# ARCH



standard contents

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

DIARY NEWS

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[VOL. 103 No. 26581 PRESS THE ARCHITECTURAL War Address: Forty-five The Avenue, Cheam, Surrey. Phone: Vigilant 0087-9

Price 9d: Registered as a Newspaper A glossary of abbreviations of Government Departments and Societies and Committees

of all king below. In in the add	nds, together with their full address and telephone numbers, is given all cases where the town is not mentioned the word LONDON is implicit ress.
ABT ACGB	Architectural Association. 34/6, Bedford Square, W.C.1. Museum 0974 Association of Building Technicians. 5, Ashley Place, S.W.1. Victoria 0447-8 Arts Council of Great Britain. 9, Belgrave Square, S.W.1. Sloane 0421 Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1. Euston 2158-9
ARCUK ASB	Architects' Registration Council. 68, Portland Place, W.1. Welbeck 9738 Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1. Welbeck 5721
BC BCIRA BDA BIA	Building Centre. 23, Maddox Street, W.1.  British Cast Iron Research Association. Alvechurch, Birmingham.  Redditch 716  British Door Association. 25, Victoria Street, S.W.1.  British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.
BIAE BINC BOT BRS BSA BSI CCA CID CPRE CSI DIA	British Institute of Adult Education. 29, Tavistock Square, W.C.1. Euston 5385 Building Industries National Council. 11, Weymouth Street, W.I. Langham 2785 Board of Trade. Millbank, S.W.1. Whitehall 5140 Building Research Station. Bucknalls Lane, Watford. Garston 2246 British Steelwork Association. 11, Tothill Street, S.W.1. Whitehall 5073 British Standards Institution. 28, Victoria Street, S.W.1. Abbey 3333 Cement and Concrete Association. 52, Grosvenor Gardens. S.W.1. Sloane 5255 Council of Industrial Design. Tilbury House, Petty France, S.W.1. Whitehall 6322 Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280 Chartered Surveyors' Institution. 12, Great George Street, S.W.1. Whitehall 5322 Design and Industries Association. Central Institute of Art and Design, National Gallery, W.C.2. Whitehall 2415
DOT EJMA	Department of Overseas Trade. Dolphin Square, S.W.1. Victoria 4477 English Joinery Manufacturers Association (Incorporated). Sackville House, 40, Piccadilly, W.1. Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.
FMB	Federation of Master Builders. 23 Compton Terrace, Upper Street, N.1.
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.
GG HC IAAS	Georgian Group. 4, Hobart Place, S.W.1.  Housing Centre. 13, Sutfolk Street, Pall Mall, S.W.1.  Incorporated Association of Architects and Surveyors.  Sloane 2837 Sloane 2837 Sloane 2838 Whitehall 2881 To Place, S.W.1. Sloane 3158
ICE IEE IOB IRA ISE LIDC	Institution of Civil Engineers. Great George Street, S.W.1. Institution of Electrical Engineers. Savoy Place, W.C.2. Institute of Builders. 48, Bedford Square, W.C.1. Institute of Registered Architects. 47, Victoria Street, S.W.1. Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29 Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264
LMBA MARS MOA MOE MOH MOLNS MOS MOT MOTCP	London Master Builders' Association. 47, Bedford Square, W.C.1.  Modern Architectural Research. 46, Sheffield Terrace, W.8.  Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.  Ministry of Education. Belgrave Square, S.W.1.  Ministry of Health. Whitehall, S.W.1.  Ministry of Labour and National Service, St. James's Square, S.W.1.  Whitehall 4300  Sloane 4522  Whitehall 4300  Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933  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.  Whitehall 8411
MOW NAMMO	Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611 Natural Asphalte Mine-Owners and Manufacturers Council. 94, Petty France, S.W.1. Abbey 1010

94, Petty France, S.W.1. Abbey 1010
National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 7070 NBR National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041 NEBTE National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1. Holborn 2770 NFBTO

Street, W.C.1. Holdon 2776
National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/3
National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham
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 NFHS PEP

PWB 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.

Tudor 70. RCA RIBA Whitehall 9936 Welbeck 5721 RS

Regent 3335 Temple Bar 8274 RSA SFMA Society of Industrial Artists. 20, Wellfield Avenue, N.10. W.C. Chancery 5313
Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. SIA SPAB

Holborn 2646 Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.

Temple Bar 5006

Timber Davelorment Association. 75, Cannon Street, E.C.4.

City 6147 TCPA

Timber Development Association. 75, Cannon Street, E.C.4. Town Planning Institute. 18, Ashley Place, S.W.1.

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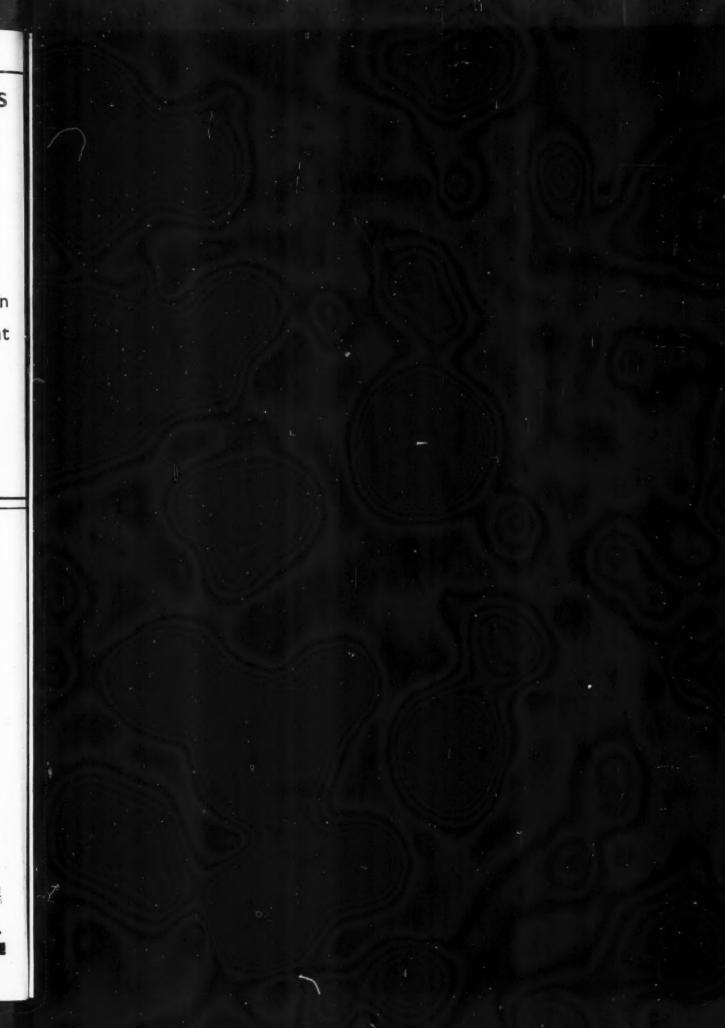


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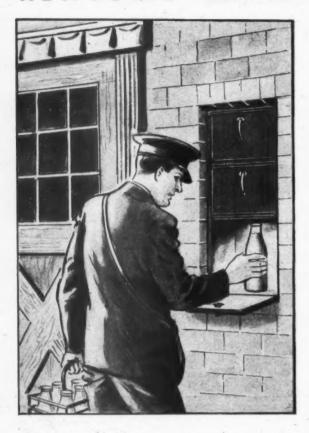
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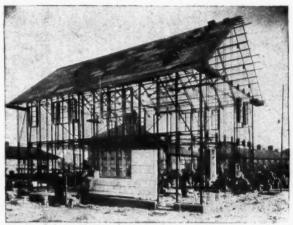
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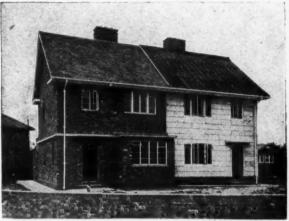
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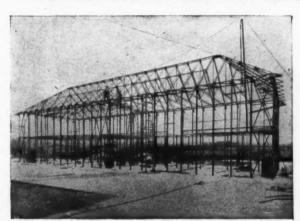
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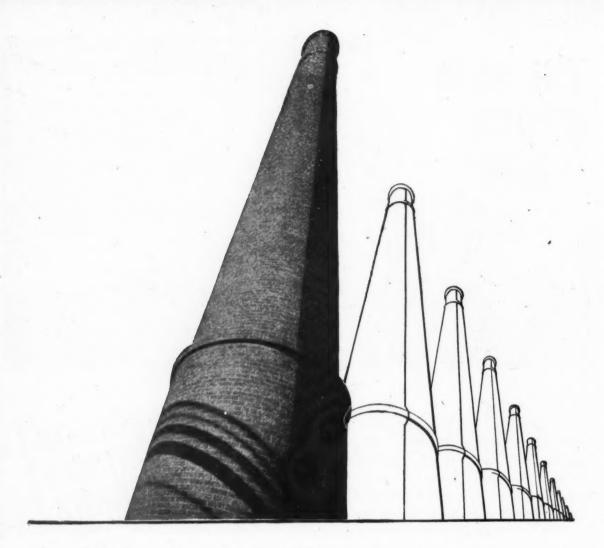
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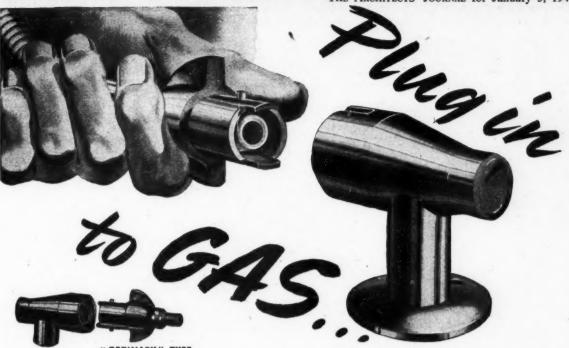
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B.S.P.



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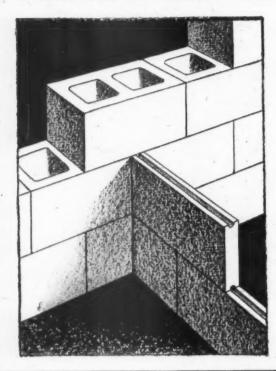
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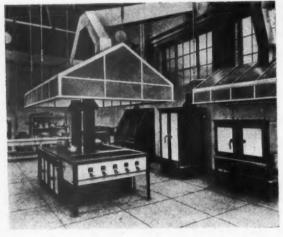
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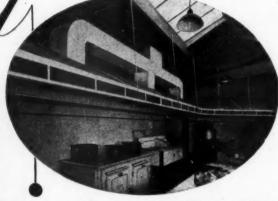
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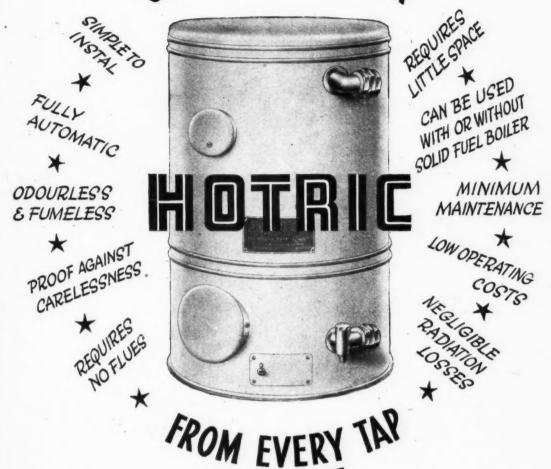
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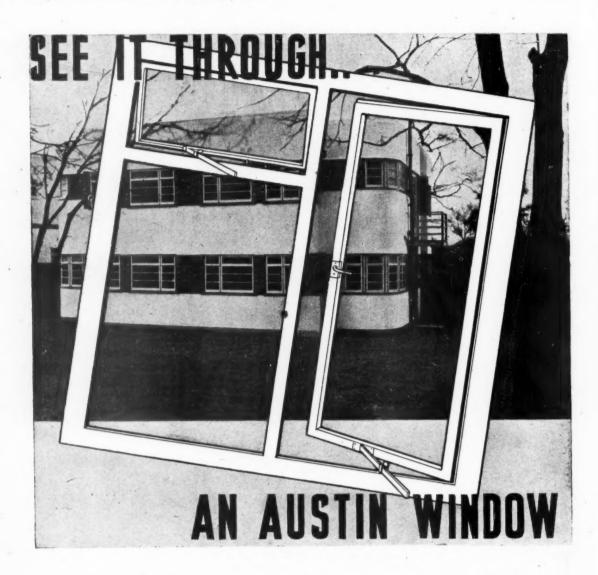
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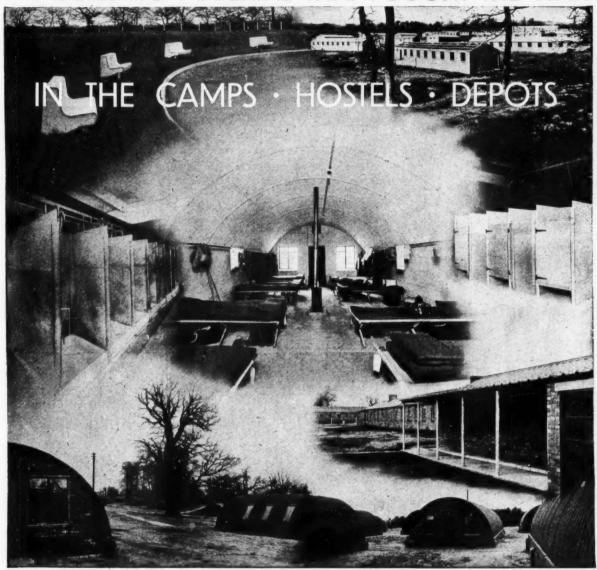
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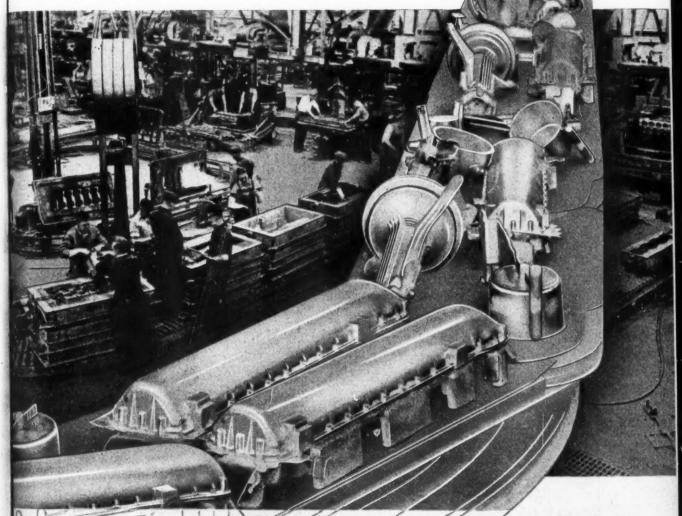


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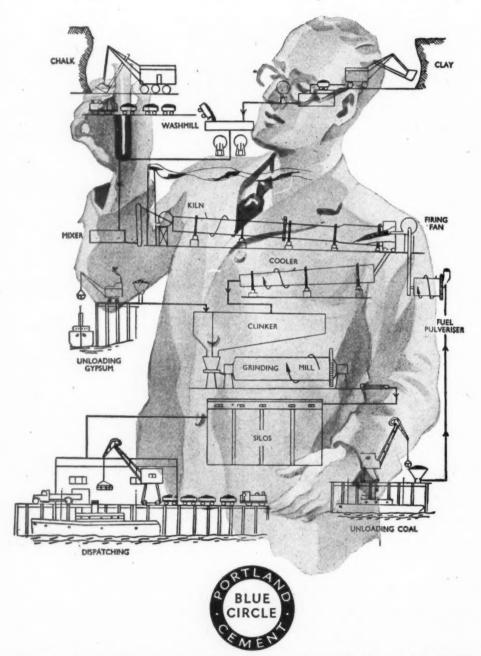


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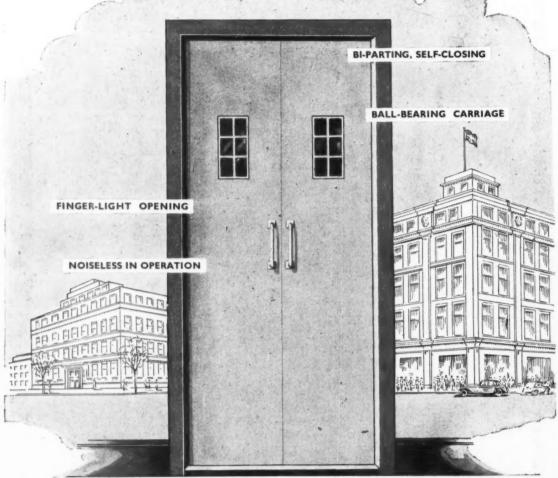
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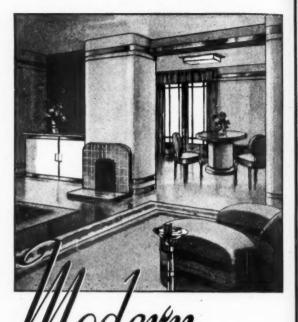
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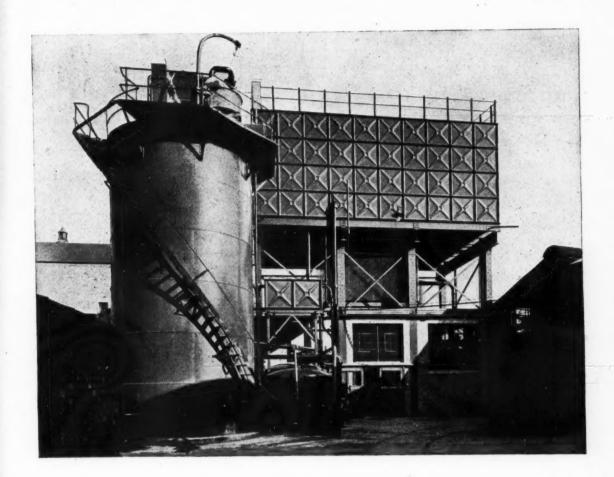
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## BUILDING FOR DAYLIGHT

#### No. 16 FACTS FOR ARCHITECTURAL STUDENTS

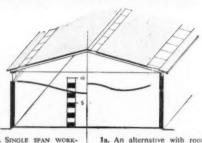
These diagrams show how daylighting needs in factories may be met. It is assumed that artificial light would supplement daylight to provide the higher lighting intensities necessary in certain processes. The following points have been considered when positioning the windows: (a) An even intensity of lighting at the working plane, this usually being taken as 5% to 10% daylight factor. (b) The avoidance of glare, which might affect the eyes when observing adjacent surfaces which present strong contrasts in the degree of lighting. (c) The avoidance, where desirable, of direct sunlight on the working plane. (d) The avoidance of strong shadows

where these are not needed for a particular process: (light coloured floors and walls often reduce heavy shadows). (e) Ease of cleaning internal and external windows, Diagrams 1, 2 and 3 are small span types; 4, 5 and 6 are wide span factories, and in all these examples the roof construction can be extended indefinitely in length.

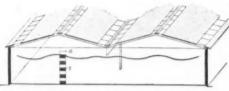
The daylight factor curve is shown on each of the drawings goainst a vertical coole In

The daylight factor curve is shown on each of the drawings against a vertical scale. In all examples except No. 3 this curve represents the values calculated at the section shown. In No. 3 the values have been taken on a line running midway between the columns.

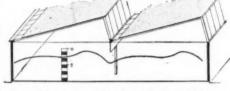
2 & 2n. MULTI-SPAN WORK-SHOP TYPE. Similar construction to 1 but with many bays. The positioning of the roof lights is adjusted to compensate for loss of the wall windows, and to light the underside of the roof, thus avoiding glare. Where the avoidance of sunlight is important the north light type (2a) is used.



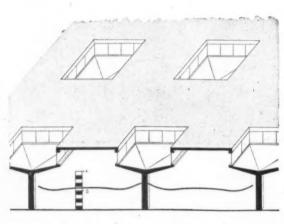
1. SINGLE SPAN WORK-SHOP TYPE. Giving general light from wall windows with individual top light to benches along the walls. 1a. An alternative with roof lights only (similar to 2) is shown.



Diagrams 1, 2, 2a are common examples of factory glazing and roofing but with the windows positioned according to daylight calculations. The problem of cleaning, and to some extent the avoidance of glare, cannot be overcome in all of them.



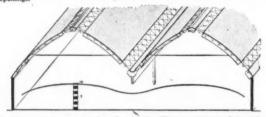
Either of the types of roof construction shown can be used for much greater spans by introducing main supporting trusses running at right angles to the roof trusses.



3. This example overcomes all the difficulties. Glare is avoided by lighting the underside of the ceiling at the higher level by means of the reflected light from the upper surface of the lower level roof, and because the lower and darker ceiling can never be seen in direct juxta-position to the sky, but always against the partially lit ceiling at the higher level. As the windows are vertical it is a simple matter to exclude unwanted sunlight with blinds. Access to the outside of all windows is easy for cleaning. Strong shadows are avoided by arranging for the light to come from all directions.

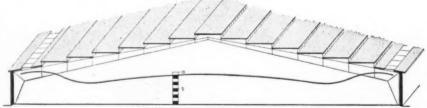


4. BARREL VAULT CONCRETE ROOF. Even lighting at the working plane is obtained by an even distribution of the lighting openings over the roof. (The lights could be lens type set in the concrete, or glass domes on raised kerbs in the crown of the vault, using diffusing glass to cut out direct sunlight.) The underside of the roof is lit by reflected light from reflectors placed under a limited number of the openings.



5. DIAGONAL RIBBED ROOF (wood or steel). The arrangement of the lights is similar to that shown in example 2, but the light is broken up by the nature of the roof construction. Diffusing glass is used again to avoid glare. The problem of cleaning the underside of the glass is not solved.





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.

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In common with every other periodical this JOURNAL is rationed to a small part of its prewar 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



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## DIARY FOR JANUARY FEBRUARY AND MARCH

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.

E XETER. Exhibition of the New City Plan. At the City Library, Castle Street. The town planning consultant is Thomas Sharp. (Sponsor, Exeter City Council.)

JAN. 3.

L IVERPOOL. Film Steel. At the Liverpool Technical College, Byrom Street, Liverpool, 3. (Sponsor, Institute of Welding, Liverpool Branch.) 7 p.m. Jan. 16.

LONDON. Exhibition of Hampstead Artists, Past and Present. At Studio House, Haverstock Hill, N.W.3. Works are being lent by Messrs. Colnaghi, Agnews, Lefevre, Frost and Reed, as well as private collectors and public galleries. Many of the pictures in the historical section have never before been exhibited. (Sponsor, Hampstead Artists' Council.)

JAN. 3 onwards

H. G. May. Town Planning Interim
Development and the Repair of War Damage. At the Chartered Surveyors' Institution, 12, Great George Street, S.W.1.
(Sponsor, CSI.) 5.30 p.m. Jan. 7.

Richard H. Sheppard, J. H. Newsom, Hertfordshire County Education Officer and others. Talk on Schools and showing of the film Children's Charter. At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m.

S. C. Mount. A Factory in a Railway Tunnel. At the Institution of Heating and Ventilating Engineers, 72-74, Victoria Street, S.W.1. (Sponsor, IHVE.) JAN. 9

W. R. Watson. The Control of Electrical Installation Work. At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m. Jan. 10

G. Scott Williamson. Health Centres. At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m.

Country Road Lighting. Discussion opened by C. R. Bicknell at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m.

A. Ramsay Moon. Shop and Site Welding. At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, ICE.) 5.30 p.m.

Two Day Conference. The Family and Its Needs. At BMA House, Tavistock Square, W.C.1. Speakers include F. J. Osborn, Miss E. E. Halton, Professor F. A. E. Crew, and Sir Montague Barlow. Conference fee 5s. (Sponsor, TCPA in

conjunction with the British Social Hygiene Council.) Jan. 24-25.

National Federation of Building Trades Employers' Dinner. At The Dorchester Hotel. Guest of honour, Mr. Aneurin Bevan, Minister of Health. Jan. 30

Kenneth Holmes, Principal of the Leicester College of Arts and Crafts. The Place of the Art School in the Life of the Community. At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m.

H. M. Llewellyn, of the Building Research Station. Painting Plastered Surfaces. ASB Lecture at the RIBA, 66, Portland Place, W.I. (Sponsor, RIBA.) 5.45 p.m. FeB. 6 Professor G. I. Finch, Scientific Adviser to the Ministry of Home Security. The Need for Scientific Research into the Prevention and Extinction of Fires. At the Royal Society of Arts, John Adam Street, W.C.2. (Sponsor, RSA.) 1.45 p.m. FeB. 13

Max Lock. Surveys and Their Practical Application to Planning. At the Livingstone Hall, Broadway, Westminster, S.W.I. (Sponsor, TPI.) 6 p.m. Feb. 21

Miss Jacqueline Tyrwhitt. Planning in Canada. At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1-15 p.m.

J. F. Bickerton and Petros Protopapadakis. Layout of Passenger Stations. At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, ICE.) 5.30 p.m. FEB. 26

Professor J. D. Bernal, Science in Architecture, at the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. Feb. 12. Professor J. D. Bernal, Building Research. At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA.) 5.45 p.m. MAR. 6.

Maurice B. Reckitt. The Polls and the Citizen. At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m.

Mar. 7.

Percy Delf Smith. Signs and Amenities. At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1.15 p.m.

MAR. 21.

H. Berry, M.P. Town Planning and Water Supply. At the Town and Country Planning Association, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) 1-15 p.m.

YORK. NALGO Exhibition. At Holgate Hill Settlement. (Sponsor, BIAE.) Feb. 10-23

## NEWS

Thursday, No. 2658.	JANUA	RY 3, 1 VOL	
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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 LCC Valuer has been APPOINTED DIRECTOR OF HOUSING and Valuer with sole responsibility for the COUNCIL'S housing much

the COUNCIL'S housing work. A proposal by the Civil Defence and General Purposes Committee that the valuer be appointed director of housing and valuer with sole responsibility for the Council's housing work has been approved by the London County Council. Major John Hare, for the Opposition, proposed as an amendment that an independent director should be appointed and given powers for co-ordination. He suggested that either Lord Reith or Lord Woolton should be asked to accept the post. London had a right to know the full story behind the committee's recommendation. Sir Harold Webbe, supporting the amendment, said that the situation called for drastic measures. The problem should be tackled as a new one by devising new machinery. Mr. Frank Rye said it was known that Sir Patrick Abercrombie and Sir Charles Reilly were against the scheme. Mr. E. P. Martin thought the housing situation in London was likely to bring about a jungle worse than the jungle in Malaya in which our soldiers had fought. Lord Latham, leader of the Council, supporting the recommendation, said the proposals were purely organizational and administrative to create a better machinery. There would be the same architects and technical staffs concerned, but whereas they were now under the direction of the architects they would come under the direction of the housing director and valuer. It was the Council's business to see that they devised a machine that would give the maximum number of houses in the shortest possible time. That was the origin and reason for the proposals. In dealing with this problem it was the duty of the Council to try out anything calculated to achieve that result. The recommendation was carried, the amendment being rejected.



# HOPE'S WINDOWS for POWER STATIONS

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## From AN ARCHITECT'S Commonplace Book

THE CACTUS GIVES A LESSON IN STRUCTURE. [From An Autobiography by Frank Lloyd Wright (Faber and Faber).] A pattern of what appropriate Arizona architecture might well be lies there hidden in the Sahuaro. The Sahuaro, perfect example of reinforced building construction. Its interior vertical rods hold it rigidly upright maintaining its great fluted columnar mass for six centuries or more. A truer skyscraper than our functioneer has built. And all these desert remarkable growths show scientific building economy in the patterns of their construction. The stalks especially teach any architect or engineer who is modest and intelligent enough to apply for lessons. In these desert constructions he may not only see the reinforcing rod scientifically employed as in the flesh of the sahuaro but he may see the perfect lattice or the reed and welded tubular construction in the stalk of the cholla, or staghorn, and see it too in the cellular build-up of the water-barrel, Bignana. Even the flesh of the prickly pear is worth studying for scientific structure. In most cacti Nature employs cell to cell or continuous tubular or often plastic construction. By means of plasticity Nature makes continuity everywhere strongly effective without having to reduce the scheme to post and girder construction before she can figure it out. She has this great advantage in this architectural adventure over our very best engineers. Engineers are quite often as silly as architects. Plasticity is the new problem now ready to be met in building construction. I have seen that experts can be wrong for more than fifty years.

A deputation from the National Union of Agricultural Workers to the Minister of Health stressed the urgent necessity for an immediate and vigorous RURAL HOUS-ING PROGRAMME.

A Deputation from the NUAW representing 130,000 farm workers with 2,600 branches throughout rural Britain was received by Mr. Aneurin Bevan, the Minister of Health, and Lord Huntingdon, the Parliamentary Secretary to the Ministry of Agriculture. The Deputation stressed three points:—(1) Its implacable opposition to the use of public funds in reconditioning tied cottages. (2) Insistence on alternative accommodation being available before a worker is evicted. (3) The urgent necessity for an immediate and vigorous rural housing programme. The Minister said in reply that he had asked the Rural Housing Sub-Committee to investigate the whole question of reconditioning and had specially asked them to report what improvements could be made to the old scheme. He took note of the opposition of the deputation to the perpetuation of the tied cottage system. The policy of the new Government was to secure an ample supply of new houses built by the local authorities in the villages where the tenants could enjoy a full and free community life, and he was resolved to take whatever steps might be necessary to bring

Mr. B. S. Townroe, speaking at the Housing Centre: IN 1939 THERE WERE ABOUT 13 MILLION DWELLINGS in England and Wales for a population of 41 million; in France 9,770,000 dwellings for 42 million. During the war, he continued, about half a million homes have been destroyed or withdrawn from residential use in both countries, but three times as many homes have suffered war damage in the British Isles as compared with France. On the other hand, in the United Kingdom persons per dwelling unit have decreased from about 3½ in 1939 to 3½ in 1944, since the civilian population has declined a little more rapidly than the number of houses. Actually in this country 200,000 new houses have been

this about.

completed since 1939. Overcrowding and slum conditions are, said Mr. Townroe, far worse in France than in this country. Materials are so short that cottages are being erected with walls made of rushes and dried mud, or of pisé and cob. To make up for the lack of man power in France there are 800,000 German prisoners of war at work on rebuilding, and the French Government hopes to have 1,750,000 Germans engaged on reconstruction by June, 1946. France is using every possible agency under M. Dautry to carry out her reconstruction plans. Mr. R. S. Townroe is Director of the Franco-British Society and a member of the Central Housing Advisory Committee.

Local authorities are to be invited to set up an ADVISORY COM-MITTEE FOR LONDON REGIONAL PLANNING.

GIONAL PLANNING.

Mr. Lewis Silkin, Minister of Town and Country Planning, in the Middlesex Guildhall, addressed representatives of the 23 Joint Planning Committees of the area covered by the Greater London Plan prepared by Sir Patrick Abercrombie with representatives of the eight County Councils involved in the area and of the London County Council, and the City of London Corporation. The conference, convened by the Minister, was called for the purpose of setting up an Advisory Committee for London Regional Planning. The Minister spoke of the great and important task confronting the authorities, of the necessity for making rapid progress in agreeing on a plan for the Region. The suggestions put forward by the Minister were cordially received, and the conference unanimously decided that the authorities concerned should be invited to appoint an advisory committee with the following terms of reference:—"To co-ordinate the examination of the outline plan prepared by Professor Sir Patrick Abercrombie for the outer area of the Greater London Region; and to arrive at an agreed outline plan for submission to the Minister of Town and Country Planning with a view to its serving with the Minister's approval, as a broad directive to the Planning Authorities and to the Authorities responsible for the control of interim development within the area affected." Mr. Silkin's suggestion that the advisory committee should aim to submit to him the agreed outline

plan by June 30, 1946, was warmly endorsed. Questions of representation were broadly agreed, but final decision on these and other matters of finance, etc., was deferred until the constituent authorities had agreed on formation of the committee. The Minister pointed out that agreeing on an outline plan is one thing, but that this will be ineffective unless there is also agreement on the means for carrying it out. For this separate and different task he proposed to set up concurrently a small body which would be asked to consider as a matter of urgency the question of permanent regional machinery for securing concerted action in the implementation of outline plans for Greater London as a whole. Mr. Silkin also announced that he proposed to appoint Mr. Clement Davies, K.C., M.P., to act as Chairman both of the Advisory Committee and of the small body concerned with regional machinery.

Mr. G. W. Buchanan: Builders agree with Mr. Aneurin Bevan that THE COST - PLUS SYSTEM of payment for war damage repairs is unsatisfactory and must go at the earliest possible moment. Mr. G. W. Buchanan, President of the National Federation of Building Trades Employers, was speaking at a luncheon in his honour given by the London Master Builders' Association's No. 1 Area. He said: When the fly-bomb was falling, speed at all costs was necessary, but the progress made with repairs since then is such that cost can and must resume its rightful place, and a very important one. Builders are anxious to get back to competitive tendering at the earliest practicable date. The matter is not an easy one to settle, but the National Federation and the London Master Builders' Association are in consultation with the Government Departments with a view to finding a speedy solution of the problem. In order to be in a position to play their part effectively in the great housing campaign and to put in reasonable prices to local authorities for new houses, builders all over the country are overhauling their organizations to bring them up to the highest pitch of efficiency. They realise to the fullest they must be in a position to absorb smoothly a very big influx of men and to employ them to the best advantage.



Sunshine as Medium

Riddarholm Church, in the old part of Stockholm, was originally built in the thirteenth century, and is the burial place of of using a camera ASTRAGAL comments this week. Other Sweden's royalty. With its brilliant play of light and shade, examples are shown on page the illustration is typical of the fine photography of the side of the world—in Brazil.

examples are shown on pages 5 and 6, taken on the other

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The Courtauld Institute of Art has HUNDRED ONETHOUSAND PHOTO-GRAPHS of English architecture to the National Buildings Record. The fourth annual report of the National Buildings Record states:—The Courtauld Institute of Art, which from the inauguration of the Record has been of the very greatest assistance, has now decided to hand over to us (on indefinite loan) its collection of approximately 100,000 photocollection of approximately 100,000 photographs of English architecture from the Conway Library. This collection has been filed with our own at All Souls College, Oxford, and can now be formally added to the Record. The accessions for the year total 33,010 and the whole collection now reaches approximately 247,000 photographs and drawings. The purchases for 1944-45 have been considerable, and include the important records by Mr. Herbert Felton of modern architecture. of modern architecture.

Members of the Town and Country Planning Association are among those appointed by the Minister of Town and Country Planning to consider the general questions of the establishment and development of NEW TOWNS.
Lord Reith, Chairman of the Committee, is a Vice-President of the Association. Mr. W. H. Gaunt, Mr. F. J. Osborn, Sir P. Malcolm Stewart and Mr. John A. F. Watson are Council members. Mr. Gaunt, a director of J. Lyons & Co., Ltd., and chairman of the Hertfordshire County Council Planning Committee, has been closely connected with the Town and Country Planning Association for many years. He was concerned in the early development of the Trafford Park Trading Estate and was at one time Estate Manager of Letchworththe first new town to be built in Britain in this country. Mr. F. J. Osborn, chairman of the Executive Committee of the Association, is Financial Director of a big radio company at Welwyn. His book, New Towns After the War, published in 1918, led to the starting of Welwyn Garden City, of which he was Estates Manager for 16 years.

The Minister of Town and Country Planning (Mr. Lewis Silkin) has dismissed an appeal against the refusal of the Sheffield City Council to permit the building of a housing estate at Moor Edge, Totley, in the SHEFFIELD GREEN BELT area. After considering the report of the Inspector who held an inquiry into the appeal, the Minister is satisfied that the proposed development would seriously prejudice the general character of the surrounding area which he considers of great value to Shef-field as a whole, and that development of the city in this direction should stop considerably short of this site. The Minister is also satisfied that the proposed development would involve an excessive expenditure of public money on the provision of essential services, and that there are sites in the neighbourhood, but nearer the city, in which those services could be provided without heavy expenditure or demands on

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## COST MINUS CONTRACTS

Thas been decreed that for the spending of Government moneys Cost Plus Contracts and in Government Much ink has been used in decrying this form of Contract. Theoretically it is an ideal form of Contract. Its chief enemy is human frailty. The client, the architect and the contractor fail to give the attention and concentration of thought necessary to organize the Contract for maximum production and minimum cost. Piecemeal and contrainstructions are issued whereby the basis of the Contract soon becomes apparent to the operative—the disease spreads and,

in the end, ultimate cost seems nobody's business.

To-day Government moneys for building are spent either by a Government Department or by Local Authorities. There are many Government Departments and many more Local Authorities, and all seem to have their own approved Form of Building Contract and certainly their own Conditions of Contract. These Conditions of Contract lead to great divergence of the amounts of tenders. There is an increasing tendency in these Conditions to saddle the Tenderers with all costs likely to be incurred in carrying out the work. For instance, the contractor is responsible if progress of the work is delayed through lack of materials or labour—materials which are often Government issue and labour which is strictly under Government direction. All labour costs too must be included in the tender amount. But labour costs these days include daily fares and travelling time for men between the building site and place from whence the men are directed: subsistence money to men directed from other areas: payments to men for wet time under the guaranteed week. These non-productive labour costs can amount to as little as 5 per cent. of productive wages or to as much as 50 per cent. In housing to-day it is said that 60 per cent. of the cost is for labour. Of this 60 per cent. about one-third is impossible to ascertain previously but must be "estimated"—guessed is probably a more apt description. The lowest tenderer will be given the work. Often he is the one who guessed the lowest figure for his unknown labour charges. Woe betide him if he has a wet winter and his labour, when (and if) allocated to the Contract, comes from a distance, or is directed from other areas.

Similar conditions obtain, more definitely, on works of Civil Building. The mere award of a Licence to Build does not imply that adequate or, for that matter, any labour or controlled materials will be made available for the work. Consequently the period of time it may take to execute the work is unknown, but the contractor is asked to cover for his site and office oncosts for the duration of this unknown time. Again the supply or direction of labour to the work is at the discretion of the Ministry. And with materials, the issue of a Building Licence does not automatically give authorization to use controlled materials. Nor does an authorization for these materials yield automatically a permit to purchase. Many of the materials in short supply are reserved for certain types of work and certain priorities of work. Then, apart from having the necessary permit to purchase, there is still the difficulty of finding supplies.

Gambling was formerly the prerogative of the racecourse and Stock Exchange. These days we can add Lump Sum or Fixed Price Contracts. With competitive tendering under these conditions it can well be visualized that the outcome of many present-day Contracts is likely to be Cost Minus.



The Architects' Journal

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TOPICS

HOW KIDDER-SMITH DOES IT

During the past two or three years many photographs by Mr. G. E. Kidder Smith, young American architect, have cheered up the war-time pages of the AJ. and the Architectural Review, notably those taken in Sweden and in Brazil. Kidder Smith is undoubtedly among the handful of the world's finest architectural photographers in which one would, of course, include Dell and Wainwright, and Helmut Gernsheim for his superb work for the Warburg Institute. But Smith, so far as I know, is the only actual architect who can take photographs the way he does.

Anyone who wields a camera for the first time thinks that there isn't much to it really—a purely mechanical business in which only a certain amount of patience and care are needed plus an eye for composition. The results are

usually very disappointing, and humility is soon learned.

As a matter of fact it certainly sounds quite easy-especially if you read the article in a recent issue of Pencil Points by Kidder Smith himself on Photography for the Architect, which is illustrated by a number of his own brilliant examples.\* Nevertheless, even if the tyro cannot hope to reach the high standard of these examples, he can here glean some valuable information from the author who reveals that "having a natural interest in photography and several unusual opportunities to develop it in the last half-dozen years, I have picked up by much trial and considerable error some useful points of procedure."

Almost all of them, he says, revolve about expressing a brilliant play of light and shade, which is the essence of architectural photography. "Throughout the day the sun plays on our buildings, producing changing effects, emphasizing certain features we wish emphasized and vice versa, bringing out by quantity and angle of sun the three-dimensionality and rhythm of the design. Most of us forget this when we set forth to photograph even our own buildings, and snap with little consideration of what the light might be two hours earlier or later."

So start with a bright sunny day preferably with a few harmless clouds thrown in to break up sky areas. "Then, site plan and red pencil in hand, stroll leisurely around the entire project, noting the angle of the sun and estimating at what time it will be best on the sides or sections you wish to photograph. I make small arrows on the plan with 9.00—10.00, noon—2.00, 4.30—5.00, etc., indicating

\*Other examples of Mr. Kidder Smith's work are illustrated on pages 2 and 6.

where the sun is (or should be) good at these times. By a 'good' sun is meant one—and this is immensely important—which is strong on one facade and not on the adjoining one. Note when eaves cast interesting wall patterns, when trees project shadows in the early morning or late afternoon, when the foreground will be in shade and the main subject highlighted." Incidentally, he adds, this consideration of the amount of sun on various facades never did any architect harm.

Whereas lighting can be analysed, composition must be 'felt.' "One could argue about it for a hundred and three years," writes Kidder Smith, "but it is the architect's strong point... Many ingredients are needed: a dominant (usually), a certain equilibrium (very rarely symmetry), variety of line, mass, light and shade, rhythm, and other abstruse elements which one can read about in the savants' notebooks." His own solution is simple. He sidetracks all divine triangles and optical metaphysics "by the simple device of squinting."

Although the 'framing school,' he goes on, with vistas through pretty arches is trite, the device of holding down the foreground with parts of another building, trees, figures, etc., will often give depth, especially if the foreground value is darker than the background.

On interiors: The main idea should be to get contrasts weaker than you think they should be, with no dark corners. Wide angle lenses and a battery of lights are useful but much can be done with natural daylight, sometimes supplemented by fixtures in the room. And in taking interiors, move out some furniture, or the picture will make the room look more cluttered than it actually is.

Apparatus Smith leaves till the last, being of less importance than the man. The ideal kind of camera for architects is the simple rectangular ground-glass back, folding variety, with rising and sliding front, and taking film packs. This is best used on a tripod. The preferred sizes are  $2\frac{1}{4}$  in. by  $3\frac{1}{4}$  in.

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31 in. by 41 in. or even 4 in. by 5 in. The 35mm. camera, he thinks, is more or less a waste of time, especially for the architect. Besides the camera, a sturdy tripod, a medium yellow filter, an exposure meter, and a lens hood complete the basic outfit.

So now, if we had a camera and if the sun were shining we might be able to get some good results-if we had some films.

#### DRAMATIC EVENING

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The AA pantomime-like Punch and the English summer, is never so good as it used to be. But last week's production in Bedford Square was sufficiently gay to remind us of the good old days, and one song at least-"Plaster Cast, Plaster Bust"-would have made the most determined Beiunski librettist recognize a genuine contemporary rival.

The Great Exhibition of 1851, represented by a really exquisitely painted backcloth, was the theme to which in true panto tradition, the songs and sketches were occasionally permitted to return, but a fair range of topics from

the personal foibles of AA staff to the impact of the USA and the troubles of the returning ex-Serviceman, received their share of attention. show rattled along at an agreeable pace before a packed shirt-fronted audience, which had been ushered to its seats by Can-Can girls (garters for all thighses), and was therefore in a receptive, even dreamy, mood.

But the evening's drama did not end with the fall of the curtain. From the ambulance waiting at the front door to Mr. Fairweather backing through a window, from the Director of the Soane booking visits to see his crypt to the police chase round Bedford Square (it was the night of the great round-up), the night was packed with incident.

So, too, was the dance floor—at least during the first half of the evening. More room next year, please, if possible-and less of that facetious and commanding master-of-ceremony stuff-however well intentioned. Incidentally, if skill at pantos is any indication of skill in the studio-and in my view there is no more infallible indication to be found-then the AA looks as if it was on the right lines.

**ASTRAGAL** 



One of Mr. G. E. Kidder Smith's photographs on whi hastragul comment, this week - the Royal Palace, Stockholm. Storkyrkan is on the left Te palace was built durin; the middle of the eighteenth century by Tessin. The church dates from 1260 but has been altered since.



## LETTERS

7. L. Maule, Hon. Secretary, The Association of Architects, Engineers, Surveyors and Draughtsmen of Australia, Tasmanian Branch.

Bernard Price

#### Salaries.

SIR,—Prompted by the letter regarding salaries writ.en by D.D., I herewith forward for your perusal and perhaps your readers' interest, subject matter indicating how the salaried members of the Profession have handled the question in Australia.

J. L. MAULE, Hon. Secretary,
The Association of Architects, Engineers, Surveyors Draughtsmen of Au Australia, Tasmanian Branch, Hobart

Enclosed with Mr. Maule's letter was the News Bulletin of his Association for August last year. Here are some extracts from the News Bulletin concerning News Bulletin of salaries:

can do little to obtain salaries comparable with such professions as Medicine and Law until we improve our status to the necessary level in the eyes of the public and the Courts. Presenting a log of claims is not enough in itself, as instanced by the case of the P.M.G. Engineers' claim for an increase in salaries, recently sub-mitted by the POA to the Commonwealth Public Service Arbitrator.

The desired status can only be attained

by:

(a) Propaganda of the right type aimed at advertising ourselves to the public so that it will know who we are, and thus appreciate our expectations of just remuneration; and

### BRAZIL THROUGH AN ARCHITECT'S LENS







Three examples of the photographs taken during a visit to Brazil by the American architect, Mr. G. E. Kidder Smith, on whose methods of photography Astragal comments this week. Top, one of the sixteen fine Baroque fountains pre-served in Ouro Preto. Centre, a church at Ouro Preto, Nosso Senhor de Bom Jesus de Matosinhos, built in 1777, and notable for its twelve magnificent soapstone figures of the Apostles and finely terraced garden. Left, the courtyard of a small modern house in Brazil. Other photographs by Mr. Kidder Smith appear on pages 2 and 5.

(b) Jealously guarding future entrance to our professions by means of a high minimum standard of educational

qualifications.

In the case of (a), the Architectural and Surveying professions should have no difficulty, but the Engineering profession may have to coin some other term if it is to keep the public from confusing its mem-bers with locomotive drivers, machinists, or mechanics.

mechanics.

All members should read the editorial of the Commonwealth Engineer of November, 1944, under the heading "What Price Engineers?" the final paragraphs of which are quoted hereunder:—

"Salary and status go hand in hand. Until the status of the whole engineering profession is raised there is little hope that higher salaries will be forthcoming. An initial obstacle arises in the use of the word 'engineer' which in the lay mind is already. 'engineer,' which in the lay mind is already synonymous with the 'mechanic.' An-other factor preventing the raising of status is the restricted training and outlook of many engineers; engineers must move fur-ther away from their drawing boards and their text books, must take more interest in public affairs, become more versatile and generally move from the narrow to the broad gauge. Yet another obstacle to overcome is the lack of cohesiveness in the ranks of engineers. Engineers as a group are not cemented closely together, if the much quoted medical and legal professions can be taken as standards. Nor do engineers unselfishly interest themselves in one another. Another fault is that engineers do not make known their works, preferring to 'hide their lights under a bushel.' Overcoming of these difficulties and faults would result, in a relatively short time, in the elevation of the professional engineer to public affairs, become more versatile and the elevation of the professional engineer to a higher status in the community. An im-provement in the salary position would soon follow.

Most of this article is equally applicable

Most of this article is equally applicable to the kindred professions.

All members should be broadminded enough to face the facts, and if necessary to look even ten years ahead in our fight for due recognition, but let us make sure that we at least build on a firm foundation. The Association's activities will in no way interfere with, nor encroach upon, the functions of the various learned and academic Societies such as the Institution of Engineers, Australia, the Royal Australian Institute of Architects, or the Institute of Surveyors. As membership of these Societies is open to both employers and employees they cannot become bargaining bodies. Under these circumstances the Association and these Societies are in reality complementary to one another. mentary to one another.

#### Periodicals

SIR,—We are trying to build up an efficient library and reading room to meet the varied demands of the Regiment this winter.

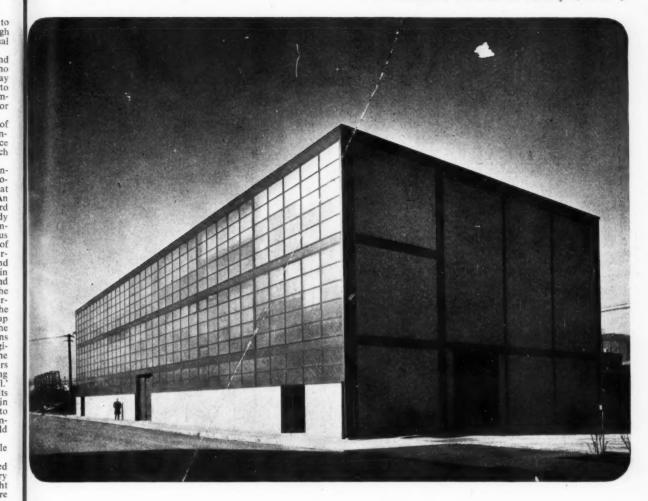
The promise of severe weather and the birth of the Army Educational Scheme have thrown a burden on our limited renave thrown a burden on our limited resources, which we are at the moment quite unable to bear. If, then, you know of a reader who would be kind enough to forward to us his used copy of your periodical, we would be grateful. We could assure him it would be warmly appreciated and widely read. widely read.

If, too, you have any associated journals that might be of use, may we ask you to solicit their help? While the demand both for general and specialised material is great, we are not always certain where best to try and meet it.

BERNARD PRICE, Librarian, 127th (H) Field Regt., RA.

Verden, BAOR.





## METALS AND MINERALS RESEARCH BUILDING TECHNOLOGY ILLINOIS INSTITUTE OF BY MIES VAN DER ROHE DESIGNED

Rohe's buildings to be erected in the USA, and has been designed to form part of a large educational group for the Illinois Institute of Technolos.

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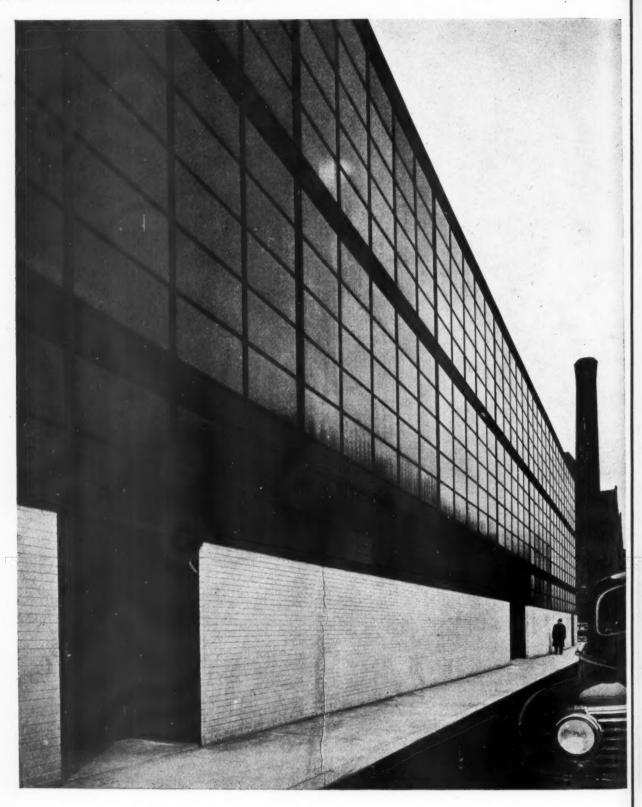
e e e e a e d

It has that purity and integrity of expression, that simplicity of design, and that extreme care in structural detail which distinguish his earlier work in Europe.

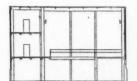
This is the first of Mies van der The building was erected for the Armour Research Foundation to house several industrial research activities involving the use of delicate precision apparatus and fairly heavy industrial equipment including several types of furnaces, presses and metal rolling mills. This equipment, however, is not fixed or permanent and a major requirement was that flexibility

possessed by a modern factory. As a war expedient the building has been used to house equipment other than was originally intended, but the building is first and foremost a foundry.

The materials used are structural steel framework, which is exposed and painted, brick, concrete and glass. The roof is a combination of steel and concrete.



METALS AND MINERALS RESEARCH BUILDING



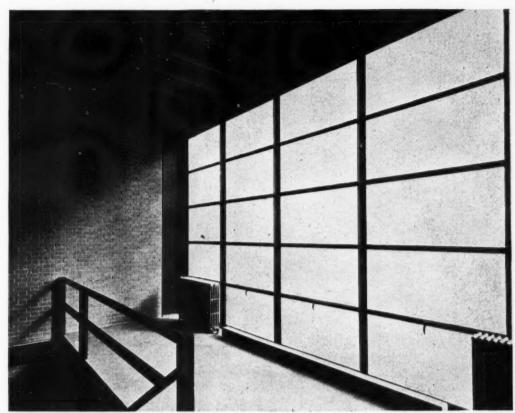
SECTION



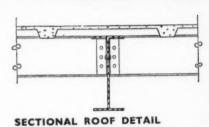
FRONT ELEVATION



SIDE ELEVATION

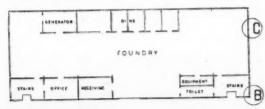


On facing page, view of the main elevation with exposed steelwork frame and glazing running from floor to ceiling on each storey. Top, drawings of section and two elevations. Above, the staircase landing. Below, plans of ground and upper floors and details of the steelwork.



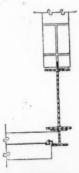
PREPARATION SPACE LABORATORY

UPPER FLOOR

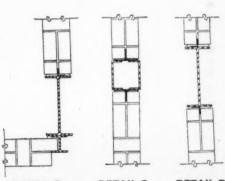


GROUND FLOOR

G



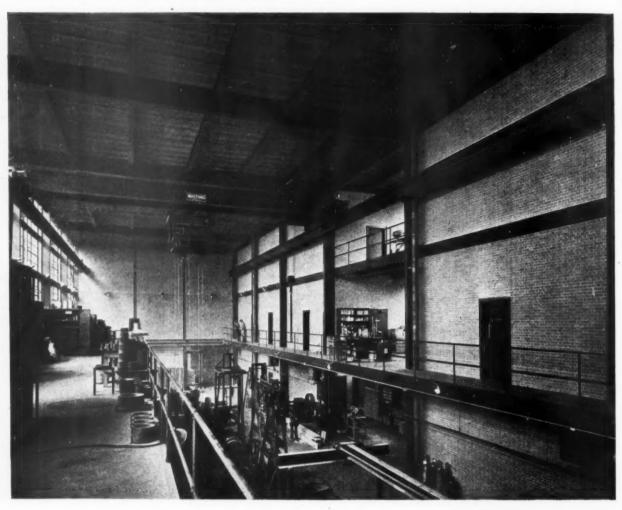
DETAIL A



DETAIL B



DETAIL D

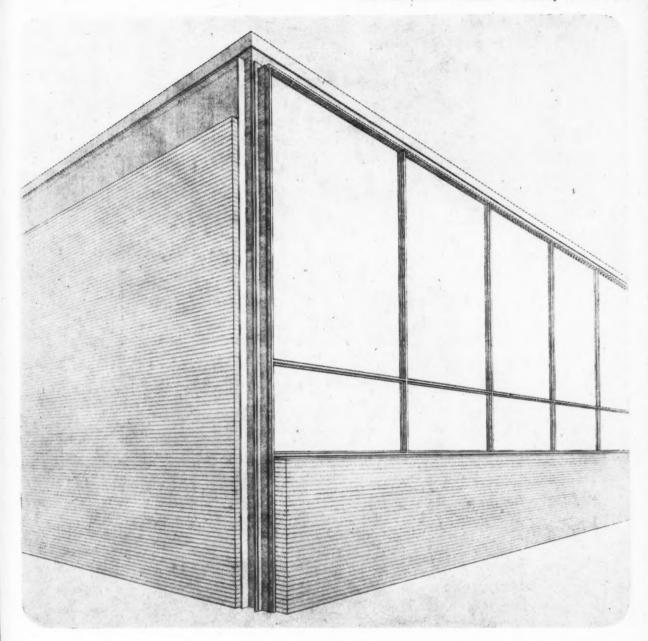


Above, the central part of the building open to the full height of two storeys to give flexibility for various, and changing, equipment. Below, one of the laboratories. Partitions have been omitted as far as possible. Right, the second of the two main laboratories used as a lecture hall.





METALS AND MINERALS RESEARCH BUILDING BY MIES VAN DER ROHE



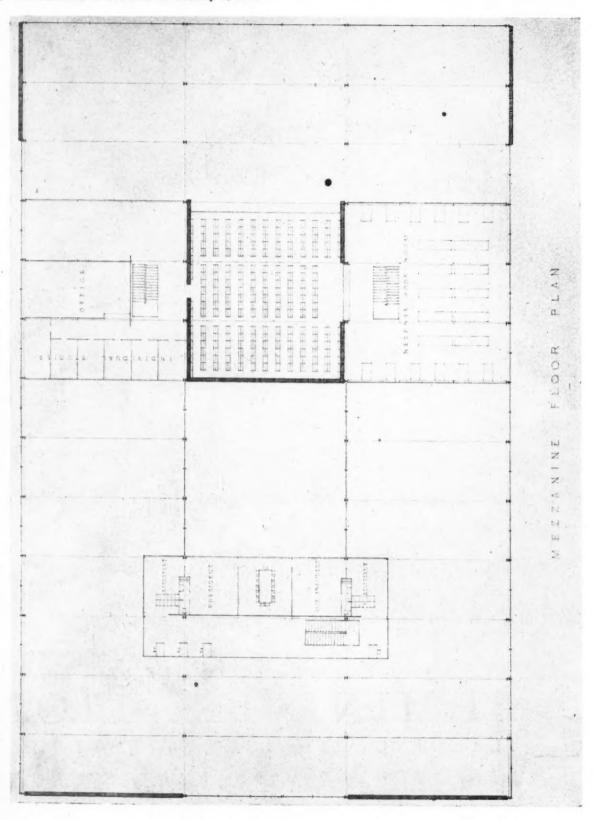
## ADMINISTRATION

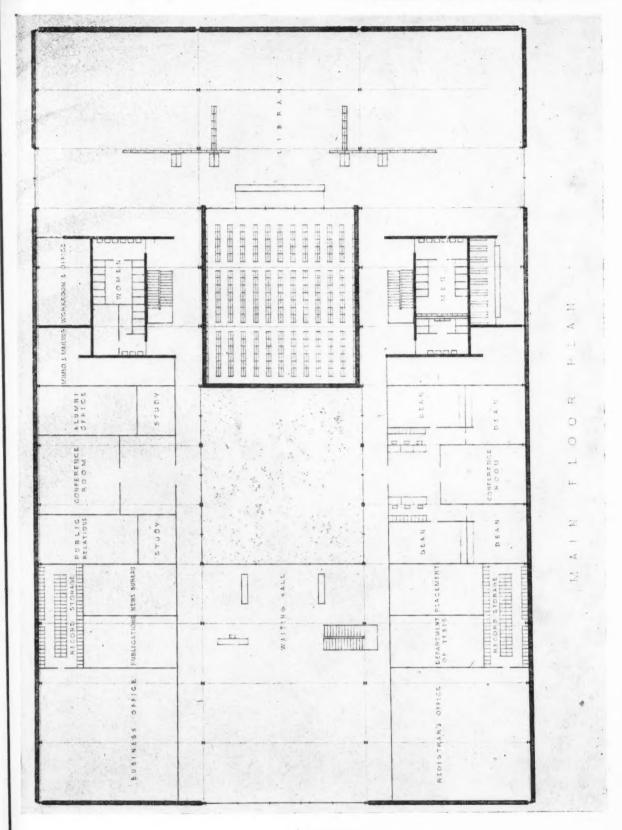
BUILDING, ILLINOIS INSTITUTE DESIGNED BY MIES VAN DER ROHE

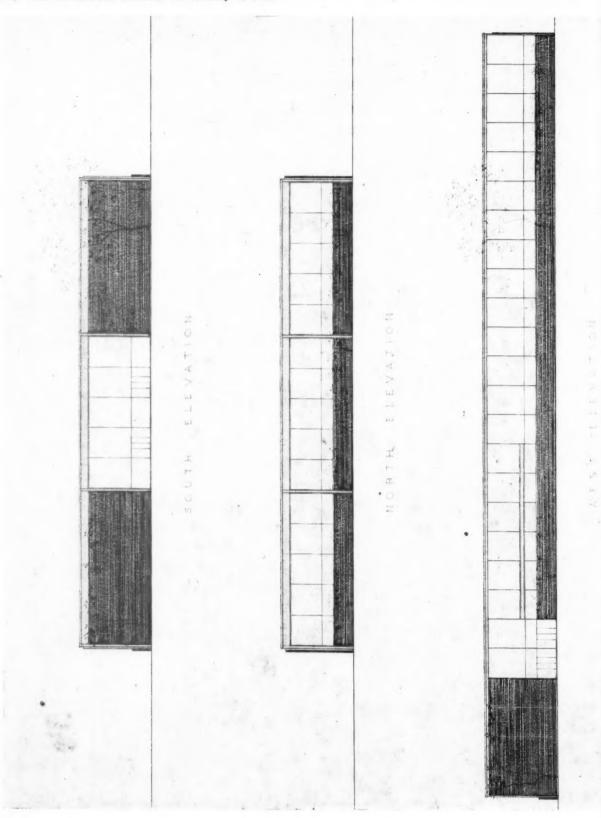
The original drawings of a project for the Library and Administration Building, part of a construction programme of fourteen buildings for the Illinois Institute of Technology, which Mies van der Rohe has been commissioned to design, are illustrated here. The construc-

tion is similar to the Research Building shown on the preceding pages, and will form part of the same group.

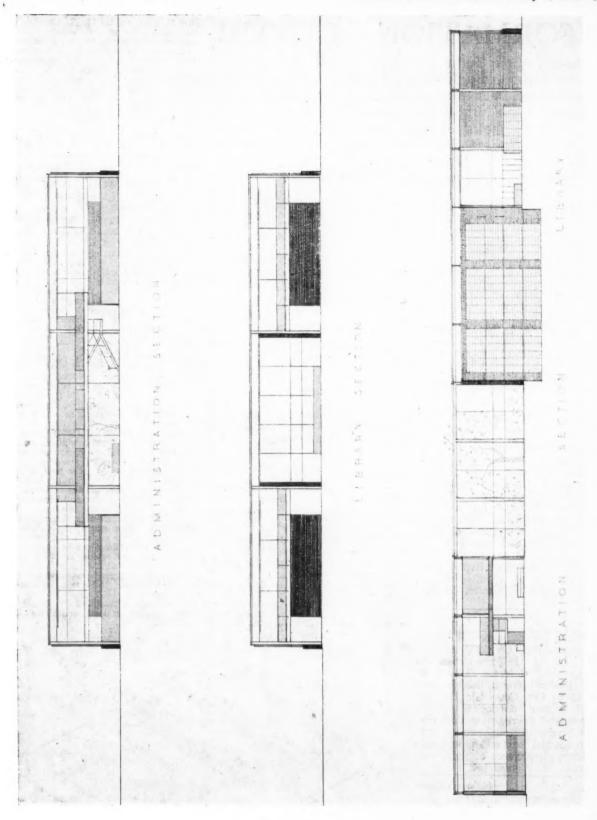
This building, like the Research Building, has that sensitivity of line and that precision, purity and sincerity of design in general which has placed its author among the world's handful of contemporary leaders in architecture, in spite of the small amount of work he has executed. The extreme fastidiousness of his detailing is typified in the drawing illustrated above.







LIBRARY AND ADMINISTRATION BUILDING, ILLINOIS



DESIGNED BY MIES VAN DER ROHE

## INFORMATION CENTRE

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

### PHYSICAL PLANNING

2294

Middlesbrough

MIDDLESBROUGH SURVEY AND PLAN. Prepared by Planning Team under Direction of Max Lock, Town Planning Consultant to Middlesbrough Corporation, with Association for Planning and Regional Reconstruction and Wartime Social Survey. (Architects' Journal, August 2, 1945, pp. 79-90.) Story of Middlesbrough Town and its new plan illustrated by survey maps and proposals based on them, covering: Land Use and Land Use Proposals, Industry, Transport, Housing, Neighbourhoods, Open Space, Health, Education, Shops, the Town Centre.

2295 Wolverhampton

WOLVERHAMPTON PLANS. (Architects' Journal, February 15, 1945, Planner's Scrapbook, p. 136.) Exhibition and report of Wolverhampton Reconstruction Committee on Wolverhampton of the Future. Proposals put forward as basis for discussion and for future consideration by Council. Social and industrial survey to be undertaken later in co-operation with Birmingham University. Report deals with: Growth of town, Housing, Transport, the Civic Centre, Recreation.

296 Sheffield

SHEFFIELD'S GREEN BELT. W. Hunt (Sheffield and Peak District Branch of CPRE, 1s. 0d., 1945; reviewed in Architects' Journal, March 22, 1945, p. 226). Sheffield Green Belt Scheme approved by City Council in 1938 as part of general development plan. Unco-ordinated development since endangers clearly defined boundary between residential areas and agricultural reservation. Importance of fixing exact boundaries of green belt.

2297

Planner's Quiz

PLANNER'S QUIZ. (Architects' Journal, January 4, 1945; February 1, 15, 1945; March 1, 22, 1945; April 5, 1945; May 17, 31, 1945.) Series of parts of maps taken from A Rapid Method of District Survey, prepared by Association for Planning and Regional Reconstruction to demonstrate labour-saving procedure as alternative to thorough diagnostic

survey. Information supplied on A: symbols used in preparation of maps, and B: published sources from which details shown on maps were taken. Maps cover: Relief, Rock Types, Water, Farmland, Sites for Preservation, Distribution of Population, Administrative Boundaries and Population Changes.

2298

Tower Hill

Tower Hill Replanned. Report by Technical Sub-Committee (Tower Hill Improvement Trust, 1945; reviewed in Architects' Journal, May 31, 1945, p. 405.) Practical and sensible suggestions for area north of Tower. Proposal for public garden of about seven acres between Tower and East-West Road. Traffic roundabout at approach to Tower Bridge.

## STRUCTURE

2200

Barrel Vaulting

BARREL VAULT ROOFING. (Pamphlet issued by Twisteel Reinforcement, Alma Street, Smethwick.) Typical sizes of various types of barrel vault roofs. Types of structures suitable for barrel vault roofing. Advantages.

vault roofing. Advantages.

Barrel vault roofing, known also as shell construction, has often been referred to in the Information Centre. A detailed description of this type of construction was published in the ARCHITECTS' JOURNAL, Septem-

ber 21, 1944, pp. 211-19. The booklet contains data which should enable architects to prepare a preliminary design for the general arrangement of such roofs. It is well illustrated with examples carried out during the war, and will, no doubt, contribute to the popularization of this system of roofing which has already been so widely adopted in Europe, the USA and South America.

### MATERIALS

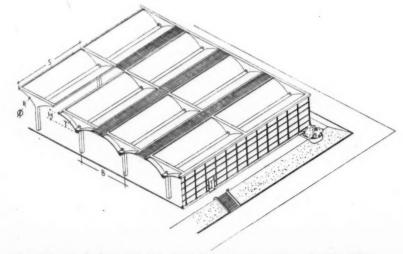
2300

Electro-Concrete

ELECTRO-CONCRETE, Kurt Billig. (Journal of the Institution of Civil Engineers, October, 1945, pp. 368-378.) Treatment of green concrete by electric current in cold weather. Method

adopted mainly in USSR.

Casting of concrete at low temperatures is of comparatively little importance in this country, but in certain parts of USA, Canada, Scandinavia, Germany, and particularly in USSR, engineers are forced to pay special attention to the problem of concrete work during frost periods. The highest degree of development has been reached in USSR. During her industrial reconstruction after the first world war, many factories, sheds, roads, waterworks, hangars, etc., had to be erected within short time limits which made work during the winter months indispensable. For strategical reasons many large structures have been erected far inside the European-Asiatic land mass. There the daily average temperature for five to six months is below freezing-point, and during three to four months is minus 10° C (14° F) or lower. Under Siberian winter conditions, methods like heating the concrete components or the admixture of chemicals alone, do not go far in preventing freezing. The most common practice is the construction of temporary hutting around the projected building. The air inside may be heated and heated aggregates and mixing water are used. This method is not suitable for single-storey industrial buildings where the volume of structural concrete per unit of floor area is small. Such buildings can be more economically protected against frost by double moulds between which steam is blown as soon as the concrete is cast and the outer mould is closed. All these methods are well known in USA and Europe, but another method, treatment by electric current, is applied on a commercial scale only in USSR.



A cantilever roof of barrel vaulting in shell concrete construction. See No. 2299.



THE GREAT BARN, PASTON.
Built by Sir William Paston in 1581.

A STONE tablet records 'THE BILD'G OF THIS BEARNE 'S BI SIR W. PASTO KNIGHTE.'
The inconsequence of the carver in leaving off the final letter of his patron's name, contrasts strangely with the thoroughness of the builders, who achieved a beauty and permanence they little recked of. The memory of the Paston family

is preserved in the letters they wrote, freely discussing their intimate domestic affairs, and the general customs of English life of their times. So, although fame and permanence may be deliberately aimed at, their achievement is more often the simple result of things done well, for their own sake.



Used with Portland Cement in renderings or concrete to exclude or retain water.

## KERNER-GREENWOOD & COMPANY, LIMITED ANN'S PLACE, KING'S LYNN

Sole Proprietors and Manufacturers



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DOME A. N. tember efficie The a orthod given. stairs

kitcher mersio sockets Wet green concrete is electro-conductive and at low voltage quite large quantities of current may pass through it. Owing to the existence of the concrete, the electric power is transformed into heat and the tempera-ture of the concrete is raised. This accele-rates setting and hardening of the concrete and prevents it from freezing at too early a stage. Its influence on the concrete depends on the rate at which electro-energy is transformed into heat. Current is passed through the green concrete by introducing into it two (or more) poles, the circuit being closed by the fresh concrete itself. Only alternating current can be used for this purpose because direct current effects a decomposition of the water by electrolysis. Electro-treatment is rather expensive in comparison with the more usual methods and can be most advantageously applied to structures which are neither too massive nor

The paper contains thermal and electrical data, results of tests on the electrical resistance of concrete, and data on the costs of electro-treatment on a large-scale on the site of one of the new car factories.

## HEATING and Ventilation

Heat Insulation METHODS OF CONSTRUCTION AND OF HEAT INSULATION IN THE UKRAINE. Extracts from Dwellings of the People in the Ukraine. P. G. Yurcheuko. (Translated by G. N. Gibson. Introductory note by H. Bagenal. RIBA Journal, August, 1945.) Interesting description of Russian methods of construction, with particular reference to their way of dealing with conditions of extreme cold. Valuable as indication of methods of approach different from our own but which may be studied with advantage in relation to conditions here. Illustrated by sketches.

Flue Pipes

ASBESTOS CEMENT SPIGOT AND SOCKET FLUE PIPES AND FITTINGS (HEAVY QUALITY) FOR HEATING AND COOKING APPLIANCES. (British Standard 835:1945. (British Standards Institution, 2s. 0d.) Dimensions and tolerances. Workmanship. Hydraulic test. Water absorption test. Recommended methods of fixing and jointing. List of fittings and diagrams.

The section on methods of fixing and joint-The section on methods of fixing and jointing is very brief and there is no mention of the pipes being unsuited to certain types of heating apparatus where flue temperatures may be high, although in USA ordinary AC pipes are not normally used in such cases. Presumably the BSI is satisfied that the present Specification adequately covers the conditions obtaining with all types of heating and cooking appliances.

Domestic Power

POWER DOMESTIC INSTALLATION. A. N. Turner. (Electrical Times, September 27, 1945.) Economical and efficient domestic circuit.

The author describes a wiring scheme for orthodox permanent houses. Plans are given. There are two ring mains, one upstairs and one down, a separate circuit for kitchen appliances and another to an im-mersion heater for the hot water. Cabling, sockets and plugs, distribution board, and

control gear location are described. A considerable saving in material and labour is claimed, with a total of 20 power points

2304 House Wiring

POST-WAR HOUSE WIRING. Heelis. (Electrical Times, September 27, 1945, p. 387.) Wiring by PVC, MICC, lead sheath, screwed tube, grip tube methods.

The article contains a brief analysis of wiring by five methods. The work was done in connection with the design of a tubular steel house at Coventry by D. E. E. Gibson, the City Architect. The

five systems are:—
(1) Polyvinyl chloride covered cable (PVC).

Mineral insulated copper-covered cable (MICC).
(3) Lead sheathed cable.

(4) Screwed conduit with internal cable.

(5) Grip conduit with internal cable. The most interesting item of information is that a light gauge MICC cable is now to become available for housing work. There is a useful table in the article, the main contents of which are quoted below.

Comparison of Wiring Systems

	Esti	Adapt-		
	Life	Cost	Site Man- hours	ability to Prefab.
PVC	30 years	£30 £39	15 25	100
MICC Screwed tube	100 ,,	£45 £47	33 95	45 16
Grip tube	60 ,,	€46	75	20

## 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.

2305 Petrol Pumps

Could you give us the names and addresses of any makers of Petrol Pump Installations?

We suggest that you get in touch with S. F. Bowser & Co., 42, Newlands Park, London, S.E.26.

Park, London, S.E.26.

If the pumps are required for a garage, you might find it worth while to get in touch with the major petrol supply companies, who were accustomed, before the war, to assist garage proprietors in pump installations by taking out a mortgage on the pump, to be repayable over a number of years. It is possible, however, that this practice has now been discontinued. tice has now been discontinued.

2306 Sports Pavilions

Where can I obtain information on the design and construction of pro-vincial cricket and sports pavilions?

A You may find the following references useful:—Architects' Journal, July 1, 1931; February 24, 1932; April 30,

1936; September 4, 1941; November 18, 1943. *The Builder*: August 4; 25; November 24, 1939; August 28, 1942. The above selection will give you a range of pavilions of all sizes from the small private pavilion to the largest sports grounds.



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

### MOTCP

#### Region London

The following is the text of a MEMOR-ANDUM WITH REFERENCE TO THE POSITION OF PLANNING IN THE AREA COVERED BY THE ADVISORY COM-MITTEE FOR LONDON REGIONAL PLAN-NING issued by the Ministry of Town and Country Planning, to the Local Authorities, other than the LCC and City Corporation, responsible for the control of interim development within the area covered by the Advisory Committee for London Regional Planning.

"1. The area covered by the Committee "I. The area covered by the Committee coincides with the area of the Greater London Plan, 1944, prepared by Professor Sir Patrick Abercrombie and submitted to the Minister of Town and Country Planning, plus the County and the City of London.

2. Within this area there are, in addition to the London County Council and the City Corporation, 143 Local Authorities who are

Corporation, 143 Local Authorities who are responsible for the control of interim development, and it is to these 143 Authorities that this memorandum is addressed.

that this memorandum is addressed.

3. These 143 Authorities have formed themselves, or are about to form themselves, into 23 Executive Joint Planning Committees on which the respective County Councils are also represented.

4. These Executive Joint Planning Committees and Committee Councils are also represented.

mittees and County Councils and the London County Council and City Corpora-tion have now formed themselves into the Advisory Committee for London Regional Planning with the following terms of reference: 'To co-ordinate the examination of the outline plan prepared by Professor Sir Patrick Abercrombie for the outer area of the Greater London Region; and to arrive at an agreed outline plan for submission to the Minister of Town and Country Planning with a view to its serving, with the Minister's approval, as a broad directive to the Planning Authorities and to the Authorities responsible for the control of interim development within the area affected.'

The aim of the Advisory Committee is to submit an agreed outline plan to the Minis-

ter by June 30, 1946.

5. The Minister has announced his intention to afford guidance to the Advisory Committee, and through that Committee it will be available to the Executive Joint Planning Committees whom the Interim Development Authorities are required to con-sult when dealing with applications for

development.

The process being followed in the examination of the Greater London Plan is:—
(i) On December 12, 1944, the Minister forwarded advance copies of the Plan to the 143 Local Authorities and the County Councils for their consideration; (ii) these Authorities are forwarding their comments to the Executive Joint Committees of which they are constituent members; (iii) the Executive Joint Committees, as the statutory schemepreparing Authorities, are considering and collating these comments for the areas with which each is concerned, and in due course will submit their views to the Advisory Committee for London Regional Planning

7. While this process is proceeding, the Authorities responsible for the control of interim development will have to deal with applications for development, and it is obvious that unless in exercising such con-trol they adhere to the Greater London Plan the realisation of that plan or of any appropriate modification of it may be seriously

prejudiced.

8. Consequently, the Minister will expect hese Authorities, unless there are strong these Authorities, unless there are strong reasons for not doing so, to adhere for the time being to the Greater London Plan in its present form as the background against which their control should be administered.

They should not in this respect depart from the principles of the plan without consulta-

tion with his officers.

9. In addition to new applications for development, consideration must also be given to consents given before the war but not yet acted upon or fully acted upon as some of these consents may be quite contrary to the principles and proposals of the Greater London Plan. The Minister has already asked the Authorities to supply him with information about these consents and desires to be fully informed as soon as possible so that he may take into consideration the pos-

sible revocation of such consents.

10. Furthermore, draft schemes, whether already submitted to the Minister or in course of preparation, should be examined in the light of the Greater London Plan with a view to their revision. Similarly, it may be necessary to consider how far operative schemes may need to be varied or revoked.

11. The Greater London Plan presents a unique opportunity for safeguarding the future of the greatest capital city of the world, and the Minister is confident that he can rely on the co-operation of all concerned in achieving this great object.

## ILA

## Williams-Ellis

Conference at the Waldorf Hotel of the Institute of Landscape Architects. Speakers included Clough Williams-Ellis, F.R.I.B.A., who gave an address on HOLIDAYS IN THE LANDSCAPE.

WHAT IS C. Williams-Ellis: USE THE OF ALL THIS PLANNING? WHAT DO YOU EXPECT FROM IT? Well, my answer to that perfectly proper Benthamite question is a short and simple one—MORE FUN FOR MORE PEOPLE.

My present attitude to Holidays in the Landscape has been profoundly influenced by my pet philosopher Don Marquis from whose book The Almost Perfect State I shall

"To-day we announce the Purpose of the Universe. Briefly then: The Purpose of the

Universe is Play.

'Artists are the only persons that should be listened to—about anything; about edu-cation, government, the conduct of life generally, forms of government, economic conditions, wars, upheavals and revolutions, inventions and sciences and philosophies, laws and leaders and revolutionary processes -all these things are of consequence only in their relation to the production of art and

'The main thing is to get more Shakes-peares, another Leonardo, a second Beet-hoven; that is all that matters in this world; everything else is extraneous or subsidiary. Artists should be listened to, artists should have charge of this world and govern it, because they and they alone understand some-

thing of what it is all about.

'The Purpose of the Universe is Play. The artists know that, and they know that Play and Art and Creation are different names for the same thing-a thing that is sweat and agonies and ecstasies.

'All the troubles and travail the human race has experienced in making itself human, and all the trouble it is having in making itself into something better than humanity now is, look toward the production of a being who shall devote himself more and

more to conscious creation, to play.'
What really matters is that the appreciation and enjoyment of beauty shall widely diffused and shared as possible-for the greatest happiness of the greatest num-So far as outdoor visual beauty concerned, whether natural or man-made, that philosophy must, in England at any rate, lead one to certain pretty definite conclusions and lines of effort to attempts at popularising and democratizing the enjoyment of such beauty—to making lovely buildings and lovely places generally accessible, without thereby impairing their dis-

without thereby impairing their distinctive characters.

With the overwhelming mass of our teeming population townbred, barbarously reared in far other than splendid cities, having had little contact with beauty of any kind and therefore knowing or caring little for it, the introduction is a hazardous one, for one is unlikely to respond appropriately when pre-sented to the hitherto unknown. Yet it is a risk that must be taken. We must perforce put up with the inevitable misunderstand-ings and gaucheries that will mark the first contacts of the uninitiated with their hither-

to unrealised heritage.

There's room for all of us—for all the different sorts of us who want different sorts of holidays in different places, if not yet enough) at different times. But we need grading, and the holiday places want grading too, and until we have been matched up a bit, no one will know even roughly, what to provide for how many where. Though for the moment of course you can hardly go wrong, as everything is anyway desperately short everywhere, from Youth Hostels up to (relative) luxury hotels, no matter where. But we must be careful not to queer the pitch by doing the wrong thing in the wrong places. And we must take care, too, not to upset the local ecology, not to scare away or unduly disturb the local fauna—in which I would include the local land-owners, who are also God's creatures.

Now, one of the most difficult, but hopeful things about God's creatures—the human race—is its endless variety and the wide differences in its taste and desires, and we

must try so to plan that there will be scope for all of them. We are about to multiply those having holidays by anything up to ten and our landscape available for holidays has been shrinking for a century with an acceleration that is frightening. You may retort that better transport and other facilities have to some extent offset that shrinkage, but excursion trains, speedways, motor coaches, and Holiday Camps aren't landscape, and it is Landscape that I am con-cerned about and it is the landscape itself that all along has been rifled, pilfered and chisled. Now, just because it gives a compact thumb-nail picture of the popular and civilized use of leisure let me quote again from by good book:-

'And what will the inhabitants of the world do with all the leisure that will be theirs through a simplification of humanity's economic, industrial and political problems?

What they please.
They will tell stories and listen to stories; they will run foot races with one another; they will write plays and act them and no one will get rich from it; they will go swimming and drink enough to be happy with-out becoming sots; they will go fishing oftener; they will speculate on man's destiny and cultivate their religious natures and go to chicken fights and ball games and discover new gods and sit in the shade and smoke; they will eat excellent food without becoming gluttons, and make love without becoming jealous; they will invent new arts and new games and new duties, and everyone will live five hundred years and be glad of it and never have the toothache; they will pitch horseshoes and write poems and build beautiful buildings and recite limericks to one another.

one another.

There will be plenty of useful and noble and pleasant things to do and plenty of time to do them in, and everybody will do them.'

What-everybody?

Why not? They will work all the harder on account of all this, and they will get more work done in four hours than is done in eight hours now—partially because they will be more vigorous nervously and mentally and physically, partially because they will each be working for himself, partially because they will use better machines than exist to-day, and partially because they will feel themselves the masters and not the slaves of that machinery.
'Just because you have heard a thing so

often that it bores you is no sign that it

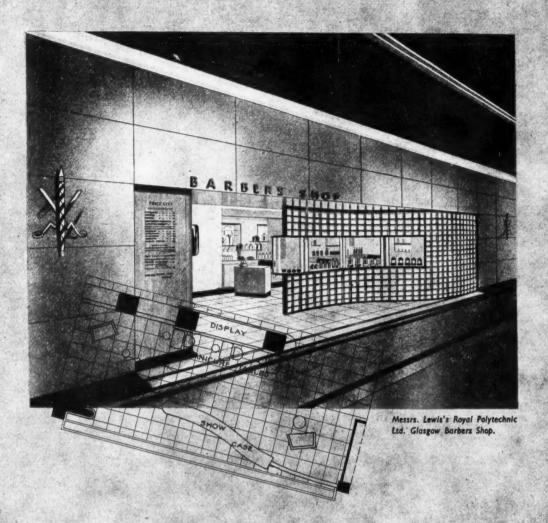
isn't true

CHANGE! Wanting it or not, every-thing is going to change including the landscape, but we've got to see that the change is always for the better. In accordance with the old Chinese Philosophy of Feng Shui as to which Sir Patrick Abercrombie is our great European authority, let me quote him:

Missionaries establishing themselves in some remote valley and building a neat corrugated iron tabernacle with spiked bell turret have been indignantly surprised when the population has arisen and massacred them—not by reason of any objection to their religious teaching, but because the pitch of the roof was perhaps, too steep or the spike of their bell turret should have been domed or square-topped. Again, rail-way embankments and tunnels have been considered by the inhabitants to favour the circulation of a maleficent breath-a sort of whiff from the pit—and enterprising con-tractors have been astonished that their civilizing efforts have met with furious opposition. The Professor of Feng Shui, whose job it is to study and expound the shapes which the spiritual forces of Nature have produced and to prescribe the ways in which all buildings, roads, bridges, canals and railways must conform to them is placed in a position of extreme power; and we ourselves can hardly hope to be able similarly to explode some flaring upstart bungalow or dark Satanic mill or conflagrate the perpetrators of certain country-side blasting







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advertisements in their own spirit. But whether we base our æsthetics upon Chinese premises or not, they have shown us in their exquisitely artificial country that it is possible to evolve a workable system. There must, it will be found, be no attempt to make new things imitate the old, or to aim at a bogus naturalism. .

and so on. All magnificent pre-Christian oriental CPRE propaganda.

But now, all of a sudden, we find ourselves

not merely in the year 1945 A.D., but in the year 1A.A. (Atomic Age) which, so we are assured, is going to transform everything -industry, productivity, agriculture, trans-port, health, leisure and what have you, and the exciting thing is, it may even be true. Obviously, it will profoundly affect physical planning—I don't mean universal dispersal or burrowings for fear of the atomic bombs that is altogether too defeatist and sub-human to be contemplated but in all sorts of other ways, industrially, in particular. even see it suggested that we can now mani-pulate the landscape to our fancy, for example—creating a new Lake District wherever we have the mind merely by a series of controlled explosions; so many pounds of the prescribed mixture to produce a Helvellyn, so many differently detonated, to excavate a Windermere.

As the over-comfortable are an almost negligible minority, in planning holiday arrangements for the masses—the 'holidays with pay' people, our ten million or so home tourists, we do want to give them what comfort and elegance we can if their holidays are to be a real success. But programmes that start out with fulminations against the Idle Rich will always fail. For nearly everyone, secretly, wishes to be both idle and rich. And more idleness (leisure) and more riches for everyone are precisely what the world needs. Luckily, on the whole most of us are gregarious and like being surrounded by our fellow creatures,

even of the same sort from the same sort of places. But they do want to forget home, and have something gayer, more comfortable and more exciting than what we know their homes are mostly like-because we know what our towns are mostly likewhere eight out of every ten of us live. The big holiday camps thoroughly understand this; they are gay and bustling with activity and social events all day and half the night—and I am all for them—in the right places: They are what a large proportion of people want, and we, who may shudder at the bare idea of such a holiday, should surely be humbly grateful that most of our fellows do like multitudes, and will therefore leave us our solitudes.

We can no longer talk about 'concentra-tion' in connection with camps, but that is their beauty-from their patrons' point of view, and from ours: Cluster Camps if you like; Galaxies, Pleiades—places where four or five thousand people gather for a week or a fortnight and have a rollicking high old time, which is, after all, what most of them want—anyhow the younger folk. And remember these Camps are new, shouldn't be too harshly judged by new, their present form, which I doubt not will be greatly improved architecturally and in their amenities generally. They will grow up, become more civilized, less intent, perhaps, on pure amusement and athleticism and social occasions and become more alive to their cultural opportunities, with good music and drama, a good library, perhaps debates and conferences, and generally pass on from the realm of ENSA to that of CEMA—the same architecturally. Though God knows, same architecturally. Though God knows, I'd rather have any holiday camp I've ever seen, which is usually a compact and orderly lay-out, if a bit uninspired and mechanical, than have even a quarter of the inmates left loose to run up their own little holiday shacks all over the place, as at Winchelsea Beach, Hunstanton, Kinmel Bay and Peace-

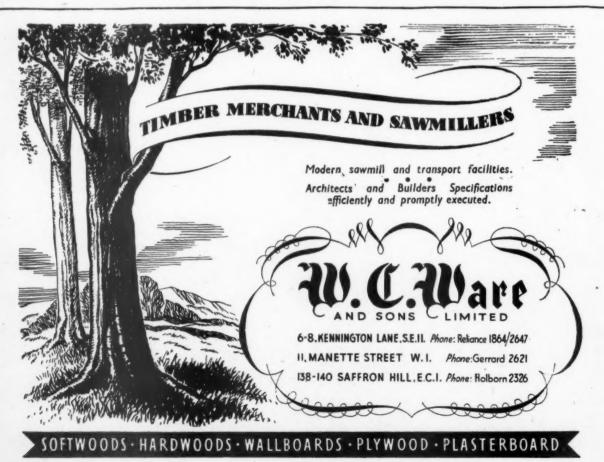
haven. At present Holiday Camp 'Func-tionalism' is quite primitive and mechanical; it now needs to develop and evolve on to an altogether higher plane where, to efficient arrangements for eating and sleeping and drinking and washing-and of course dancing and swimming—are added such graces and æsthetic amenities as only imaginative designing can give.

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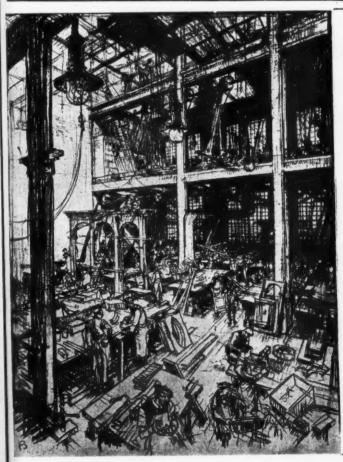
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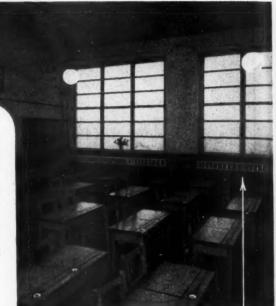
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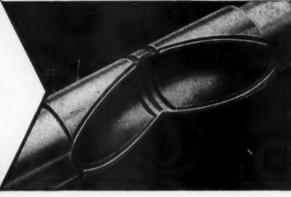
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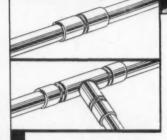
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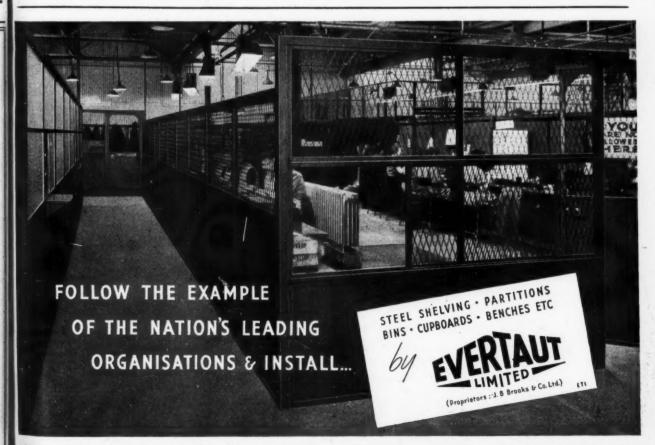
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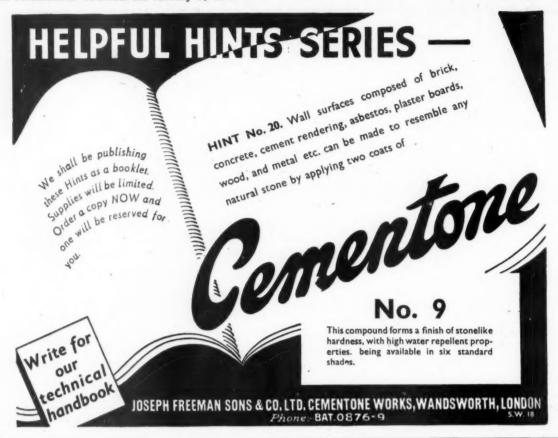
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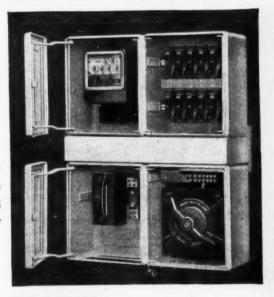
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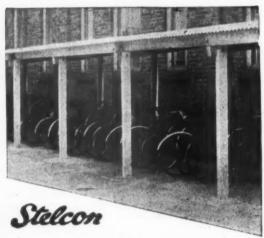
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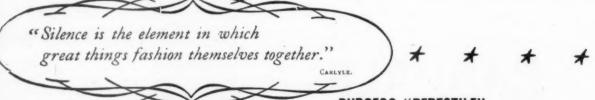
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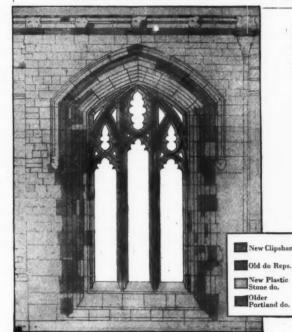
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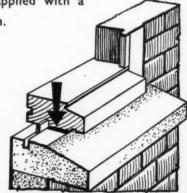
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Applications are invited for the appointment of two Draughtsmen to assist the Planning Officer of the Joint Committee.
The salary will be £300 per annum, rising by annual increments of £10, to £330 per annum. Plus cost-of-living honus.
The applicants (men or women) should be capable draughtsmen and colourists, accustomed to the preparation of planning maps, basic survey sheets (including revision of ordnance maps), and architectural drawings. Proficiency in perspective projection will be an advantage.
The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.
Applications, in writing, stating are and experience, together with copies of two recent testimonials, should be made to the undersizend, not later than Thursday, 24th Jannary, 1946.

GERALD H. R. WILSON.

Secretary to the Joint Committee.
Municipal Offices, Guildford.

SS.

RAWMARSH URBAN DISTRICT COUNCIL.

#### RAWMARSH URBAN DISTRICT COUNCIL.

### APPOINTMENT OF ARCHITECTURAL ASSISTANT.

ASSISTANT.

Applications are invited for the above appointment, at a salary of £400 per annum, plus bonus, at present £59 16s. per annum.

Applicants must be Registered Architects, and have considerable experience in the preparation of drawings and specifications for Public Works and Housing in particular.

The appointment is permanent, and subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with two recent testimonials, must reach the undersigned not later than 21st January, 1946.

J. R. S. CREIGHTON,

Engineer and Surreyor.

Rawmarsh Urban District Council Council Offices, Parkvate, Yorks, W.R.

20th December, 1946.

539

COUNTY BOROUGH OF DARLINGTON.

### COUNTY BOROUGH OF DARLINGTON.

#### BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ONE ARCHITECTURAL ASSISTANT, at a commencing salary of £7500 per annum, rising by annual increments of £15 to £420 per annum, plus cost-of-living bonus of £59 19s. 3d. per

The appointment will be subject to the provisions of the Local Government Superannuation Act. 1937, and to the conditions of service applicable to the Council's permanent officials. Preference will be given to candidates who have passed the Associateship examination of the Royal Institute of British Architects.

Applications, endorsed "Architectural Assistant" giving names and addresses of three referees, should be delivered to the undersigned on or before the 12th January. 1946.
Canvassing, directly or indirectly, will disqualify.

H. HOPKINS.
Town Clerk.
540

The LONDON COUNTY COUNCIL invites applications for appointment on a permanent basis, to the position of APCHITECT TO THE COUNCIL, with responsibility also for the duties of Superintending Architect of Metropolitan Buildines. Salary 22.500, rising by increment of £250 after the first and third years, to £3.000 a year. The person appointed will be required to contribute under the Council's Superannation and Provident Fund Scheme. Forms of applications (stamped addressed foolscap envelope necessary), obtainable from Clerk of the Council (K), the County Hall, Westminster Bridge, S.E.1. Applications must be returned so as to be received not later than Saturday, 2nd February, 1946. Canvassing disqualifies (2549)

#### CORPORATION OF GLASGOW. HOUSING DEPARTMENT.

Applications are invited for the undernoted appointments:—
CIVIL ENGINEERING ASSISTANTS (FIRST CLASS).

Applications are invited for the undernoted appointments:—
CIVIL ENGINEERING ASSISTANTS (FIRST CLASS).
Applicants should be Associate Members of the Institution of Civil Engineers or Members of the Institution of Civil Engineers or Members of the Institution of Municipal and County Engineers, and should have experience in surveying and levelling and in the development of housing estates. Town planning experience is desirable. CIVIL ENGINEERING ASSISTANTS (SECOND CLASS).
Applicants should have completed their apprenticeship and should have passed Section "A" of the Associate Membership Examination of the Institution of Civil Engineers or the Intermediate Examination of the Institution of Municipal and County Engineers, and should have experience in surveying and levelling and in the development of housing estates.
QUANTITY SURVEYORS (FIRST CLASS).
Applicants should be Professional Associates of the Chartered Surveyors' Institution, and should have experience in taking off quantities from plans, preparing schedules and specifications, making up interim payments, probable costs and valuations, measuring up and adjusting final measurements for all trades and for all classes of work, and should have completed their apprenticeship and should have completed their apprenticeship and should have experience in taking off quantities from plans and preparing schedules and specifications and measurements of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum, plus war increase of \$20 to £395 per annum increments of £20 to £400 per annum.

The appointments are subject to modifica

the successful applicants will require to pass a medical examination.

Applications, stating age, particulars of previous training, experience, and qualifications, should be addressed to the undersigned in an envelope indicating on the top left-hand corner the position for which application is made, and should be received not later than 26th January, 1946.

The Ministry of Labour and National Service have given permission under the Centrol of Engagement Order, 1945, for the advertisement of these vacancies.

RONALD BRADBURY,
Briefly of Housing.
Housing Department, 20, Trongate.
Glasgow, C.1.
24th December, 1945.

CITY AND COUNTY OF BRISTOL.

#### CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following temporary appointments:—
(1) Four ASSISTANT
enced in Housing, and
(2) Four ASSISTANT ARCHITECTS; experienced in Hospitals,
The salaries offered are £450 per annum, plus war benns, salaries age, qualifications, and

The salaries officed are dualifications, and experience, together with the names of three referees, are to be delivered to the undersigned not later than Saturday, the 12th January, 1946. The appointments will be subject to one month's police on either side.

City Architect.

use. Colston Avenue. Bristol. 1. Eagle House

#### CITY OF ROCHESTER.

#### ARCHITECTURAL ASSISTANT.

ARCHITECTURAL ASSISTANT.

Andications are invited for the above appointment in the City Survevor's Department, at a commencing salary of £400 per annum, plus costof-living honus (at present £50 per annum). Candidates should be Associates of the Royal Institute of British Architects, and have had good general experience particularly in the preparation of drawines, specifications, and quantities for Municipal Housing Schemes.

The annointment will be subject to the Local Government and other Officers' Superannation Act, 1937, and the successful candidate will be required to pass a medical examination.

Annivations, stating age, unalifications, and experience, accompanied by copies of three recent testimonials, to be delivered to the undersigned not later than 21st January, 1946.

W. LAW.

City Surveyor. King Edward Road, Rochester. 27th December, 1945. 545 Ame C

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(c) to £
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Amended Advertisement.
SALOP COUNTY COUNCIL.

### COUNTY SURVEYOR'S DEPARTMENT— PLANNING ASSISTANTS.

Applications are invited for the following appointments in the Town and Country Planning Section of the County Surveyor's Department.

(a) Grade E—Planning Assistants. Salary, £410 to £430 per annum.

(b) Grade D—Planning Assistants. Salary, £350 to £336 per annum.

(a) Grade E—Planning Assistants. Salary, £410 to £470 per annum.
(b) Grade D—Planning Assistants. Salary, £350 to £385 per annum.
(c) Grade B—Planning Assistants. Salary, £235 to £285 per annum.
In addition to the salaries stated, a cost-of-living bonus of £59 l6s. per annum is at present being paid by the County Council.
Applicants for appointments (a) and (b) should have had a good practical experience in the preparation of Planning Schemes for urban and rural areas and be suitably qualified. Preference will be given to applicants who are members or associate members (by examination) of the Town Planning Institute.
Applicants for appointments (c) must have had training in the office of an Engineer, Surveyor or Architect, and be capable of making surveys and be good draughtsmen. Planning experience, though desirable, is not essential.
The above appointments are to supplement the present staff engaged in the preparation of Planning Schemes for the five Joint Committees which cover the County, and those appointed will be required to work within the area of one of the Joint Committees and carry out his duties under the general direction of the County Planning Officer.
The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications, training and experience, and giving particulars of past and present appointments, accompanied by copies of two recent testimonials, or, in the case of H.M. Forces, the names of two referees, and endorsed "Planning Assistants" (a) (b) or (c), must be delivered to the County Surveyor, County Buildings, Shrewsbury, not later than the 14th January, 1946.

G. C. GODBER, Clerk of the Council.

Shirehall, Shrewsbury,

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#### BURGH OF JOHNSTONE.

#### APPOINTMENT OF ARCHITECT.

APPOINTMENT OF ARCHITECT.

Applications are invited from Qualified Architects with experience in Municipal Housing Work. Applicants should not be over 45 years of age, and have had experience of Local Authority Housing work. The commencing salary will be at the rate of £350 per annum, plus cost-of-living bonus, at present £60 per annum. The appointment will be subject to the terms of the Town Council's Superannuation Scheme, and the successful candidate will require to pass a medical examination.

Applications, stating age, experience, and qualifications, and accompanied by copies of three recent testimonials, should be lodged with the Subscriber, not later than 12 noon, on 7th January.

RODERICK S. MACRAE,

RODERICK S. MACRAE, Town Clerk.

Town Hall, Church Street, Johnstone, Renfrewshire. 19th December, 1945.

#### Architectural Appointments Vacant Pour lines or under, 4s.; each additional line, 1s.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is released. is welcomed.

A RCHITECTURAL and Surveying Assistant required in West End office of Quantity Surveyors, in connection with preparation of working drawings and details on adaptation of new schemes and war damage schemes. Write, stating age. experience, and salary required, Box 983.

R EQUIRED, immediately, for Reading firm, good Draughtsman; capable of preparing working drawings from sketches; housing and commercial experience; salary up to £350 per annum, according to age and experience.—Apply Sainsbury and Chamberlain, L./F.R.I.B.A., 14, Cross Street, Reading.

CHIEF ASSISTANT required immediately for busy Yorkshire office; general experience in design, planning and surveying, with knowledge of quantities necessary, for housing, factory, banks, hospital, and domestic work, etc. Apply, stating age, salary, references, and when at liberty. Box 517.

A RCHITECTUBAL DRAUGHTSMAN for Architect's Department of an industrial undertaking in Birmingbam. Write age, quali-fications, and experience, to Box 529.

A RCHITECTURAL ASSISTANT wanted for small but busy office in Brighton; specifications, surveys, and working drawings, without supervision; progressive position to keen Assistant of either sex; state salary, experience, and when available. Wilfrid L. Mickiewright, A.I.A.A., 18, Queen's Road, Brighton.

SENIOR and Junior Architectural Assistants required immediately; write details of experience, salary required, Stephenson & Gillis, Architects and Surveyors, 2, Saville Chambers, North Street, Newcastle-upon-Tyne.

URGENTLY required, experienced Archi-tectural Assistant, for housing layouts, working drawings, details specifications, levels, etc.; salary up to £600 per annum, according to ability and experience. L. & C. Hannon & Partners, 9, Victoria Street, Westminster, S.W.1. Abbey 2033.

A SSISTANT required, in Architect's Office, Grimsby; experienced in surveys and working drawings; capable in design and ability to take responsibility encouraged. Write, stating experience and salary required, to H. S. Hall, Chartered Architect, 26, South St. Mary's Gate, Grimsby. Grimsby.

A RCHITECTURAL ASSISTANT, able to make complete surveys, required for modern Architect's Office in Suffolk; £400 per annum for suitable applicant. Box 521.

A RCHITECTURAL ASSISTANT required for Engineer's Department of a Mersey Port Authority; applicants must be experienced in the design and estimating of costs of industrial buildings, including modern welfare schemes; good and permanent conditions of service and salary in accordance with ability and experience. Box 516.

#### Architectural Appointments Wanted

Advertisements from Architectural Assistants and Students seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice.

PROBATIONER, R.I.B.A., ex-Service man (Intelligence Corps), preparing for inter-mediate exam., requires employment in Architect's Office (London area) as Draughtsman and in general duties; available at once. Box 217.

PARTNERSHIP required by A.R.I.B.A. Dip.
Arch.; ex-Major R.B.; aged 37; in active established practice; preferably in South of England, but excluding London; capital available. Box 223.

A RCHITECTURAL ASSISTANT (age 26), due to be released from the Forces in March, 35 years' experience in Architect's and Surveyor's Office, good draughtman, capable of preparing working drawings, details and surveys, seeks appointment in Architect's Office; South Bucks area. Box 224.

POSITION wanted in Architect's Office by Architectural Student, after 4 years on war work as an Engineering Draughtsman; perspec-tive a speciality. Box 225.

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A B.I.B.A. (37), Scot, capable draughts-oman, with excellent and varied G.P. ex-perience, desires position, with early partnership, in Scotland or Midlands. Box 227.

YOUTH (17) seeks post with Architect(s), in London or North suburbs; 3 years' architectural and surveying experience, etc. £300 per annum. Box 228.

A RCHITECTURAL ASSISTANT (22), to be released from Army during January, seeks position of responsibility in office of Architect or Local Authority where free hand would be given in contemporary design; 42 years prewar experience on variety of building works with private architect and local authority; 6 years' service in Military D.O.'s (R.E. Works Services); latter 44 years as Chief Draughtsman inc.; C.D. for 3 years on construction of new Central Ordnance Depot; fifth place Thistle Foundation Competition (scheme produced overseas); testified as "ability above average," etc.; South of England preferred, will consider other districts. Box 229.

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Application forms and further particulars may be obtained from the Registrar, College of Art, Lauriston Place, Edinburgh, 3.

The last date for receiving applications is 4th February, 1946.

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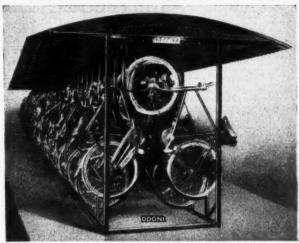
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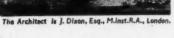


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	li	Kingfisher, Ltd.		Tullis, D. & J., Ltd.	xlii			
Colt Ventilation, Ltd	11	King, George W., Ltd.		Turners Asbestos Cement Co., Ltd	xvii			
Copperad. Ltd		King, J. A., & Co., Ltd.	xlviii	Tylers, Ltd.	xII			
Crittall Manufacturing Co., Ltd		Lacrinoid Products	WIAIII	Underfeed Stoker Makers' Assoc	All			
Crittall, Richard, & Co., Ltd.	11			Uni-Seco Structures, Ltd.	xlviii			
Croft Granite, Brick & Concrete Co., Ltd.	xii	Lancashire Dynamo & Crypto, Ltd		United Steel Companies, Ltd., The	YIATH			
Crompton Parkinson, Ltd	* ***	Lead Industries Development Council		Val de Travers Asphalte Paving Co., Ltd.	16			
Cutting, R. C., & Co., Ltd.	xlviii	Limmer & Trinidad Lake Asphalte Co			10			
Davidson, C., & Son, Ltd	vi	Lockerbie & Wilkinson (Tipton), Ltd		Walterisation Co., Ltd., The	11			
Docker Bros	-	London Brick Co., Ltd	viii	Wardle Engineering Co., Ltd				
Doulton & Co., Ltd		McArd, Robert, & Co., Ltd	xiv	Ware, W. C., & Sons, Ltd	xxxiv			
Dreadnought Fireproof Doors (1930),		Magnet Joinery Co., Ltd		Wheeler, F. H., & Co., Ltd.	-			
Ltd		Metal Finishes, Ltd.	XX	Wilkinson Rubber Linatex, Ltd	1			
Dunlop Rubber Co		Metropolitan-Vickers Electrical Co., Ltd.	***	Wimpey, George, & Co., Ltd	18			
Eagle Pencil Co., Ltd		Mills Scaffold Co., Ltd	lii	Windshields of Worcester	В			
Easco Electrical Service	-	Milners Safe Co., Ltd	XXXV	Wood Wool Building Slab Mfrs. Assoc	-			
Edgar, Wm., & Son, Ltd	xi	Mint, Birmingham, Ltd., The	xxxvi	Line Alloy Rust-Proofing Co. Ltd	-			
	nents (Wan		ors. Tracin	gs. etc., Educational.	- 2			
For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Leval Notices, Miscellaneous Property and Land Salse—see pages xivi, xivii and xiviii.								

Legal Notices, Miscellaneous Property and Land Sales—see pages xlvi, xlvii and xlviii.



