He told of a "miserable little kennel hole" occupied by some of them. But none of his messengers is as badly housed as the personal messengers of the Lord Chancellor, who lived "in a bit of a passage." He agreed with Lord Schuster that the rooms occupied by the Law Lords, which were smashed in the 1941 raids, are "not fit to be inhabited by anyone." Sir Henry added that he was sorry for typists working in ground floor rooms. for typists working in ground floor rooms. Cmdr. Stephen King-Hall, M.P., suggested the erection of an office block over minster Underground station, and connected with the House of Commons by fast-moving escalators. His scheme contemplates staircases moving at 10 m.p.h. from which members could step on to others travelling at 20 m.p.h. He thought about 200 rooms would be sufficient. Each room would be able to accommodate three or four persons. would be a contrivance by means of which

one man in the chamber, "by merely press-ing things like typewriter keys," would be able to indicate the name of a speaker. He pictured an eight- or ten-storey building, the top floor devoted to bedrooms. He did not think the cost should matter, but was prepared to say it might cost a million." In a few years, Cmdr. King-Hall declared, In a few years, Cmdr. King-Hall declared, many hundreds of people would be wanting to hear debates. On the whole, he was opposed to broadcasting of Parliamentary debates, but he saw no objection to a television theatre, to hold 1,000 people. It could be built under the Thames, air-conditioned dark like a cinema and in every retioned, dark like a cinema, and in every respect form part of the House from the point of view of discipline. Admission would be by ticket, and the Gallery rules would apply. Viscount Mersey thought the proposal would prove extraordinarily expensive. chairman, Earl Stanhope, pointed out that the theatre could even be built under the Commons Chamber.

The Competition for the proposed Women's Hospital at Golders Green, N.W., has been WON BY W. F. HOWARD, F.R.I.B.A., of Enfield, Middlesex. The other awards were: Design placed second, Nicol, Nicol & Thomas, A.R.I.B.A., in association with Donald G. Walton, A.R.I.B.A., of Birmingham; design placed third, Herbert H. Clark, F.R.I.B.A., of Reading, Berks. The competition was promoted by the Industrial Orthopædic Society, and Sir Giles Gilbert Scott, R.A., was the assessor. There were seventy-two competitors. The site of the proposed new hospital is Ivy House, Golders Green, home of the late Mme. Pavlova.

The Standing Committee on National Parks urges INSTALMENT OF FIRST SOME HALF-A-DOZEN PARKS NATIONAL at the end of the war. After these six national parks have been established, states the committee, whose chairman is Sir Norman Birkett, in a pamin a pam-should be phlet just issued, three more should be added each year—one in the North, one in the South or West, and one in the East. As obvious areas for national parks the pamphlet names the Lake District, Snowdonia and the North Wales mountains. the Peak District with Dovedale, the North Yorkshire coast and moors; the Pembroke coast, part of the Cornish coast, Exmoor and Dartmoor. Taking the Lake District, Snow-donia and North Wales mountains, The Peak, North Yorkshire coast and moors, parts of the Cornish coast, and Exmoor and Dartmoor as examples, the Committee would like to see a National Commission appointed to take over stretches of country which would be things of beauty and joys for ever. Wherever possible, these parks would become even more agricultural. Out would become even more agricultural. Out of the 58,000 square miles of England and Wales, it is suggested that a reasonable aim would be to have 5,000 to 6,000 square miles in about 20 national parks. Present ownership of the land thus taken under the State's shelter would remain except in special cases where, for example, access to open country was at stake. Farms, villages open country was at stake. Farms, villages and roads would not only be preserved, but would be given every opportunity of developing from the point of view of practical agriculture. The land, says the Committee's pamphlet, would be used. Britain will need these breathing spaces, says the report, because "the land is the basis of man's physical and spiritual life." man's physical and spiritual life."

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The Federation of Master Builders describe the pressed steel house as A GHASTLY MISTAKE. The federation says that if the building programme after the war must be started with some hundreds of thousands of two-bedroomed bungalows capable of being removed, to give place to two-storeyed houses with more accommodation, expert builders could produce a building which could be taken down and nearly every component re-erected in a larger type. Alternatively they could build on a system which could have a second storey added

### THE NATIONAL TRUST

THE year 1894—the middle of a decade not particularly associated with concern for the æsthetic well-being of the British public-is a far cry from 1944. Yet, precisely fifty years ago the National Trust was conceived and it was brought to birth in 1895. Next year it will celebrate its Jubilee. How then to-day should we assess its development? Not surely by just quoting figures of acreage-1924 just over 10,000 acres, 1934 over 30,000, to-day approximately 110,000, with restrictive covenants over another 35,000-nor even by recording that since the present war began, National Trust acreage has actually doubled in size. Mere accumulation of acreage is certainly not the Trust's primary function. A better indication lies perhaps in the great diversity of the Trust's properties. It can boast some of the most spectacular wild open spaces, mountain tops, downlands, coast lands, sea-girt islands and nature reserves. It holds prehistoric earthworks and stone circles, Roman villas and encampments; mediæval barns, mills, ruined castles and abbeys. It owns cottages and ancient farm houses, historic and literary shrines, manor houses, town houses and some of the greatest of our country palaces, with their collections of pictures, furniture, china and other treasures.

To-day there are perhaps two problems pre-eminently the concern of the amenity conservationists generally, and so of the National Trust. These are National Parks and the future of our greater Country Houses. Never before has there been more vexed ventilation in Parliament and Press of the recreational needs of the people after the war. There is no disputing that with the promised facilities forthcoming upon the return of peace, such as holidays with pay, will coincide a popular demand for access to what hitherto have been the preserves of the privileged. In this respect it should be remembered that the National Trust, a body enjoying no State support, although several unique statutory privileges, and solely dependent for its existence upon the charity of its subscribing members, has paved the way. The areas to-day officially adumbrated as National Parks already have their nucleus in properties laboriously acquired by the National Trust, especially in Snowdonia, Dovedale, Pembrokeshire, Dartmoor and above all in the The Trust has in consequence acquired a unique experience in the management of such areas and the Government will surely do well to call upon this experience if these areas are to be widely and wisely developed.

The problem of the future use of large Country Houses is of more recent origin. We must always bear in mind that the best of these architectural specimens were designed first of all to be lived in and only secondly to be admired, and the National Trust has always, and rightly, set its face against their purely passive sterilization as dead museums, especially in out of the way districts. This does not of course imply that the rarest of them should be lived in by just anybody or anything. Whatever our political inclinations, we cannot deny

that the old families, so long associated with these houses, probably afforded the most satisfactory solution of user in so far as their architectural fabric and artistic character are concerned. But whether we applaud or deplore the impending divorce, social conditions are compelling the individual families to leave their ancestral homes. For the time being the National Trust, in return for their donors' generosity, provides the only compromise in allowing them virtually to caretake their former homes, but it is already encouraging suitable educational or cultural establishments to tenant an everincreasing number. This is perhaps the happiest solution, whereby the principal showrooms with their chief contents may be reserved inviolate for the visiting public to appreciate and enjoy, while the rest of the accommodation may readily be devoted to the communal and institutional requirements of the future.



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

THE POSITION REVISED

We have indeed, as Miss Megan Lloyd George complained, "been led up the garden path to find no Portal house at the end of it." Coming on top of the Greek affair, even the most complacent are beginning to murmur, and to wonder why a material now apparently needed almost exclusively for war purposes should have been chosen as the main constituent of the Portal design.

What is to happen now about those temporary houses? The story is that the other types of temporary bungalows developed by private enterprise are to go ahead—the Arcon, the Uni-Seco, the Tarran; with what speed has not been revealed, though, according to Mr. Sandys, "it will be possible

to start deliveries in limited numbers during the early part of next year."

Other types of temporary houses are now being considered. There is the Phœnix designed by Mr. J. W. Gibson, of Mulberry harbour fame, built, I understand, of light tubular steel frame and concrete slab cladding. There is the Spooner (Dri-built) house of wood frame, and the Universal and the Orlit, both of steel frame. Examples of all these, according to Fleet Street snoopers, are now being erected on the Tate Gallery site with great secrecy.

Added to these possibilities we may get temporary houses from the States, whither a Mission has lately departed to make investigations. Canada has been quoted as another possible source, and Swedish factory-made timber houses have been proposed, though these would be permanent.

The first of the Rep-Prefab-Perm trinity also seems to be in a tangle. This, however, may now be unravelled by various means. First MOW is to be the boss ministry responsible for concerted action, and an inter-departmental London Repairs Committee is being set up, led by Sir Trustram Eve, which will contain a statistical branch, and maintain direct contact with the local authorities through specially trained liaison officers.

An experiment is about to be undertaken by which one of the big contractors will have control over a number of smaller contractors, and will organize the work in a particular region as one job, ordering materials in time and in bulk, and keeping a careful check on progress. The object of the experiment will be to see if private enterprise can organize better than MOW. The comparative results should be interesting.

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The old group system of the linking of small builders by a main contractor, who takes 24 per cent, from the small man for his pains, has not worked too well, apparently, and has been unpopular. It remains to be seen whether the group system will work better on the bigger scale. The small builders, meanwhile, are to be organized into working parties by MOW. Every firm, however small, even if it employs only one operative, is being invited to join one of these parties, each of which will contain some 150 operatives (say 10 to 20 contractors). A separate contract will be made with each firm. and a Clerk of Works will run each team. Over 50 such groups are already at work, and the scheme, it is said, is proving a successful method of using the small builder.

Materials on the whole are not short. though some of them are. board is one of them, and the explosion at Burton-on-Trent didn't help matters. Slates, too, are scarce. Hard plaster is also limited, and the use of lime plaster in its stead is being encouraged. Clay tiles are very few, and concrete tiles must now be accepted by local authorities. Glass is sufficient, but only if 50 per cent. of it is accepted in its rolled (clouded) form. There is a bottle-neck in doors and windows, though this trouble will be eased by the mass-production of standard patterns now going ahead. Distribution is to be improved by the organization of builders' merchants, who will now be compelled to serve only certain Boroughs allocated to them. Materials Officers will set up clearing houses.

With better organization and with the increase in the labour force on London repair work from 50,000 to 130,000 since the beginning of September (over a third of the total building labour of the country), Mr. Sandys' repair burden should be lighter than his predecessor's. Nevertheless, the Rep, Prefab and Perm programme taken as

a whole is still badly confused in itself, quite apart from the chaos which will result from inadequate planning powers. One wonders how the new Minister is going to be able to tackle the job properly even with such a father-in-law behind him. The difficulties are obvious, and begin with politics and money. If he fails, incompetence will probably not be the cause, but the impossibility of running an engine whose cylinder explosions don't synchronize.

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No doubt with typical British compromise we shall muddle through in housing-to more muddle. But at certain melancholy moments one wonders whether the interests of minorities and the majority are not so opposed that a time will come to present political truce when an indestructible force will meet an immovable object. Then, as the howling schoolboy has told us, one thing can happen—an indescribable crash.

#### OUR BUILDING INHERITANCE

I have been reading Walter H. Godfrey's new book, Our Building Inheritance (Faber & Faber, 10s. 6d.), and enjoying the tolerant wisdom of text and the 104 beautifully selected photographs. Walter Godfrey is one of the few scholars I know whose massive learning does not prevent him from writing about architecture as if he

The book is a plea for the sensible treatment of the buildings shown in the pictures-sensible treatment meaning preservation, but preservation for use. Mr. Godfrey contends that a substantial part of Our Building Inheritance is in remarkably good order, and will last as long as we like, provided it is properly maintained and equipped for present-day conditions. In other words, why send your grandfather clock to the scrap-heap or the museum when a little expert attention will enable it to tell you-and your grand-childrenthe time, as well as any mass-produced time-piece of the present day?

This is a good argument—a middleway, middle-brow, practical argument. Its effectiveness involves, above everything else, the employment of architects to examine and report on houses which a Whitehall rule-of-thumb would condemn out of hand. If the buildings of the English countryside are to be considered as anything other than mere obsolete forms of shelter, they must have the balanced, critical consideration which only an architect can supply.

**ASTRAGAL** 



### LETTERS

Major Ian C. Lea, R.A.

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

Herbert Jones

Gilbert Fraser, M.C., F.R.I.B.A.

W. R. Chown

(Managing Director, F. Hills and Sons.)

### The Small Man's House

Sir.—I have recently reached Holland at a fairly rapid rate from France and Belgium. What a striking difference to the eye the modern Dutch house presents compared with the British. How pleasant to look at when one remembers the rows of ugliness in so many of our big cities.

The Government is going in for a vast and urgently needed building programme. If the serving soldier does not tell the Government what sort of house he wants, he will get the type of house the Government thinks he ought to have. It will be too late to do anything about it unless he does it now.

The main points which strike one forcibly are:—

British sanitation, plumbing and lighting

British sanitation, plumbing and lighting are. in every way, superior.

The Dutch are far in advance of us in their knowledge of how to make a house look beautiful both outside and in, and in how to make a collection of houses look attractive as a whole. There are no signs of jerry-building or shoddy material, though perhaps the roof design is not so solid as ours nor the walls so thick. The workmanship and materials, however, are both good.

both good.

The modern Dutch home is designed to admit the maximum of sun and light. Large plate-glass windows, ground-floor rooms divided by sliding doors so that the ground floor can be one or two rooms at will.



From Our Building Inheritance. Parts of High Street, Lewes, a continuous line of building principally of 18th century character on both sides of the street for 4,000 feet. The church is St. Michael's. See Astragal's note.

The sliding doors disappear into the walls, which also are fitted with built-in cupboards. Outside, small but lovely gardens, and no two alike. External paintwork and colouring is refreshing, attractive, spotlessly clean, and each is different.

and each is different.

I am not among those who think that everything which is not British is superb, nor do I want to see Holland transplanted to England; but I shudder when I compare some of the small man's housing estates in England with what is available over here and for the same man. Send over quickly open-minded people who will have the say in the matter to see how nice a working man's home can be made to look in design and appearance, and then let them incor-porate the best of both countries in the post-war building plans.

IAN C. LEA

### London Repairs

SIR,—There has been a spate of articles, letters, reports, recommendations and apologies in connection with the repair of wardamaged London houses, but nowhere has the root cause of the delay and mismanage-ment been properly located.

The responsibility for the repair of some

1,000,000 houses has been placed on the local authorities. This means that 95 local local authorities. This means that 95 local authorities have been forced to assume the role of master builders. In practice this means, of course, that this function is discharged in each case by the borough engineer. No one has a greater respect than I for the qualities of the borough engineer. In normal circumstances he has a multitude of tasks and is probably the most hard worked official on the council's staff. wartime, with a depleted staff, this is doubly true. It is no disparagement of his virtues, therefore, to suggest that he is fitted neither by training nor experience to fulfil

the functions proper to a master builder in control of numerous sub-contractors.

The organization of the practical execution of building work is a specialized job and no one can replace the experience of the master builder himself. This experience exists and is available everywhere, but it is not being utilized. but it is not being utilized. Instead the master builders themselves are employed in the subsidiary capacity of sub-contractors and compelled to use whatever labour, skilled or otherwise, that is allotted to them.

It is scarcely surprising, therefore, that instead of an organized and disciplined attack on a pre-scheduled task, there is a hand-to-mouth scramble by ill-balanced gangs with no clearly defined objective. What skilled labour there is will not unnaturally be found on those jobs where the builder is working to a contract price.

Supervision is not so much absent as

I know of one clerk-of-works whose previous experience has been as a foreman shop-fitter. However good a crafts-man he may be, or however capable of supervising high-class joinery work, it obvious that he is simply not equipped to supervise jobbing house repairs. This is not an isolated case, and it means that work is in the charge of supervisors who are in-capable of knowing whether the work is proceeding at a satisfactory pace or in the proper sequence.

proper sequence.

The remedy is the short and obvious one of placing the control of building operations under those qualified by training and experience to control it. The especial skill necessary to direct the execution of building work, specify exactly what needs to be done, in what manner it shall be done, and to ensure by personal supervision that it is in fact so done, is all part of the normal duties of the architect. Yet if there is one duties of the architect. Yet if there is one class of skilled knowledge that has been consistently ignored, it is that of the architects. I understand that the RIBA has prepared a list of its members who are in a position to help, but only a very small proportion has been utilized by the authorities.

The master builder, whose especial skill lies in the proper organization of labour and materials necessary to execute building work in the most effective and economical manner, is accustomed to working under an archi-tect's direction. Both know each other's problems and functions. Between them there is no building problem that cannot be successfully overcome. There is no other way of ensuring a properly concentrated attack on this urgent repair work.

I am sure that the present position is only tolerated by the public and its Members of Parliament simply because of a lamentable ignorance of how building operations are normally carried out.

Chingford

R: BLYTH WINTER

### Protective Architecture

SIR,-No doubt Mr. John Gloag is re garded by many people as an intellectual leader, but to me his article is a mask for the spiritually defeated, for those who are convinced of the imperfectibility of man.

For Mr. Gloag accepts war as the in-evitable condition of living; in the im-mediate future war is to be a periodical visitation, ultimately to develop into per-

manent war.

Going underground means taking our bodies underground: we take our minds with us. Then we say goodbye to the sunlight, the flowers and the seasons. because when permanent war arrives we shall be underground the year round. And unless we take the cows and sheep, the

swine and the hens, we shall live on spam and fungus. But perhaps Mr. Gloag envisages the army of the days ahead to be those who remain on the surface to feed those below. Perhaps there will be a selective test to determine who shall go down and who shall stay up to face the jangled music of the spheres? Your editorial note suggests that future wars may be seen that the whole of the spherest programmer. change the whole character of civilization Living in permanent war may well change us physiologically. Is it lunatic to face

Furthermore, Mr. Gloag seems to miss the moral of his own observation; that new wars bring new weapons, and those weapons will be designed to defeat defensive measures, such as going underground.

In the middle of his article Mr. Gloag provides a sort of anti-climax: "If the British

Empire is to survive," we must presumably study fortification here. Either the army in this crazy blue pencil world of the future will be on the surface, or he reckons that some Singapore will be liberated (of whom?) by remote control situated deep in the heart the Cotswolds.

Why not say War is Hell; to Hell with War, and do something about it? Then we need ask architecture for no more protection than that provided against the elements by our brick box with a slate lid in which we were born.

Padbury. Buckingham

HERBERT JONES

### Thirty-nine Years' Old Prefabrication

-Astragal's constant reference to the Churchill House and your many solutions of the problem have influenced me to send you this postcard photo of the Hollow Concrete Block House designed and built by me for some interested clients at Letch-worth Garden City in 1905. It may rightly be claimed to be a prefabricated house.

The hollow concrete blocks were made on the site of the house by a portable hand power machine from the sand and gravel on the site—the sand and gravel having a cream colour which remained in the block when dried out. The whole of the roof when dried out. The whole of the roof timbers, doors, windows, floor joists were cut to the required sizes in Liverpool and fixed in the building without any serious adjustment. The internal services were supplied to fit in with little extra labour. The roof tiling was of a brindle colour. I saw the house about twenty years ago, and it was in perfect condition.

Unfortunately my office was completely burnt out in the blitz of May, 1941, and I have lost all the records and plans. Letchworth forty years ago was just agricultural land as will be seen from the photograph, and on my last visit a small city had grown up round the cottage. I am of the opinion unless it has been hit by a V2 that cottage is standing to-day. It cost one hundred and fifty pounds (£150), and won the first prize for a cottage of the type asked for in the conditions of the competition.

Liverpool

Manchester

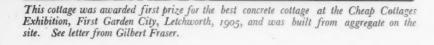
GILBERT FRASER

### Lessons from Northolt

SIR.—I can assure Astragal that window manufacturers have not been idle, and my company have designed, and are ready to put on the market, a window which will answer all his criticisms.

There are many technical difficulties in double-glazing with a vacuum filled space between, and we have adopted a simpler method of employing double-glazing with de-hydrated air hermetically sealed inside the glass. the glass.

W. R. CHOWN Managing Director F. HILLS & SONS, LTD.



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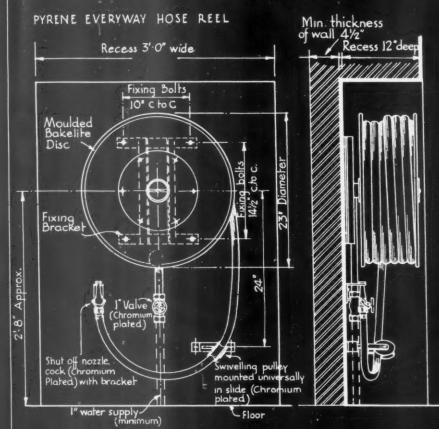
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FRONT ELEVATION. SIDE ELEVATION

PYRENE EVERYWAY HOSE REEL USES.

for Theatres, Industrial Blgs, Cinemas, Scho Municipal Blgs, etc Schook, ADVANTAGES,

- 1. Hose can be run out in any direction
- 2. Minimises obstruction (overhang 11")
  3. Distribution of weight & direction of pull gives minimum leverage on the wall.
- 4. All steel parts parkerized to resist corresion.

WEIGHT, with 60 feet of 3/4" hose, 70 lbs + FINISH,

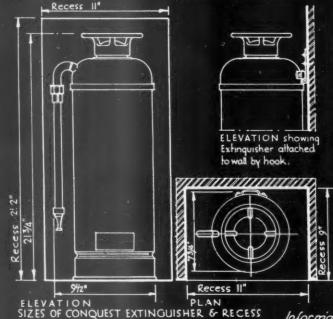
Colour, with Chromium plated nuts, centre & fittings, or, primed one coat for finishing by the General Contractor

MATERIALS, 1. Side discs, Moulded Bakelite

- 2. Brackets, mild steel, parkerized
- 3. All water fittings, gunmetal 4 Bolts, mild steel, parkerized

- 5. Piping, between valve & reel, steel 6 Swivelling pulley, gun-metal-casting in colour & Chromium plate
- 7. Slide & pulley housing, brass chromium plated.
- 8, Hose, 2 braid corrugated in lengths of 60'0" to 100'. 6" of 1" bore or 60'. 0" to 150'. 0" of 34" bore

CONQUEST SODA-ACID FIRE EXTINGUISHER



REQUIREMENTS of the Fire Offices Committee FORTABLE FIRE EXTINGUISHERS:

Portable Chemical fire Extinguishers having an aggregate water capacity of 2 Imperial gallons for each 250 sq.yds or part there of but not less than 4 imperial gallons, (eq. two-2gall capacity extinguishers) on each floor, the water capacity of an extinguisher to be not less than I imperial gall. & not more than 3 imperial gallons

NOTE A. "Chemical Fire Extinguisher" includes both the Soda-Acid type (e.a. Gonguest) & the Foam type (e.a. Phomene) The Soda-Acid Extinguisher is advised for all ordinary fire risks, & the Foam type where oil & spirits are involved

NOTE B. "Special-Liquid Extinguishers" (eq. Pyrene Fire Extinguishers) are approved by the Committee as an alternative to ordinary Portable Liquid Chemical Ext." on the basis of one Special Liquid Extinguisher in lieu of one 2-gall. Ordinary Chemical Extinguisher, provided at least 50% of the Ext." on each floor are of the latter type.

ELECTRICAL RISKS,

For Dynamo houses, & rooms in which celluloid or spirit is stored or used Special Liquid Type Extinguishers (eq. Pyrene Extinguishers) are specially approved when installed at the rate of 3 Extinguishers to each 250 sq. yards or part there of but not less than 6 Extinguishers to each floor.

Information from The Pyrene Company Ltd.

NFORMATION SHEET: FIRE PROTECTION: HOSE REEL & EXTINGUISHERS SIR JOHN BURNET TAIT AND LORNE, ARCHITECTS, ONE, MONTAGUE PLACE, BEDFORD SQUARE, LONDON W.C.I.

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#### INFORMATION SHEET

• 951 (105 Revised) •

### FIRE PROTECTION

Name of Product:

" Pyrene "

Types Illustrated : "Everyway" Hose Reel, "Conquest" Soda-Acid

Fire Extinguisher,

2 gallons capacity

#### Description:

"Everyway" Hose Reel of patent design, which enables hose to be run out easily in any direction but eliminates complication and extra cost of swinging or swivel joints. To operate, open valve with one hand, lift nozzle with the other, proceed as far as necessary towards the fire, open nozzle and direct jet at base of flames. Shut off nozzle to save unnecessary water damage when fire has been extinguished.

This Reel, with Bakelite end plates, is a simple and straightforward design and may readily be incorporated in the scheme of decoration.

#### "Conquest" Fire Extinguisher:

The C.I model shown is brought into action immediately upon being turned upside down. The jet can be directed at any required angle. When fire has been extinguished jet may be stopped by again turning Extinguisher right side up. With this design there is no possibility of creeping, i.e., the gradual oozing out of the solution. Made in lead-coated steel and in copper of 18 and 16 s.w.g. Also made in 10-pints capacity.

Several other types of "Conquest" Soda-Acid Fire Extinguishers are also available, including three break-bottle types, viz., the No. 3 cylindrical, plunger operated, No. 4 conical, plunger operated, C.15 operated by a knocker on the side of the Extinguisher.

There is also another turnover operated type "Conquest" Extinguisher, the C.5 model. This uses a non-corrosive acid charge.
All "Conquest" Fire Extinguishers are approved by the Fire Offices' Committee and tested to 350 lbs. pressure per square inch.

Name of Manufacturers:

The Pyrene Company, Ltd.

Addresses :

Head Office and Works Brentford: Great West Road

Telephone:

Ealing 3444

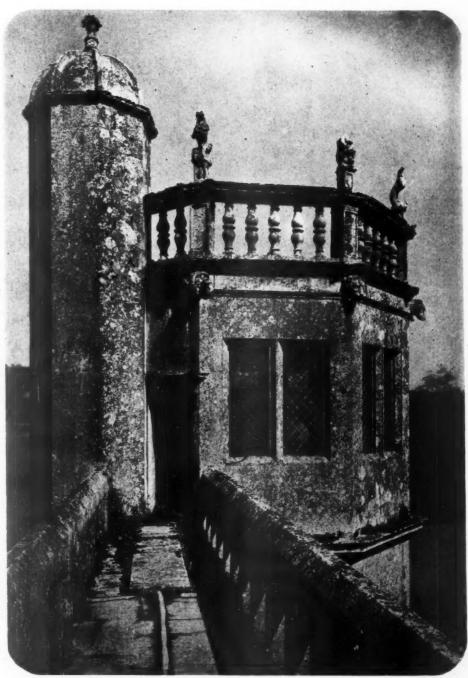
Glasgow:

136 Broomielaw

Telephone:

Central 8461

Sir Tow Will mide and pure work Flei dom half Sir William Sharington's Tower at Lacock Abbey, Wilts, dates from the very middle of the 16th century and is a rare specimen of pure Italian Renaissance work, unaffected by the Flemish influence that predominated in the second half of the century.



Country Life

### NATIONAL TRUST

### PROPERTY, ACQUIRED DURING THE WAR

On this and the following pages are illustrated some of the old buildings acquired by the National Trust since the war began. Not all of them have been referred to. Nor do buildings alone by any means constitute the bulk of the Trust's wartime acquisitions, although within recent years the public has come to realize that the future of many

of the larger country houses may fall to the Trust's responsibility.

Sir Richard Acland's gift of some 17,000 acres of Exmoor and Devon property, Beatrix Potter's bequest of over 4,000 acres in the Lake District, 900 acres of farmland along the Roman wall, Fulwood Holmes Farmland in the Peak District, Bradnor Hill, Hereford-

shire, 92 acres of coastline at Mortehoe, North Devon, are only some instances of how the Trust is developing.

The National Trust is moreover a charitable organization enjoying no Government subsidy, but relies upon its membership subscriptions with which to carry on its work.



Country Life

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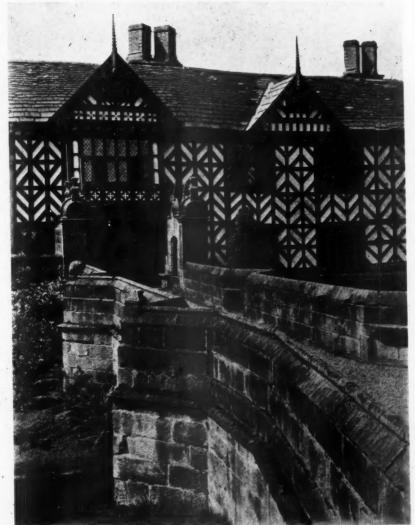


Above, Lacock Abbey, Wilts. A view across the River Avon of the east elevation, and to the left, beyond Sharington's tower, of the south front. Lacock displays a chronology of styles from the 13th century conventual remains down to 1828, when the successful oriel bays were added to the south front. After Sharington's Renaissance work, the next phase is Sanderson Miller's pre-Strawberry Hill Gothic west front and hall, dating from 1753-5. Left, a stone table in Sharington's Tower. The carving is absolutely Italian in feeling.



Country Life

Above is the west and entrance front of Blickling Hall, Norfolk. This great palace in red brick of James I's reign, was built for the Hobart family by Robert Lyminge, master builder of Hatfield. The late Lord Lothian, Ambassador to the United States, bequeathed it to the Trust. Right, Speke Hall, near Liverpool, dates from 1530-98. It is of rich half-timber and "magpie" work and is built round an open court. It is leased to the Corporation of Liverpool for 99 years.



Country Lif



Country Life

On the facing page is Great Chalfield Manor, near Chippenham, the superb late Gothic home of Thomas Tropenell, Esq., M.P. and wool merchant, who built it in the late 15th century. Right, Great Chalfield with its oriels and per-Might, Great Chaiffeld with its oriets and perpendicular windows seen from the moat, for it is still a semi-defended manor. Presented by Major R. Fuller. Below, the Court, Holt, in the same nieghbourhood. Its highly wrought Renaissance facade was contrived likewise for wroth marchant about the way 1700. Presented a wool merchant, about the year 1700. Presented by Major T. E. C. Goff.



Country Life





Country Life





Above, Gunby Hall, Spilsby, Lincolnshire, an East Anglian version in red brick with stone quoins, of the same period as the Court, Holt, namely, 1700. Built for and still inhabited by the Massingberd family. Left, the stable entry, Gunby. The clock-cote (1778) was brought from Hampshire and erected here in 1917.

NATIONAL TRUST PROPERTY



Picture Post



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Times

Top, Hyde's House, Dinton, Wiltshire, incorporating an earlier building in which Lord Chancellor Clarendon is reputed to have been born. The facade, in the later Wren manner, dates probably from 1720-30 and may actually be the work of the Bristolian, Michael Sidnell, following the guidance of James Gibbs's Book of Architecture (published 1728). Bottom, Chipping Campden Wool Market Hall, a Jacobean structure resting upon open arcades in the High Street. Purchased with the help of the Midland Counties Fund.



Left, St. John's, Jerusalem, Sutton-at-Hone, Kent. Ori-ginally a 13th century Commandery of the Knights Hospitallers. The Priory Chapel (1234) still remains. The illustration shows the semi-moat and the early 18th cen-tury wing. The historian of Kent, Edward Hasted, lived here. Below, Bank House, Wisbech, circa 1720, with flanking Victorian wings. This rather severe East Anglian elevation conceals exuberant wall plaster work in the rococo manner.

Picture Post





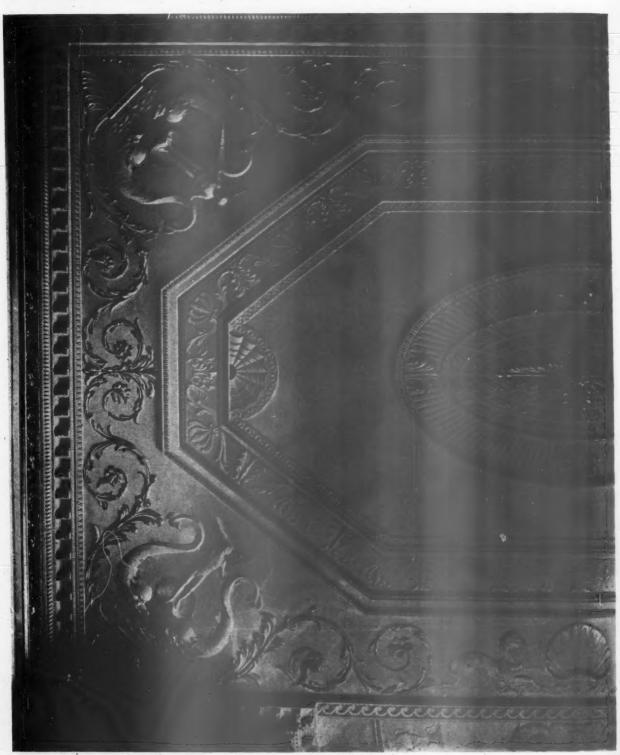
Country Life

Above, the coach house in the basse-cour at Wallington, Northumberland, the home of the Trevelyans. The stable block was added about 1737 and the cupola was designed by the 1st Duke of Northumberland. Below, left, Wallington, dating from 1688. Below, right, the south corridor, showing some of the rich plaster treatment carried out by a colony of Italian workmen in 1740-42. Presented by Sir Charles Trevelyan, Bart.



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Country Life

On facing page, an Adam ceiling at Hatchlands, the house transformed by Robert Adam for Admiral Boscawen, 1759, and possibly the architect's first work. Right, West Wycombe Park, Bucks, interior of the south colonnade. Below, the south front. The house was built by the cognoscente, dilettante, Sir Francis Dashwood, about 1765, and presented by his descendant, the present Sir John Dashwood, Bart.



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NATIONAL TRUST PROPERTY

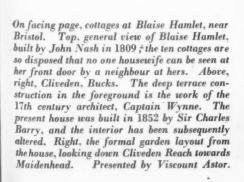
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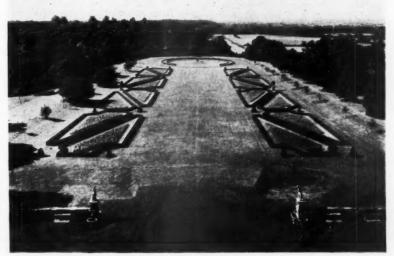


Times





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#### INFORMATION CENTRE

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

### STRUCTURE

Shell Concrete

SHELL CONCRETE CONSTRUCTION. K. Hajnal - Konyi. (The Architects' Journal, September 21, 1944, pp. 211-219, see also pp. 206-208.) New type of reinforced concrete roof construction (System Zeiss-Dywidag), consisting of thin shell and stiffening members at edges, vaults and domes. Particularly suitable for covering large areas with-

out intermediate supports.

out intermediate supports.

The first part of the article deals with barrel vaults. The characteristic feature of barrel vaults in shell construction is the transmission of loads in the direction of the generating line which is not possible in vaults in traditional materials. For this reason only a small increase in dead weight. vaults in traditional materials. For this reason only a small increase in dead weight is required for an increased span. The application of the system is illustrated by many examples of different types, such as market halls, hangars, garages, stores, factories, etc. Extensive tests have proved the great strength of the system and its the great strength of the system, and its excellent resistance to fire has also been demonstrated. It allows very favourable arrangements of roof lights.

arrangements of roof lights.

The second part shows the development of domes. Domes of surprisingly large spans were built long ago. The span of the Pantheon in Rome (140 ft.), erected in the first century A.D., was exceeded in solid construction only in our century. The weight of a dome in shell construction is only a small fraction of that of a dome in traditional materials or even in reinforced concrete of the usual type of construction. The largest solid domes ever built are the three domes of 248 ft. span of the Market three domes of 248 ft. span of the Market Hall at Leipzig. Another outstanding example is the Market Hall at Basle with a span of 197 ft.

Stressed-Skin House

Jicwood STRESSED-SKIN (The Architects' Journal, December 14. 1944, pp. 447-450, and other journals). Experimental house of stressed skin construction near Weybridge. Walls 15 in. thick of plywood skins, enclosing core of expanded rubber plastic.

The structure of the house is based on the experience gained in aircraft and other war-time construction. The load bearing walls are built in units with an outer and inner skin connected by a continuous core which prevents buckling of the skins. No addi-No addi-ed. The tional vertical supports are required. The material used for the skins is plywood throughout, but a large number of other infoughout, but a large number of other materials (asbestos, cement, aluminium, etc.) might also be used. The present core is expanded rubber, and this could be substituted by any expanded compound or waste material, such as paper and resin.

Non-load bearing partitions may have purely nominal skins or veneers such as thin

ply or cardboard to protect the core surface. The core itself is strong enough to carry loads required for partitions. The core material is pressed in small sections, with a maximum size of 8 ft. × 4 ft. and then jointed to form larger sections such as whole walls. The panels are made up into nine sections in the factory, and include the

wall, floor and roof sections.

The roof is supported on box beams (6 in.  $\times$  3½ in.) with ½ in. plywood sides, and is

glued to the beams on the site.

The floor has an extra ¼ in. plywood top skin to provide against abrasion. Overall thickness of outer walls, roof and floor is  $1\frac{1}{6}$  in., the skins being  $\frac{1}{6}$  in. except in the floor. Partitions are 1 in. thick, with the same in skins.

Welded Steel Frame Hut

A NEW TYPE OF HUT INCORPORATING WELDED STEEL FRAMES. S. R. Sparkes and G. M. Cornfield. (The Welder, January-June, 1944, pp. 3-5.) Walls and roof of  $1\frac{1}{2}$  in. cement mortar with embedded steel mesh, supported on ridge type portal frames with welded eaves joints.

This type of hut has been developed by the MOS PAD Department for use as gas cleaning stations. The design, which has been called Padmos, is adaptable for day nurseries, canteens, living quarters, storage huts, garages, and so on. The hut storage huts, garages, and so on. The hut consists of portal frames of 16 ft. span at 4 ft. 10½ in. centres, with sheets of Hy-rib spanned between. The frames are made up of 3 in. by 1½ in. with 4 lb. RSJs, and are delivered in two portions, each weighing about 0.7 cwt. Their light weight and the simple apex joint make for easy erection. The rendering is applied in three coats.

The total weight of steel per sq. ft. of floor area is 3.7 lb. This is just over half the weight of huts of the semi-circular corrugated steel sheet type. Increased thermal insulation can be provided by means of fibreboard lining inserted between the steel frames of the hut, and steel windows can be fitted very simply.

### MATERIALS

Pitch Mastic Flooring

MASTIC PITCH War FLOORING. Emergency British Standard 1093: (British Standards Institution, 2s. 0d.): Alternative to mastic asphalt

for flooring.

This Specification was originally prepared at the request of MOW arising from the necessity of using alternatives to the imported materials specified in previous specifications for the asphaltic cement. The most suitable alternative was found to be coal tar pitch, which is the solid or semisolid product remaining after the distillation of tar produced as a by-product in the carbonization of coal.

Pitch Mastic Flooring

PITCH MASTIC FLOORING INCORPORAT-ING LAKE ASPHALT. War Emergency British Standard, 1177:1944. (British Standards Institution, 2s. 0d.) Alternative to mastic asphalt for flooring.

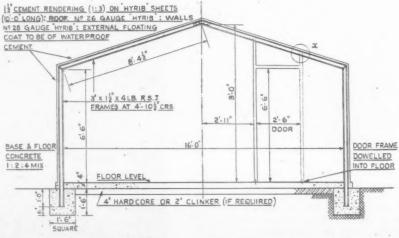
This Specification has been prepared to provide for a pitch mastic in which the binder consists of a combination of coal-tar pitch and lake asphalt. It is intended for use as an alternative to pitch mastic flooring as covered by BS 1093. Lake asphalt is an asphalt which—as formed in nature is in a fluid condition.

### LIGHTING

New Light Sources

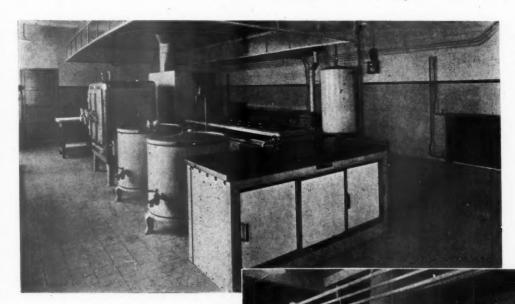
RECENT DEVELOPMENTS IN LIGHT Sources. P. S. Miller. (Electrical Engineering, April, 1944, p. 126.) Review of new lamp types. Data on operating characteristics.

There have been a number of papers lately on new light sources (see previous



Section through a new type of hut incorporating welded steel frames. Walls and roof are of cement mortar on steel mesh. (No. 1719).

# PLANNED & EQUIPPED



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references). The present note is thorough, objective and informative, though much of the data is not of immediate interest to

designers.

Reference is made to arc lamps, tungsten types and discharge lamps (including fluorescent, as well as infra-red, ultra-violet and sodium). There is an especially interesting commentary on the germicidal lamp development which appears to impinge directly upon the architects' work. Data are quoted to illustrate its value for sanitary ventilation and other similar uses in homes and public buildings.

Some of the incidental notes are worth a

reference. Before the war some passing ference. Before the war some  $\sqrt{9,000}$  different types of lamp were made. The smallest, for surgical work, was less than  $\frac{1}{10}$  in. across and  $\frac{1}{2}$  in. long; the largest was a 50,000 watt unit, with a bulb

20 in. across.

1723

Reading Lamps

THE DISTRIBUTION OF LIGHT FROM READING LAMPS. T. C. Angus and W. R. Luxton. (Transactions of the Illuminating Engineers' Society, 'September, p. 149.) Intensity distribution from ordinary reading lamps, from BS study lamp, and from modified library lamp.

The study arose as a result of a desire to improve the light distribution from some table lamps in a large library. Increased were not permissible during the wattages war, and more light was necessary over a wider field. Three improvements were wider field. made. The lamp height was raised from 15 in. to 18 in.; the shade was enlarged: and a small cone of mirrors was fixed over the light bulb. In its unmodified form the library lamp supplied light which diminished in intensity by a ratio of 8.5 across a book lying near its base, and as

modified this ratio was reduced to 1.9.

The point of significance for architects is the emphasis laid on the performance characteristic of a light source that is so often chosen for appearance.

### HEATING

and Ventilation

1724

Coke Grate

THE FULHAM GRATE. Note from the Press Officer, Gas Industry House. New coke-burning grate, with gas ignition burner.

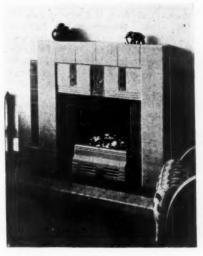
A note from Gas Industry House describes the Fulham Grate for burning coke. The grate has been developed during the war at the laboratories of the Gas Light & Coke Co. A photograph of the grate is shown above, and a section on the right. The firebars A are supported on a frame B and a shelf C. The firebrick front E provides depth and cnables the coke to be kept hot. An inlet air damper F, controlled by the lever G is embodied in the metal front H which has machined edges to make it virtually air-tight. A gas ignition burner I is pro-

It is stated that a good fire can be obtained within 40 minutes; the minimum rate of combustion is about 1 lb./hr., and a consumption of 1½ lb./hr. will normally suffice to heat a room 12 ft. × 16 ft. in The radiant efficiency is 34 per cent.

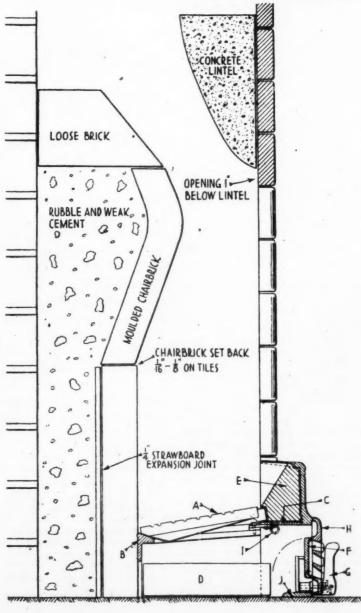
Coke Grate

A Post-War "Metro" Coke Grate. (Coke and Smokeless Fuel Age, August, 1944.) Illustrated description of new version of the Metro coke-burning domestic open grate.

The construction of the grate is explained, and some test results are given. The tests showed that the fire will burn for up to 6 hours without refuelling, and will recover within 30 minutes after re-fuelling, even after long periods of "idling." The average rate of combustion is said to be capable being varied, with fairly close control, from under 1 lb. per hr. to a maximum of about 3 lb. per hr. Gas ignition minimizes the trouble of lighting the fire, and the appearance of the fire is said to be pleasing, flames being seen when burning brightly.



Right, the Fulham coke-burning grate, with gas ignition burner, developed by the Gas Light and Coke Company. Below, section through grate. (No. 1724).



#### 1726 Wiring Birmingham Houses

WIRING POST-WAR HOUSES: LESSONS FROM THE BIRMINGHAM EXPERI-MENTAL HOUSES. (Electrical Review, September 1, 1944, p. 313.) Description of steel frame experimental houses at Birmingham and their electrical installation.

The lighting wiring is on three circuits, and cooker and wash-boiler are on separate and cooker and wash-boiler are on separate circuits. It is stated that the ring main has not been used because the system described appeared cheaper, and also because the industry has not yet agreed on the various standard accessories which are necessary. Plug points come up to a good standard in respect of numbers; the living room and the background have three outlets each and two bedrooms have three outlets each, and other rooms in proportion.

### PLUMBING

and Sanitation

Prefabricated Plumbing

PREFABRICATED PLUMBING. F. L. Barrow. (Journal of the Royal Sanitary Institute, October, 1944.) Analysis of merits and demerits of prefabrication applied to plumbing considered under headings of Is It Good Plumbing? Overall Costs, and Speed of Installa-

This paper is an attempt to put into sensible perspective the points for and against pre-fabricated plumbing, and although it does not bring out any new facts it is a useful check on the views of extremists. The author's conclusions are that for post-war

(a) Extra design and drawing office work required for any form of pre-fabrication would not be justified when only a few in-

would not be justined which only a rew installations were required.

(b) For many repetitions of identical houses and where speed is important the All-In plumbing unit may be used.

(c) For many intermediate cases there will be room for Partial Pre-fabrication.

### 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.

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Q I am preparing a thesis on the subject of Twentieth Century Churches. I am having difficulty in finding information on the subject. Can you help me?

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be seen at the RIBA Library, to which, if you are a Student RIBA you have access. The RIBA have also a thesis on this subject, which can be seen at the Library.

A certain amount has, of course, been published in architectural papers, but back numbers are difficult to get in wartime, and your choice will be limited to the particular library you are able to visit. ticular library you are able to visit.

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

### MARS

### e

December 13, at the RIBA, 66, Portland Place, W.1. Meeting of the Modern Architectural Research Group to discuss What is Modern Archi-TECTURE? Principal speakers: John Summerson, Professor William Holford, E. Goldfinger, Anthony M.

Chitty, M. Hartland Thomas. Chairman: Professor Sir Charles Reilly.

J. Summerson: Modern architecture does resolve itself into an affair of a number of exceptional individual creative artists and their schools—Le Corbusier, Frank Lloyd their schools—Le Corbusier, Frank Lloyd Wright, Gropius, Mendelsohn, Aalto, Dudok perhaps—two or three dozen names of the last twenty or thirty years. One should not talk of style—modern or international style. It is the result of the cult of literary and historical analogy developed during the last century.

Modern architecture is the work of certain men of genius, and I can offer no more profound interpretation than that.

Sir C. Reilly: Modern architecture 1 would define as a new conquest of space with new materials.

W. Holford: There is no medern architecture at the present time. There is contemporary building. Architecture is more than ideas and are in the idea stage at the present time. We haven't got modern architecture, but we are soon going to get it. We haven't achieved a style, but we have achieved the apparatus for a style:—(1) Structure, in which we have progressed far; (2) Accommodation and planning, into the technical problems of which we have only just been initiated; (3) Materials; (4) The family, the idea of which is now heavily stressed in, for instance, the need for 12 million dwellings; (5) Esthetics, which has only menetrated the We haven't got modern architecture, but (5) Æsthetics, which has only penetrated the edges of things and does not yet affect the bulk of buildings; (6) Politics.

E. Goldfinger: What provokes delight in architecture? How does it differ in this from the other pictorial arts? The arts can be divided into (1) the Pictorial (painting); (2) the Plastic (sculpture); (3) the Spatial (architecture). Whereas you are outside the Pictorial and the Plastic, you are in architecture, whether you are actually inside a building or surrounded by buildings. By moving in space you get the sensation of space and enclosure. That is where the new materials come in. Whereas indoors remains spatially more or less the same as in the past, outdoors has changed

Two different spatial enclosures necessary—the one outside for public life, the other inside for private and family life, and the two should be linked.

A. Chitty: What can we do to improve our architectural design?
We need: (1) Good finish; all of us We need: (1) Good finish; all of us architects are too slipshod as designers and we give too little consideration to details. (2) Colour; buildings have been too dull in choice of materials, too meagre, and unimaginative, possibly because we try to do too much for the money available. (3) Texture; in clearing our buildings and designs of so-called unessentials, have we not become too excluunessentials, have we not become too exclusively concerned with pure form? Obviously this is important, but more concern with surface texture is needed and the addition of such textural effects as are gained by sculpture. Modern architecture cannot be sculpture. Modern architect obtained without these three.

M.H. Thomas: (Secretary of MARS. agreed with the final speaker during the discussion that modern architecture was a synthesis of functionalism, æsthetics and



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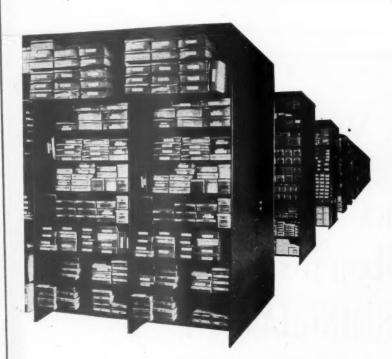
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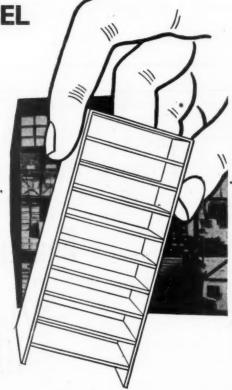
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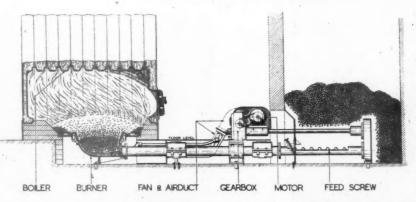
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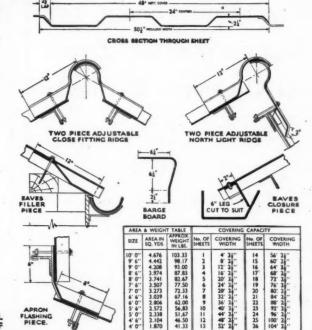
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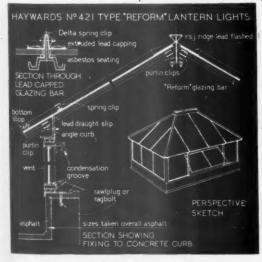
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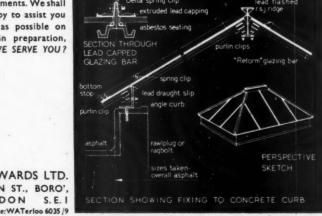
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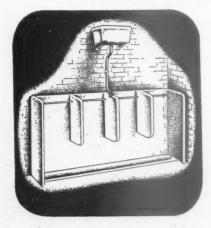
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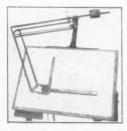
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Shire Hall, Nottingham. 8th December, 1944.

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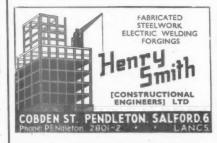
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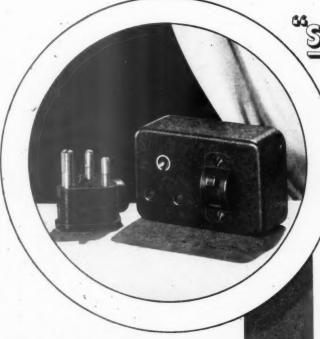
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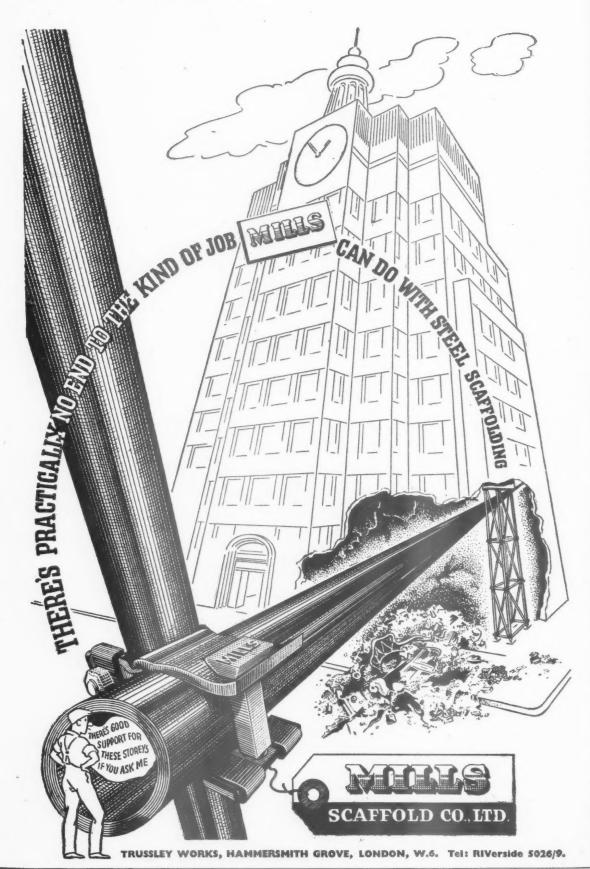




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