INE ARTS DEPARTMENT The Architects' JOURNAL for September 22, 1949 ARC HI  $\star$  A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is pub-lished in two parts—A to Ic one week, Ic to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address. Institution of Electrical Engineers. Savoy Place, W.C.2. Temple Illuminating Engineering Society. 32, Victoria Street, S.W.1. At Institution of Gas Engineers. 1, Grosvenor Place, S.W.1. Sid Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1. Temple Bar 7676 IEE IES Abbey 5215 Sloane 8606 IGE THVE Sloane 3158 Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston TIBD Euston 2450 Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 ILA I of Arb. standard contents Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071 Museum 7197 every issue does not necessarily contain Institute of Builders. 48, Bedford Square, W.C.1. MI Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1. IOB all these contents, but they are IR the regular features which Monarch 7391 continually recur. Institute of Registered Architects. 47, Victoria Street, S.W.1. Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Inland Waterways Association. 11, Gower Street, W.C.1. Abbey 6172 Sloane 7128-29 TRA ISE IWA Museum 9200 NEWS and COMMENT Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264 LIDC London Master Builders' Association. 47, Bedford Square, W.C.1. M MARS Group (English Branch of CIAM). 34, Gordon Square, W.C.1. LMBA Museum 3891 Diary MARS Euston 2158-9 News Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Ministry of Education. Curzon Street House, Curzon Street, W.1. Ministry of Health. Whitehall, S.W.1. Whitehall 3400 Mayfair 9400 MOA MOE Architects' Commonplace Book Whitehall 4300 MOH Ministry of Labour and National Service. St. James's Square, S.W.1. Whitehall 6200 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. MOLNS Astragal's Notes and Topics MOS MOT Letters MOTCP Whitehall 8411 Ministry of Works. Lambeth Bridge House, S.E.1. Natural Asphalte Mine-Owners and Manufacturers Council. MOW Reliance 7611 Societies and Institutions NAMMC Abbey 1010 Abbey 5277/8 94, Petty France, S.W.1. National Association of Shopfitters. 9, Victoria Street, S.W.1. National Buildings Record. 37, Onslow Gardens, S.W.7. **TECHNICAL** SECTION NAS NBR Kensington 8161 National Council of Building Material Producers. 2, Caxton Street, S.W.1. Abbey5111 NCRMP Information Sheets National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041 NFBTE National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451 National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 2881/2/3 National House Builders Registration Council. 82, New Cavendish Street, W.1. Langham 4041 Information Centre NFBTO Current Technique NFHS NHBRC Questions and Answers National Physical Laboratory. Head Office, Teddington. Mo National Smoke Abatement Society. Chandos House, Buckingham Gate, Molesey 1380 NPL Prices NSAS Abbey 1359 S.W.1. The Industry NT National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211/2 Whitehall 7245 PEP Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. PHYSICAL PLANNING Reinforced Concrete Association, 94, Petty France, S.W.1. Whitehall 9936 RCA Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh RIAS SUPPLE**ME**NT Edinburgh 20396 RIBA Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721/7 Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall5322 RICS CURRENT BUILDINGS Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3935 RFAC Royal Society. Burlington House, Piccadilly, W.1. Royal Society of Arts. 6, John Adam Street, W.C.2. Regent 3335 Temple Bar 8274 RSJ RSA Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Sloane 5134 Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101 Society of British Paint Manufacturers. 20, Piccadilly, London, W.1. Regent 6347 Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8. STATISTICS HOUSING RSI RIB SBPM SCR Architectural Appointments Western 1571 Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbe School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Abbey 7244 SE Wanted Vacant and SFMA Mansion House 3921 Structural Insulation Association. 14, Moorgate, London, E.C.2. Central Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand, E.C.1. Metropolitan Central 4444 SIA SIA Metropolitan 8344 Scottish National Housing & Town Planning Council. SNHTPC Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holoom 2646 SPAB Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. Temple Bar 5006 TCPA [Vol. 110 No. 2850] THE Timber Development Association. 75, Cannon Street, E.C.4. Town Planning Institute. 18, Ashley Place, S.W.1. Timber Trades Federation. 81, Cannon Street, E.C.4. War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. City 4771 (6 lines) Victoria 8815 PRESS ARCHITECTURAL TDA TPI TTF WDC , 11 and 13, Queen Anne's Gate, Westminster, City 1476 S.W.1. Phone: Whitehall 0611 Mayfair 8866 Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. City 4263/4 Price 9d. WEDA

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THE ARCHITECTS' JOURNAL for September 22, 1949 THE LONDON SAND BLAST DECORATIVE GLASS WORKS LTD. for GLASS

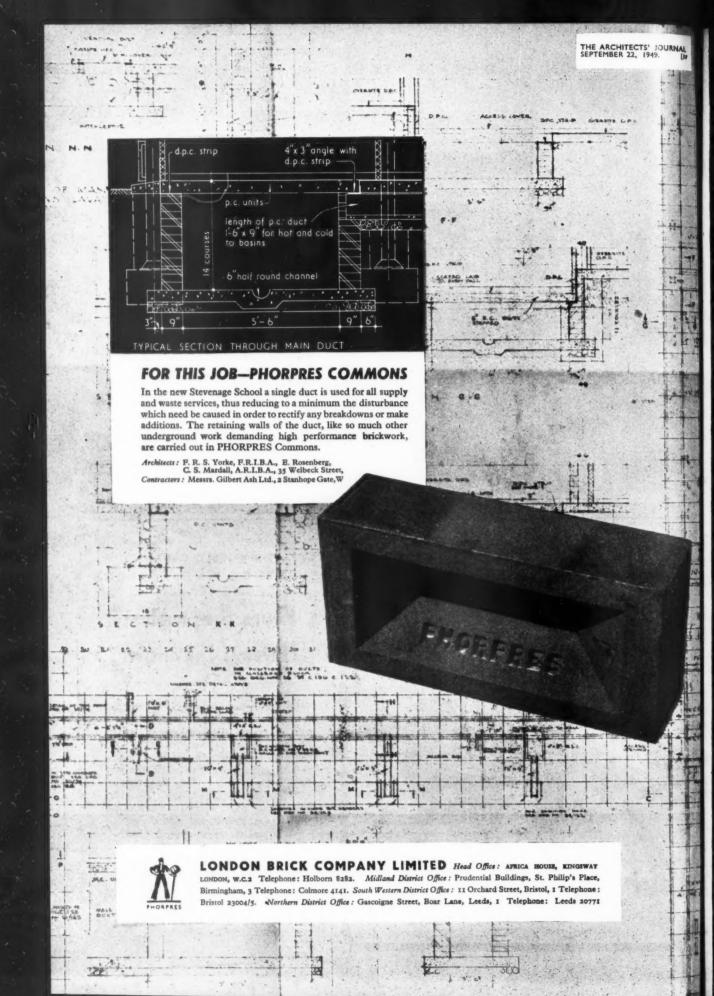
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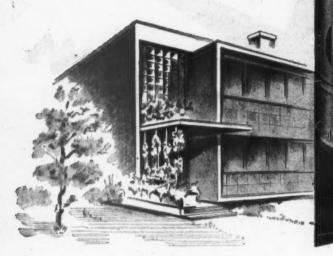
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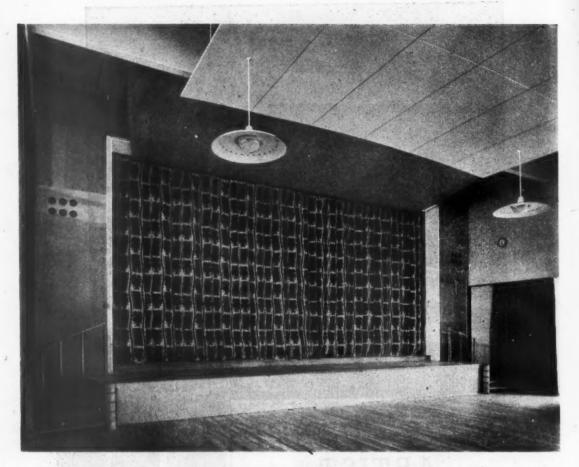
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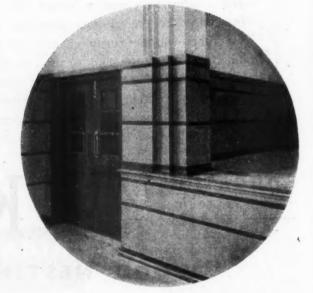
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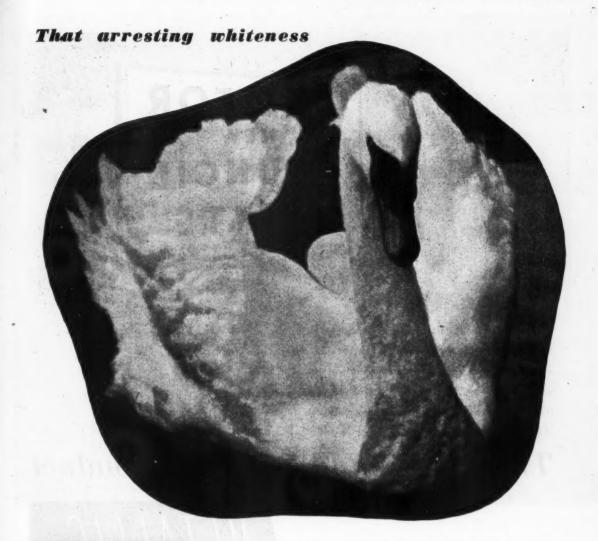
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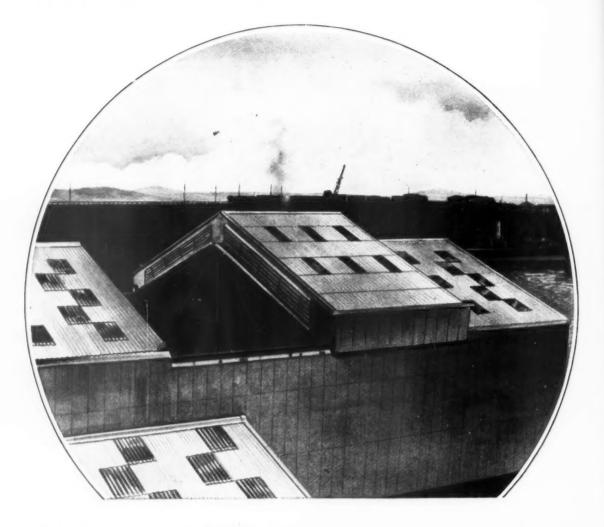
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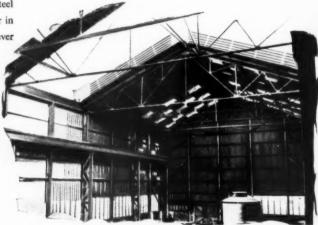
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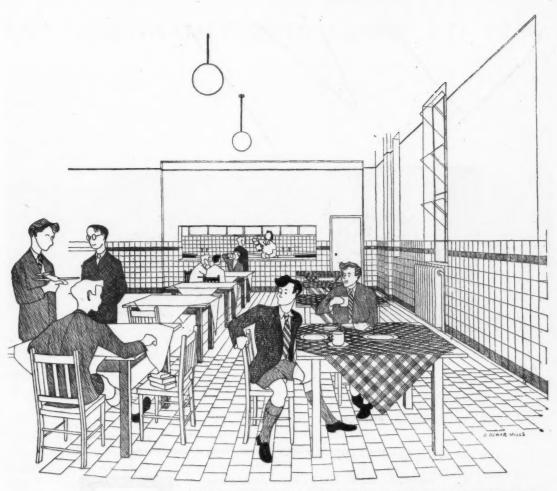
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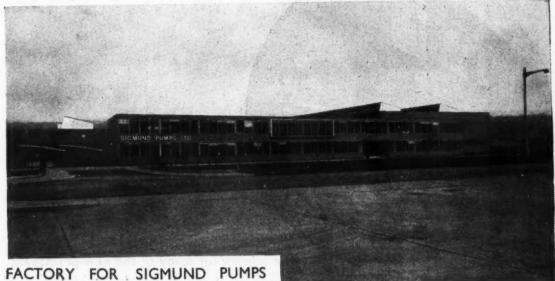
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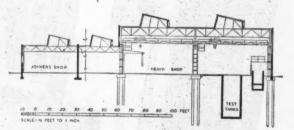
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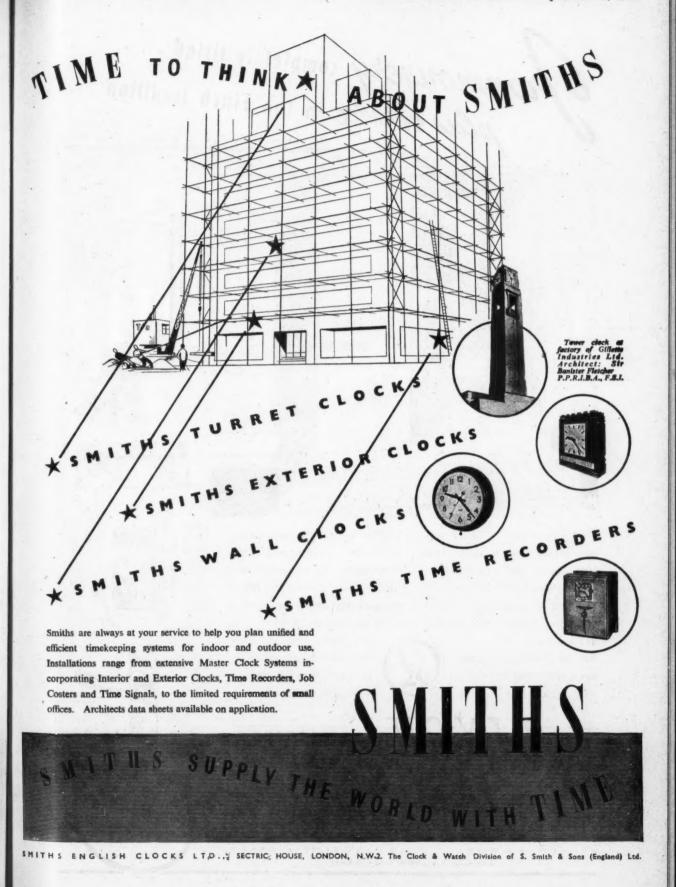
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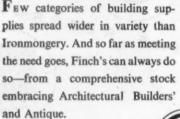
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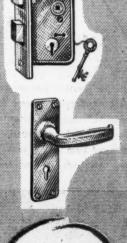
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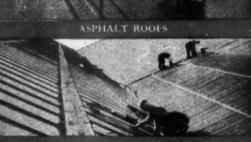
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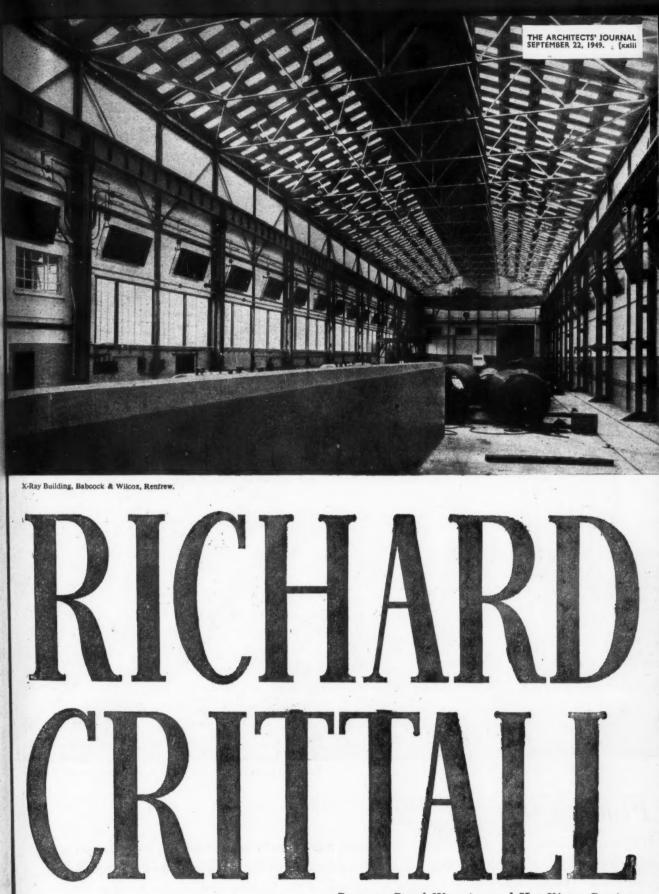
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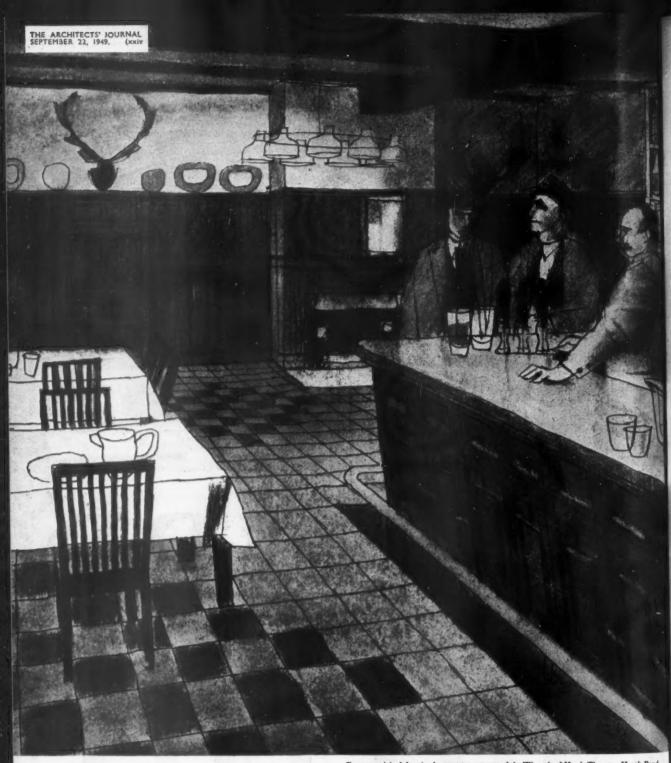


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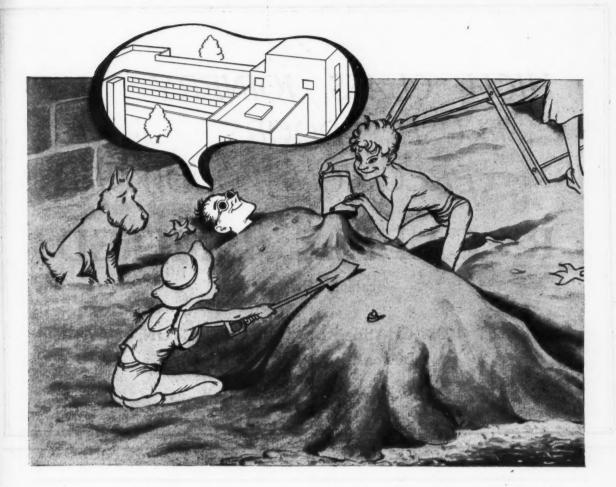


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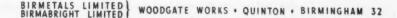
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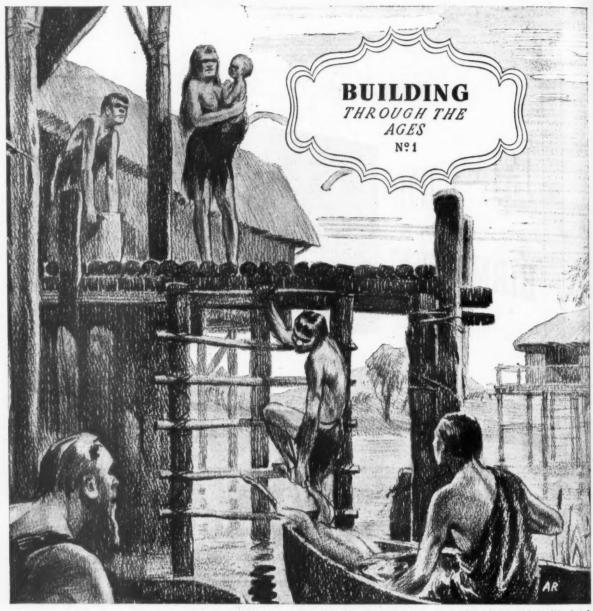
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Lake Dwellings of the Neolithic Period.

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FOR thousands of years in the long and tortuous history of Man, his only shelter from the elements was some dark cave, cleft either by nature or his own crude efforts. The earliest developments which could, by any stretch of imagination, be described as "building" were simple huts of branches or other easily available timbers.

The first buildings of which any reliable data is obtainable were primitive habitations on the edge, or over the waters, of various Swiss lakes. A typical lake village, as shown, was often built some distance out in the lake, this isolation giving protection from enemies, both human and animal. The piles which supported the huts were cut and fashioned by stone hatchets, or fire, and on this foundation the flimsy shelter was constructed. The floor platform would be fastened to the piles by wooden pins and lashings. The walls were of thin branches and wattle, made as weathertight as possible by coating with clay. The roof of straw, rushes or bark completed the structure.

Such lake dwellings were common all over Europe from 10000 B.C. down to 300 B.C. It was Man's ever-growing ingenuity in building construction which slowly brought about the transition from these crude shelters to more durable and protective edifices.

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Architect : H. F. Bailey, L.R.I.B.A. of W. H. Smith & Son Ltd. Metal Craftsmen : J. Starkey Gardner Ltd. Aluminium supplied by The British Aluminium Co. Ltd.

D

# Aluminium Headlines

\* All external metalwork in aluminium with fine satin finish protected by air drying clear lacquer.

★ Interior panelling in Australian Walnut Veneer on heavy gauge aluminium.

★ Aluminium alloy shutters — each leaf a simple extrusion eliminating riveted or welded joints.

★ Folding aluminium doors, glazed for "after hours" inspection.

★ Structural members built from medium strength aluminium alloy plate and extruded sections.

\* Unstressed members in pure aluminium.

**★** Floor constructed from  $\frac{3}{16}^{"}$  aluminium alloy plate on a lattice framing.

\* Electrical wiring carried in aluminium conduit.

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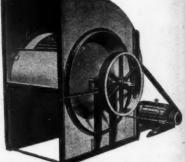
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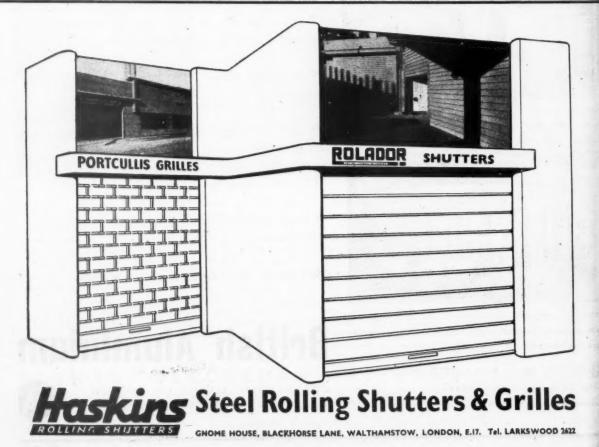
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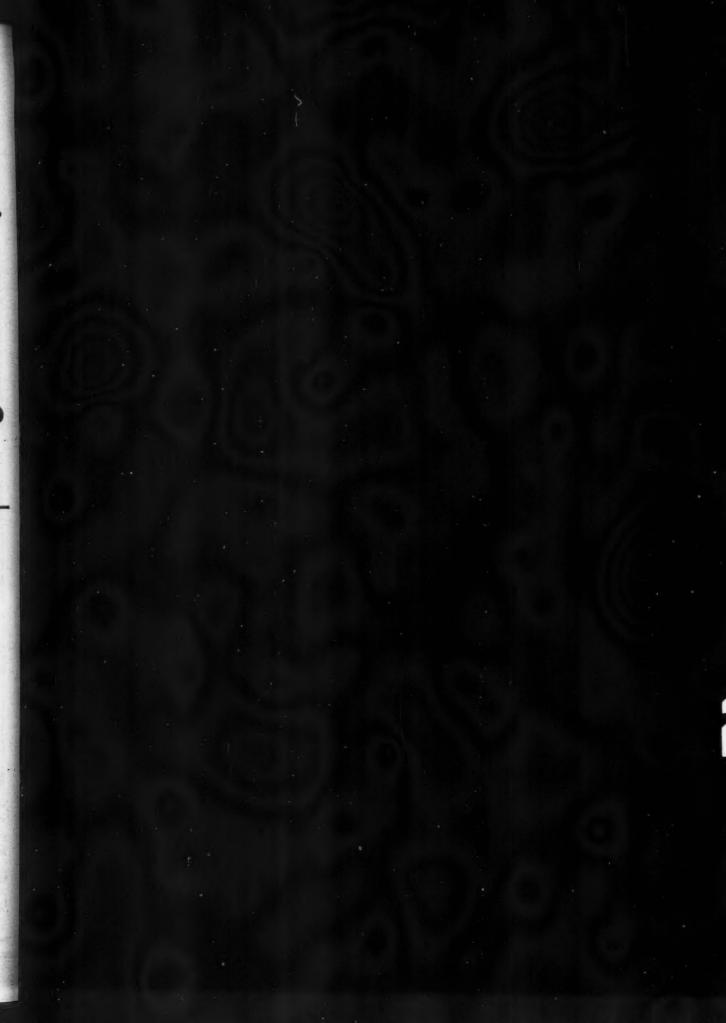
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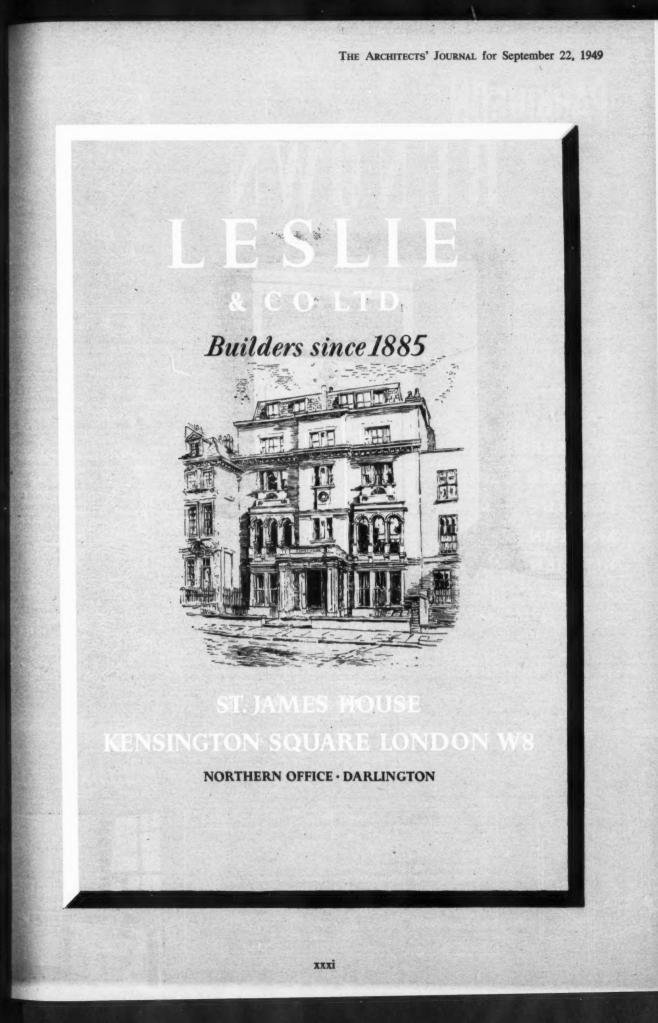


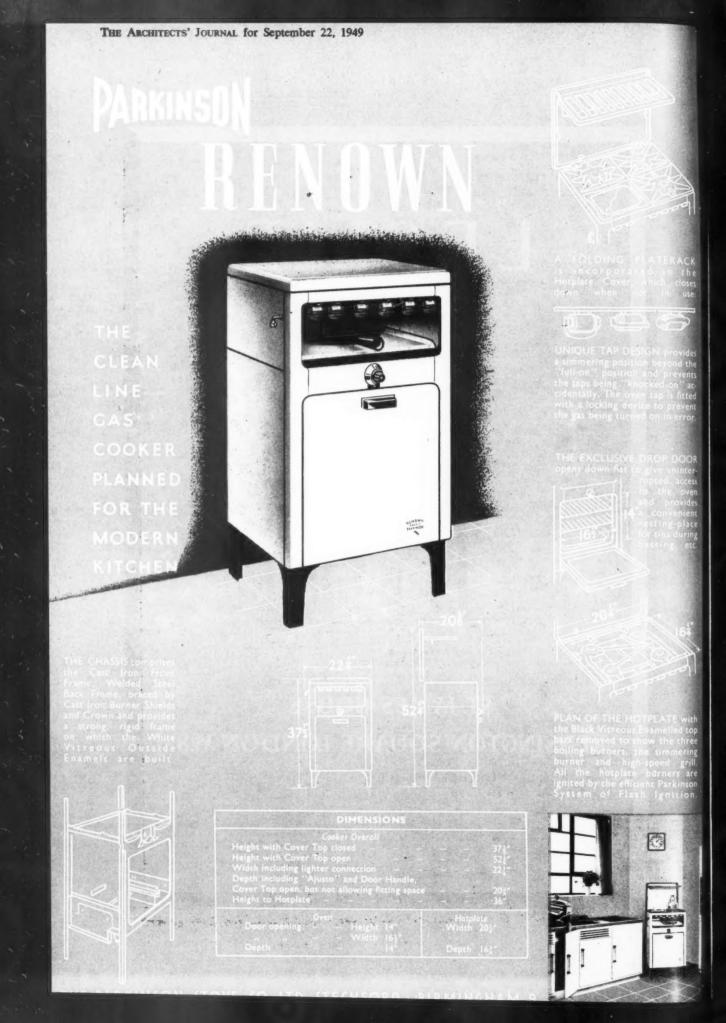
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In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be mbscribers are advised to have their names put on the waiting-list. Their names will then



be added to the subscription list as soon as possible. Subscription rates : by post in the U.K. or abroad,  $\pounds 1$  15s. Od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 17s. 6d. each; carriage 1s. extra.

# DIARY FOR SEPTEMBER OCTOBER AND NOVEMBER

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

**BIRMINGHAM.** S. F. Morice: The Replanning of Obsolete City Areas. R. F. H. Ross: Acquisition and Administration of Properties in a Central Redevelopment Scheme. The Council House. (Sponsor, RSI.) Ocr. 6

L ONDON. Background to Design Exhibition. (Sponsor, CID.) Rayon Design Centre, 1, Upper Grosvenor Street, W.1. Weekdays, except Saturday, 10 a.m. to 4 p.m. Closing date not announced.

Dry Rot Exhibition. Building Centre, 9, Conduit Street, W.C.1. (Sponsor, DSIR.) UNTIL OCT. 22

The Royal Photographic Society's Exhibition. At 16, Princes Gate, S.W.7. Part 1. Pictorial, Colour and Stereoscopic. UNTIL OCT. 2

Textiles and Textures Exhibition. Murray House, Petty France, S.W.1. (Sponsor, CID.) Daily, 10 a.m. to 5 p.m.; Saturdays, 10 a.m. to 12 noon.

UNTIL OCT. 21

Professor C. A. Hart. The Influence of Modern Methods of Surveying on the Advancement of Public Works Engineering and Town Planning. University College, Gower Street, London, W.C.I. (Chadwick Public Lectures.) 2.30 p.m. Nov. 22

Professor R. H. Bolt, Director of the Acoustics Laboratory at the Massachusetts Institute of Technology. The Royal Institution, Albemarle Street. Room Acoustics. A course of six lectures, with two informal meetings for the discussion of theoretical physics and one for the discussion of practical aspects of the design of concert halls, theatres and studios. Sept. 29, at 5 p.m., Standard Practice. Sept. 30, ot 5 p.m., May Standing Waves. Oct. 4, at 10.30 a.m., Theoretical Colloquium. At 5.30 p.m., Wave Statistics. October 5, at 10.30 a.m., Theoretical Colloquium. At 5 p.m., Free Waves and Pulse Statistics. October 6, at 10.30 a.m., Architectural Discussion. Oct. 7, at 5 p.m., Future Practice. Registration fee: 10s. 6d. Apply Joint Honorary Secretaries, Acoustics Group of the Physical Society, at 1, Lowther Gardens, Exhibition Road, S.W.7.

#### COMPETITIONS

Festival of Britain Competition. "Vertical Feature" competition. This will be the dominant vertical element in the exhibition. It may be completely abstract in conception or related to the theme of the exhibition. Height should relate to adjoining buildings. Overall area of site is 40 ft. square, excluding surrounding promenade area which may be used for guying. Steel and timber employed should be restricted to a minimum. Assessors: Presentation Panel of the Festival of Britain. Premiums: First prize, £300; second prize, £150; third prize, £100. Further fees will be payable for preparation of detailed working drawings if prize-winning design is constructed.

(a) Hall of Residence and (b) Site Layout at Notingham University. Promoters: the Council of the University of Nottingham. Assessor: Sir Percy Thomas. Premiums: (1) £1,000; (2) £750; (3) £500. Section (a) is a design for a hall of residence for 150 women students. The promoters will proceed with the scheme as set out by the winning competitor. Section (b) is a layout of the whole site for four halls of residence. The promoters reserve the right to adopt or modify this scheme, or not to proceed with it. Enquiries must be received by the Registrar, the University, Nottingham, by November 1, 1949. A deposit of £2 2s. must be paid by the competitor for conditions of entry. Designs must be received by March 11, 1950. More particulars will be found on page 307.

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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.

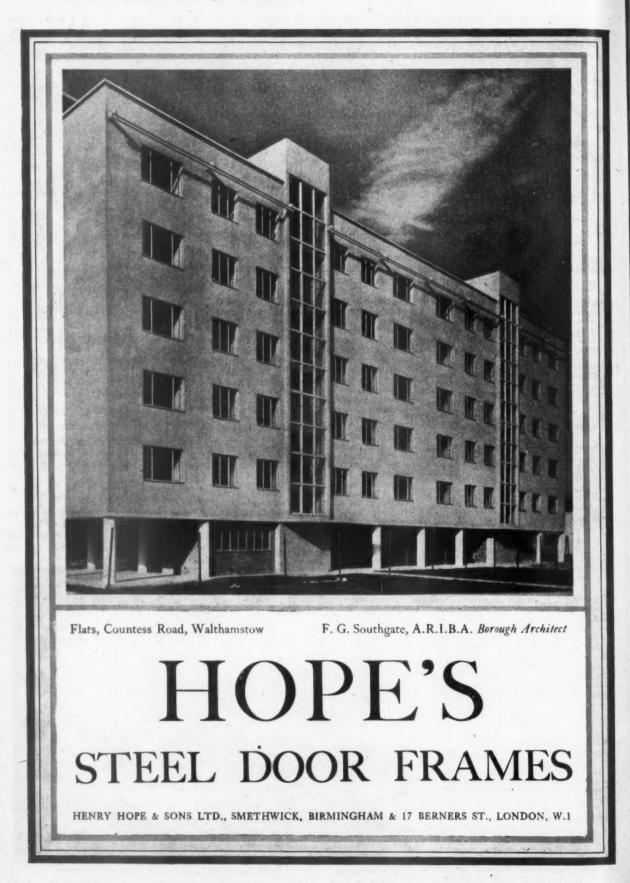
 $\star$  means spare a second for this, it will probably be worth it.

 $\star\star$  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.



This new building, which is being constructed for the West German Government, overlooks the Rhine at Bonn. Work is being carried out for twelve or more hours a day in a sevenday week so that it may soon be completed.



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\*7 P

From AN ARCHITECT'S Commonplace Book COLONIAL HOUSE PLANS. [From Colonial Williamsburg by A. Lawrence Kocher and Howard Dearstyne. (Colonial Williamsburg, Virginia).] The house types of Williamsburg are in some respects local or indigenous to Virginia. All are moderate in size, yet comfortable and commodious. Their architecture is of a practical sort, without ornament or pretense, and their plain exteriors are free from columns or other evidences of "the orders of architecture." Although altered somewhat from decade to decade, three general plan types of Williamsburg houses of the eighteenth century may be identified and described. The first may be called the "one-room-deep" plan. This has a hallway at its center and a room at either side. Tidewater Virginia had many such houses, a type rarely found in New England. This room arrangement apparently grew out of the seventeenth-century dwelling, "built of wood, yet contrived so delightfull, that your ordinary houses in England are not so handsome." A second type became popular near the middle of the eighteenth century ; this was the "two-room-deep" plan, with a side hall. This one-sided plan appears, from its several examples, to have been a favorite arrangement. The front room, often designated "the parlor," was usually almost square and had a corner fire place as did also the back rooms. A third and much more pretentious type of Williamsburg house was also two rooms in depth, but with a center hall and chimneys built within the area of the plan.

The BRITISH BUILDERS PRODUCTIVITY TEAM has

returned from an American Tour. A statement from the team said that they had found nothing to undermine their con-viction that, provided our building industry at home could be supplied with adequate materials and labour, and provided that everyone, from the top to the bottom of the industrial ladder could be given that everyone, from the top to the bottom of the industrial ladder, could be given that essential incentive in personal effort which the Americans enjoyed, the British building industry could equal the American in-dustry in its efficiency. Our industry must strive to achieve that spirit of initiative which the Americans displayed and must not play itself to be purched into more allow itself to be numbed into mere acceptance of present conditions and practices as something inevitable and enduring.

The visiting team consisted of architects, quantity surveyors, contractors, a specialist quantity surveyors, contractors, a specialist contractor and operatives. Their object was to compare American practices with British and to see if they could bring back any recommendations to help British industry to increase its efficiency and reduce its costs, thus directly assisting the export in-dustries and the housing programme. They found the overall cost of building in the USA at the present time to be 55

in the USA at the present time to be 55 to 80 per cent. above that in this country. As the average rate of wages there was more than four times our own, it meant there must be an appreciable saving on other items. There was, however, an abundance of every kind of building material and fittings there. This meant that the building contract could be planned down to the delivery and fixing of the last item.

The incentive given to speed and efficiency The incentive given to speed and efficiency was also reflected in the output of the individual operative. In the States the average production per man-hour was 50 per cent. more than in Britain. This did not mean that the American worker in-creased his physical effort. All other factors —design, materials and contract organiza-tion—helped him to achieve his figure. The tempo of the work was fixed from the tempo of the work was fixed from the beginning like a machine belt in a factory, and each one who did not keep up to the line, in whatever capacity he might be engaged, was rejected.

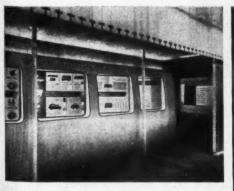
Despite the large amount of work in progress, there was a pool of unemployment in most of the centres visited in the United States, and everywhere members of the team were told that individual productivity varied over a period in accordance with the rise or fall in the number of men seeking work. Now it was definitely on the upgrade.

The team saw nothing particularly new in heavy plants or hoisting machinery. In some respects they thought Britain further advanced than America. Machinery used on the job there was to a much greater ex-tent for cutting and shaping materials, representing a saving in labour and trans-portation costs. An important difference in housing was the great advances the Amerihousing was the great advances the Ameri-cans had made in the design and installation of central heating in all types of house.

## The Annual CIAM SUM-MER SCHOOL may be held in Britain in 1951.

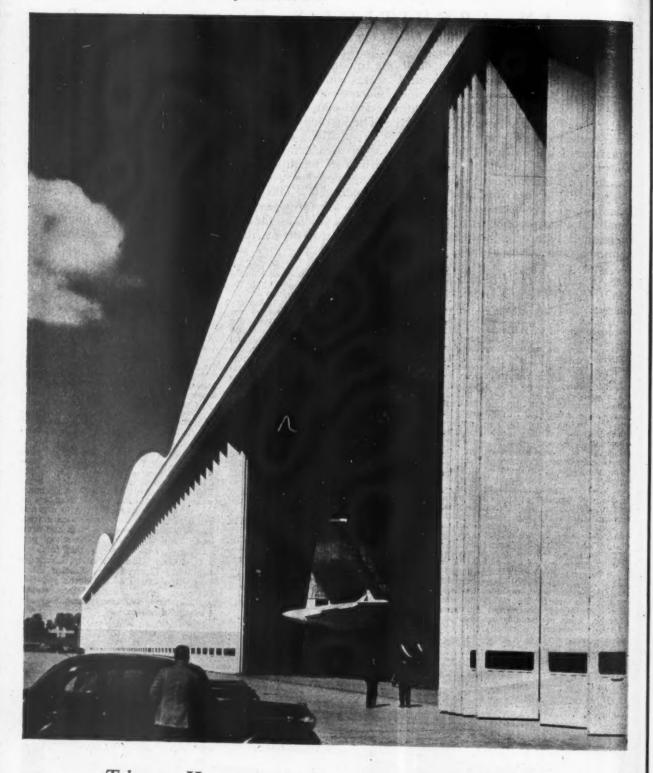
In last week's JOURNAL some illustrations were given of students' work done at the international post-graduate summer school which was organized in London in August by the MARS Group on behalf of CIAM. The school, which brought about thirty students from many countries, was an ex-periment, but after the interest it aroused it is now expected that it will become a regular institution, taking place each year in a different country and the students of earlier years becoming the tutors in later vears.

It is likely that Britain may be the host to the school for a second time in 1951, if the decision is taken to hold the 8th CIAM Congress here to coincide with the Festival of Britain. The first summer school engaged many besides members of the MARS Group, who helped to organize and entertain the students who came from abroad. The following persons and firms made the organization of the school possible by contributing to the funds:-E. C. Gregory, Charles Kearley, Liversedge Reinforced Concrete Co., London Brick Co., Marley Tile Co., H. Morris and Co., Pilkington Bros., Tentest Fibre Board, Williams and Williams, Troughton and Young, and Semtex.



The British Transport Exhibition at Charing Cross London Transport Station was designed and produced for the British Transport Commission by the Design Research Unit, London. The architect was Peter Moro. Above, a "coach" unit. carrying statistics. Right, the exterior, showing the mural designed by Gordon Bowyer.





# The Home of the Brabazon

Much has appeared lately in the newspapers about the new Brabazon aircraft, but little attention has been paid to the buildings that house it, although they constitute one of the most spectacular architectural enterprises of post-war Britain. Alongside the mile-and-a-half runway at Filton, Bristol, specially constructed for the Brabazon, is the huge triple assembly hall, shown above with the tail of the aircraft visible inside. There are three folding

doors, each with a clear opening of 330 feet. Attached to the assembly hall are several other buildings, including a workers' canteen and a boiler house, as well as a block of offices for BOAC, who have recently taken over part of the buildings as the principal maintenance base for their Atlantic service. The whole range of these buildings, for which the architect is Eric Ross, will be described and fully illustrated in the JOURNAL shortly.

### The MOE has established an ARCHITECTS and BUILDING BRANCH.

It has been decided to modify the organization of the MOE for handling building projects by amalgamating the present Architects branch and Buildings and Priority branch and transferring to the new branch certain work hitherto done by Schools, Further Education, Teachers and Special Services branches during the planning stages or projects. The new branch, which is under the joint control of the chief architect and the principal priority officer, is called the Architects and Building Branch. It came into operation on September 12.

The new arrangements are designed to ease and speed up the handling of building projects. The functions of the new branch will be to investigate jointly with the Inspectorate and "user branches". (*i.e.*, Schools, Further Education, Teachers and Special Services branches) the architectural implications of new educational trends and to keep those concerned informed of the results of these investigations; to advise local education authorities on building policies and procedure and the execution of their individual building programmes; to provide for local education authorities, private architects and manufacturers a service of information and guidance on developments in design, technique and the supply of building projects after the stages of inclusion in a programme, approval in principle and, where necessary, agreement on a schedule of accommodation; and to approve proposals for the purchase of furniture and equipment, except for school meals equipment.

ment. The territorial work of the Architects and Building branch will be handled by three building groups, each under a principal and consisting of a group of architects, a team of executive staff and the regional priority officers concerned. The names of the senior officers, other than regional priority officers, who will be responsible for each area will be sent separately to individual local education authorities.

New MACHINES, MATERIALS and METHODS of Construction are on view at Tunbridge Wells during the present Building Week. The achievements of the building industry and the new machines, methods and materials developed during recent years are the main features of Building Week, which is now being held in the south-eastern counties. The events, centred on Tunbridge Wells, are sponsored by the MOW in association with other Government departments and all branches of the building industry.

Wells, are sponsored by the MOW in association with other Government departments and all branches of the building industry. The main feature this week is the exhibition in the Assembly Hall, Tunbridge Wells, entitled "Building Today." Contributors to this exhibition include the industry, professional institutions, building materials producers, Government departments, and apprentices and students of technical schools and colleges in the south-eastern counties. Modern aids to speedier building are included in the display, "Machines for the Modern Builder." Among the many new machines are some not seen before in this country.

The third exhibition, "Prestressed Concrete," is an up-to-date edition of one already shown to builders, architects and civil engineers in London. Birmingham, Leeds and Norwich. A Brick and Tile Exhibition, presented by the South-Eastern Brick and Tile Federation, shows more than 140 bricks and tiles of all colours and for all building purposes.

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# AMERICAN VISIT

R OUGHLY two months ago a team representing the Building Industry left for America under the auspices

of the Anglo-American Council on Productivity. Representing the building industry as a whole, the team very properly included architects (Mr. Michael Waterhouse and Mr. Robert Matthew), quantity surveyors, builders and contractors, specialist sub-contractors, and several representatives of the operatives' organizations.

Returning after a high-speed but apparently illuminating tour, the team has prepared a joint statement as a preliminary to its considered report, which is soon to be produced.

First and foremost this statement is illuminating in that it disposes of the old *canard* that American building is cheap. For many years it has been said, in this country, that American costs are about the same as ours per foot cube of comparable buildings, and that high American wage rates and material prices therefore show that British methods must automatically be lacking in efficiency. The team's quantity surveyors, however, have analysed the costs of a large number of separate contracts and have found that " the overall cost of building in the United States at the present time is approximately 55 per cent. to 80 per cent. above that in this country."

Since the average wage rate in the US is about four times our own it follows that there must be appreciable savings on other items. Chief among these savings, the team finds, is that, "whereas we are yet handicapped and frustrated by shortages of various essential materials, whether they be still subject to official control or not, there is in the US an abundance of every kind of building material and fitting . . . this means that a building contract can be planned down to the delivery and fixing of the last item : everyone connected with the job knows what the target is, and knows, moreover, that with good organization and hard work from all, it can and must be achieved."

The incentive thus given to speed and efficiency is therefore reflected in the energies of the individual worker, whose output is estimated as 50 per cent. more per man hour than in this country. This does not mean that the individual operative works 50 per cent. faster or puts into his work that amount of increased physical effort, but that all the other factors-design, material supplies and contract organization-help him to work more effectively than his British counterpart. "We believe that he puts everything he can into his work without holding back. The tempo of the job is fixed from the start . . . and each one who does not keep up . . . is rejected." The incentive is the high rate of wages of the building trade craftsman, one of the highest skilled rates in American industry, from which he is able to maintain a high standard of living. Since unemployment benefits are not paid nationally, and in general represent a far smaller percentage of the weekly wage than in this country, the operative will generally make great efforts to keep his job. In most centres there seems to be a 304] THE ARCHITECTS' JOURNAL for September 22, 1949.

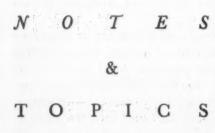
pool of unemployed building labour, and individual productivity seems to rise almost in direct proportion to the numbers seeking work—a regrettable state of affairs.

The team lays some stress on the outlook of the operative, as the same considerations apply in the other sections of the industry. The architect "must be, and is, in general, a completely efficient business machine, experienced in the same hard school as the contractor." The contractor and the sub-contractor have to live in a world where competition is keen both in cost and in time. Briefly, with efficiency and hard work the rewards are considerable, but there are corresponding risks in failure.

The broad conclusion reached is that, with adequate material and labour supplies, and with proper incentives to personal effort from the top to the bottom of the industry, the British builder should be able to equal the American in efficiency. The final report promises full consideration of the many technical problems and should make extremely interesting reading, as it should be an authoritative and balanced pronouncement on a problem which has so far been considered only piecemeal. The sooner it is published the better.



• The Architects' Journal 9. II and 19, Queen Anne's Gate, Westminster, S.W.I Phome: Whitehall 0611



NO NAMES, NO BACK-SLAPPING OR -BITING

The virtual monopoly held in building work by local authorities and state organs has resulted in the architect becoming a more familiar figure to a large number of people, who, in the old days, would have remained ignorant of his function and importance. Nonetheless, there does not seem to be a corresponding willingness to acknowledge the responsible architect's name. He may be referred to as "the architect" or not at all. I have noticed some blatant cases of non-acknowledgment lately, one in the booklet on the new liner *Rangitoto*, for which the interior work was done by Howard Robertson. The booklet quite rightly acknowledges the decorative effects of painters and other artists, but the architect remains anonymous.

Another case is even more remarkable; in the recent Report accompanying the Development Plan of Hemel Hempstead New Town, there is no reference to the original planning consultant, who, as JOURNAL readers will remember, was G. A. Jellicoe. It may be that the consultant's ideas are no longer acceptable to the progressively blinkered MOTCP, or there may have been squabbles in the Corporation, or it may have simply been obtuseness, but the scheme now published has a close relation to Mr. Jellicoe's proposals, and in any case the public, or anyhow, architects, will want to know what has happened to the very original Master Plan. In the Report, one looks in vain for any reference to the Master Plan and its author. This is not good enough. Perhaps this age is to be one of anonymity, but it seems to be mere good manners, if nothing more, to acknowledge the work of others.

Lastly, it would be a reasonable gesture at exhibitions to give the names of architects who have designed stands, either by a label itself, or in the catalogue. The Glasgow Exhibition, featured in last week's JOURNAL, provides the latest example of this omission. I notice the Design Research Unit has a neatly designed placard, with a formidable list of designers on it, placed quietly but prominently beside the exit to the British Transport Exhibition at Charing Cross Station. This idea might well be copied.

#### CHINESE STAND

While on the subject of this particular exhibition, why do designers number exhibits backwards, from right to left, when the lettering on each has to be read from left to right—unless it happens to be in Chinese. (See illustration opposite.) It is a small point, but it can be very irritating.

#### TIP FROM THE 'NINETIES

Two years ago I stayed with a family whose house faced on to a curving road which carried a good deal of traffic. The family contained an active child of five who had friends in several neighbouring houses, and I heard much of the faults of the road. It was impossible to prevent the children from nipping across it. Cars used to come round the curve at a great speed, and a garage nearby used the road for testing repaired cars (driven by b

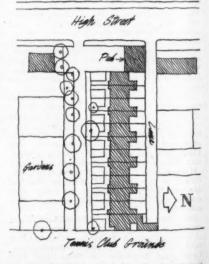
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An example of a Victorian housing layout from which a lesson can still be learnt. See Astragal's comment above.



Part of the British Transport Exhibition which recently opened at Charing Cross Underground Station. This feature was designed by Robin Day. See Astragal's comment. Further illustrations on page 301.

apprentices who apparently hoped to become racing drivers).

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This year I revisited the same family. who now live in a house in a cul-desac-a speculative development of about 1890. The family's praises of the surroundings of their new house were so high that I sketched the layout and it is reproduced opposite. The eight or nine mobile children in the terrace never want to go past the gates and most motorists leave their cars outside. The children cycle up and down the cul-de-sac, play in the planted strip or in each other's gardens, and can be rounded up at lunchtime without difficulty. The mother of the family said it was difficult to express the relief which the move had given to her.

At long last layouts for private enterprise estates are receiving planning approval or are being discussed with planning officers in most towns, and I am told that developers and their estate agents will rarely or never accept terrace houses or screen walls or closes or cul-de-sacs or indeed anything except detached houses on ‡acre plots on a 40 ft. road. I believe they are wrong in their estimate of what the public will like.

PALE REFLECTION

I had intended to leave the Kelvin Grove open-air sculpture exhibition without comment, but the photograph of it which appeared in the JOURNAL last week recalled the poor showing of this exhibition in comparison with the praiseworthy LCC effort last year. As readers will have noticed in the illustration, the various pieces of sculpture are sited very inadequately. While admiring Glaswegian enterprise in attempting to show sculpture in a proper habitat, I am afraid the authorities will have to improve upon thiseffort if they are really trying to stimulate appreciation of sculpture and its proper siting.

#### EASTERN ELECTRIC

Next week the Ministry of Transport is to open the newly electrified BR's eastern extension running from Liverpool Street to Shenfield. Not having seen the inside of the new rolling stock, I cannot tell you what it is like, but I have seen the outsides in the yards at Ilford. They seem straightforward but unexciting, and are painted in a rather darker green than the standard Southern colour, while the current-collectors are the usual parallelogram affairs on top of the coaches. Transformer buildings and subsidiaries are simple, in the 1930 Underground style; in fact, by presentday standards, the whole job strikes me as competent but uninspired. But that, of course, is on looks. If I were a Gidea Park commuter I should be overjoyed, for nothing can be worse than the present tatty old boxes full to bursting on almost every trip.

And now a word of warning. Overhead wires may not matter much in the east London suburbs, but a strong fight must be made if the technicians want to use overhead wires for main line electrification in future, instead of the third rail used on the Southern.

ASTRAGAL

# LETTERS

F. J. Meekins, F.I.A.S. G. B. J. Athoe

Grey Wornum, F.R.I.B.A.

James M. Knowles

### Architects' Registration Act, 1938

SIR.—I have read the letters you published in the September 8 issue of the ARCHITECTS' JOURNAL, and I note the remarks by Mr. H. Meyer and Mr. Sydney Redfern, Ll.B., regarding the term "Architect" applied to an unregistered man in articles of agreement. By reference to the RIBA Form of Contract, the professional adviser is first referred to as "his Architect," and later on reference is made to the term "Architect, etc., shall mean." It would seem that to contravene the requirements of the Architects' Registration

It would seem that to contravene the requirements of the Architects' Registration Act, 1938, a person not being a registered architect must personally describe himself as an architect, and for that matter claim that distinction, and I feel that in court of law such a point would have to be proved that some irregular act had been committed and some suffering had been caused to the learned gentleman that this Act seems to protect.

Further, I would point out that the architect, not being a party to the contract, does not sign the agreement, and on that point alone he would be able to prove that he did not attempt or had actually described himself as an architect. In short, the point of being called an architect in a contract agreement is merely the act of a layman or otherwise, as the case may be, signing a contract wherein a person chooses to describe his professional adviser as an architect.

London.

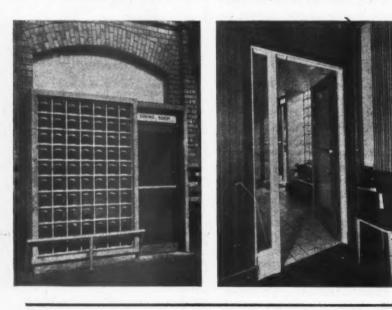
F. J. MEEKINS

SIR,-Your correspondent, Mr. H. Meyer, has posed a very knotty problem for the

### RAILWAY STATION DINING ROOM



This remodelling of premises on Leicester (London Road) Station to form a dining room was carried out by W. H. Hamlyn and H. Wyatt, architects to the British Railways, London Midland Region, for the Hotels Executive. Above : the dining room, which was opened last year. It has two end walls faced with 18 in. squares of walnut-veneered aluminium fixed direct to the plaster with a self-vulcanizing adhesive. The upper parts of the existing window were masked by a new continuous pelmet, and a false ceiling was introduced 3 ft. below the existing one. The colour scheme is nigger brown, lemon yellow and grey, with stainless steel door furniture. Below, left, the platform frontage; right, the entrance lobby.



legal luminaries to solve—if the satellites of the law in an advisory capacity can solve anything. And Mr. Redfern, like others of his kin, is not sure of his ground. Indeed, on being challenged, he says (quite shortly), "I don't know."

"I don't know." In a somewhat long experience of law and so-called "learned" counsel's opinions, ex-cept in one instance, I have been unable to discover a legal luminary who was quite sure of his ground. For confirmation of this view let your readers' memories hark back to the series "This is the Law" put over on the wireless by the BBC. An archi-

tect's mistakes may well be his undoing; the doctors bury their mistakes, the lawyers' mistakes frequently provide the coroner and the undertaker with a job! Except in one case that I remember, the Architects' Registration Council have had an easy passage with their victims. Perhaps some "Village Hampden" will call their bluff one of these days. Then Mr. Redfern (whose sagacity and ability I have always admired) will have the answer, and, doubt-less, he will "trot it out" with great unction. Meantime I feel that an ill-con-ceived and badly drafted instrument of

legislation (the Registration Act) is steadily stultifying and gradually destroying the architectural profession. The Act has diluted the profession without any resultant gain; it has delivered into the hands of the gain; it has ucuvered hard-headed, same engineers—usually hard-headed, same thinkers—the prizes. Unless something is done to stop the rot, the architectural pro-fession (as we older men have known it) will fade away. Already the operatives are multipalizing the huilding induswill rade away. Already the operatives are talking of nationalizing the building indus-try. Then there would be only one "closed shop"—a "shop" in which the architec-tural profession would be merely a small and inarticulate part.

The machinations of a professional body to make architecture a "closed shop" in its own selfish interest are pushing the com-petent and incompetent, on to a road travelled centuries back by the Gadarene swine

Westminster

London

G. B. J. ATHOR

C

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## Parliament Square Replanned

SIR,—I have, on my return from abroad, just seen the above article in your issue of August 25. I would much appreciate an opportunity to state that I have, personally, made no attempt to solve the traffic problem.

The boundaries of the new island in the Square are the result of proposals made jointly by the Ministry of Transport, the London County Council and the Metro-politan Police. These were accepted by me as part of my terms of reference. GREY WORNUM

### Traditional Materials

SIR,-I would like to thank you for including encouraging notes on natural materials in the JOURNAL of August 11. Since the war the Rural Industries Bureau Since the war the Rural Industries Bureau have retained me as Architectural Consult-ant and I have seen at fairly close quarters what a desperately hard time the small pro-ducers of natural materials have passed through. There was such a stampede to find and use new materials that it seemed to be forgotten that our traditional mater-ials might have a close in the still. ials might have a place in future building.

New materials are tremendously important and experiment and research should be directed to them, but the wise user will see the whole range of materials, choose the the whole range of materials, choose the right ones for their purpose and use them alongside one another. The danger is always that the architect will tend to fall back on traditional materials, possibly because of a fear of the future of new materials, whilst the adventurer will disregard them because of being reactionery. of being reactionary.

The small brickyards, which make hand-nade bricks, are now doing better. Their made bricks, are now doing better. Their products, because of their unique range of colour and texture and their capacity to weather gracefully, must be retained in the range of available materials.

The quarries, generally speaking, are in an unhappy position and few of the large varieties of the country's beautiful stones are being quarried. These natural materials have qualities to enhance the appearance of have qualities to enhance the appearance of modern architecture and efforts must be made to increase the pallette (e.g., there should be the choice of a dozen stones with which to face a concrete building, not just one or two). It is possible, by making full use of them, to give our buildings an in-dividual English character. I do hope that from time to time you will be available to find space to include notes on these materials and particularly how they can be used in a contemporary mannet.

can be used in a contemporary manner. JAMES M. KNOWLES

### NOTTINGHAM UNIVERSI Т COMPETITION

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The Council of the University of Nottingham is promoting a competition for the design of a hall of residence for women students on the Lenton Fields Estate, Beeston Lane, Nottingham, three-quarters of a mile from the main university buildings. Sir Percy Thomas, consulting architect to the University, will be the assessor. The first award will be £1,000, the second, £750, and the third, £500. The hall will be one of four. One is already in the course of construction, but it is pointed out that competitors are not bound to the building line adopted for that building, as it is intended

line adopted for that building, as it is intended that each hall shall have an independent character.

character. The design of the building, which will house 150 women students, and will have 3 floors in preference, and not more than 4, should incline to a traditional basis, and the selected materials should be those which will mellow with age. The cost, including all fittings and built-in furniture, should be calculated at the rate of 4s. 6d. per foot cube.

136 students are to be accommodated in single study bedrooms and 14 in seven suites, each including two single bedrooms and one study. including two single bedrooms and one study. Bedrooms and study bedrooms are to be fitted with built-in furniture. A variety of designs of studies and study bedrooms is asked for and any suggestion of an institutional character in the design of the building should be avoided. One laundry unit should be provided on each floor as well as students' pantries. Bathroom and lavatory accommodation must be appropriately distributed on each floor : linen rooms and distributed on each floor; linen rooms and storage accommodation for cases should be pro-vided, and service lifts should be installed.

vided, and service lifts should be installed. Accommodation for academic and administra-tive staff should include a married Warden's suite; 6 unmarried Fellows' suites; Fellow's suites to be distributed throughout the building; 3 separate tutorial rooms, and 2 guests' bed-rooms. Accommodation for the Vice-Warden, lady Bursar, and lady Cook is to be much the same as that for unmarried Fellows; service staff are to be provided with 8 single bedrooms, with joint bathroom and lavatory accommoda-tion, and a staff common room.

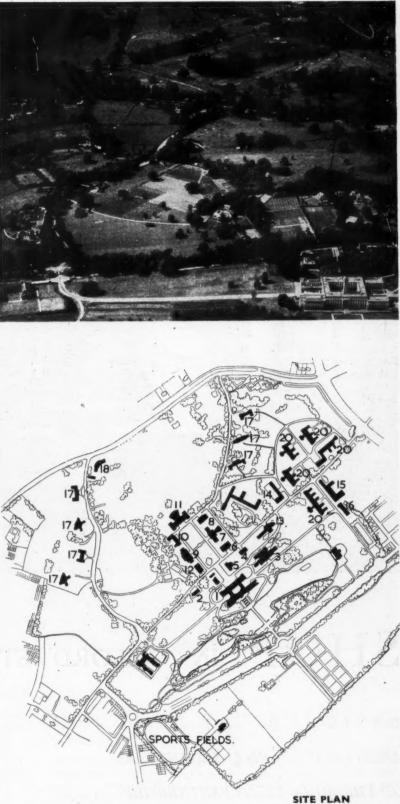
tion, and a staff common room. Also required are an additional common room for daily and outside staff; a students' dining hall, with provision for extension; an academic hail, with provision for extension; an acaaemic staff dining hall and common room; a service staff dining room, and kitchens and ancillaries. Public rooms will include the students' common room; 2 smaller common rooms; library; recreational room; 2 small music rooms; an entrance lounge and a porter's office at the main entrance.

entrance. It is intended within a few years to install a system of direct heating for the University site, but immediate provision must be made for the heating of the hall of residence by means of solid fuel boilers. Open fires are to be provided in all students' common rooms, entrance lounge, aca-demic staff common room and wardens' lounge. Competitors are not bound to any particular type of construction, apart from the need for economy in steel. It is considered that a steel frame brick building mirble be desirable. Every effort brick building might be desirable. Every effort should be made to solve the problems arising in such a building from structure-borne and airborne noise.

The competition includes the preparation of a The competition incluaes the preparation of a layout of the whole site. This includes the four halls of residence; the University Health Centre; playing fields; and 12 detached or semi-detached residences for Dons. A group of 3 such residences are to be related in layout to each hall of residence. Accommodation in each house is to include 4 bedrooms, 2 reception rooms, and usual ancillaries.

Particulars of entry for this competition will be

found on page 299. The photograph above, right, shows the main University buildings and the site for the extensions.



KEY

#### I University College

- 2 Chapel
- **3 Students' Union Building** 4 Spare
- 5 Music

6 Examinations 7 Lecture Block 8 University Press

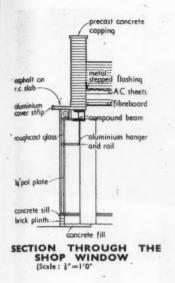
- 9 Great Assembly Hall
- 10 Drama School
- II Library
- 12 Spare

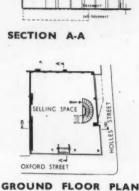
- 13 Art School
- 14 Engineering, Power and Boilers
- 15 Physical Culture
- 16 Garages
- 17 Hall of Residence
- 18 University Arms Hotel
- 20 Science Blocks



# SHOP IN OXFORD STREET, LONDON

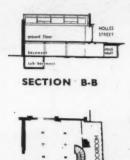
DESIGNED BY THE ARCHITECTS AND TECHNICIANS OF THE JOHN LEWIS PARTNERSHIP. ARCHITECT IN CHARGE: R. H. PEARSON GENERAL.—The shop occupies part of the large blitzed area on the north side of Oxford Street where the John Lewis store stood before the war. The south-east corner of the site, with a frontage of 55 ft. to Oxford Street and 62 ft. to Holles Street, was chosen for the commencement of rebuilding, as the ground floor here was in reasonable trim, whereas the remainder of the site was gutted to basement level. This corner also had existing walls on the north and west sides, both at basement and THE ARCHITECTS' JOURNAL for September 22, 1949 [309



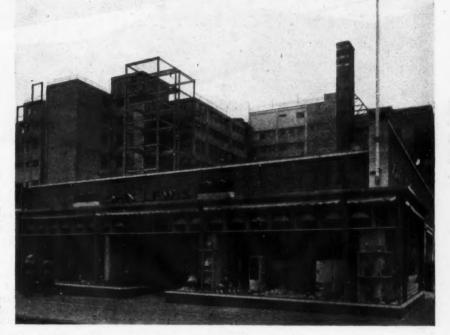


OXFOR

[Scale : 1,"=1'0"







Opposite, the main staircase seen from the basement shopping area. Right, the shop front.

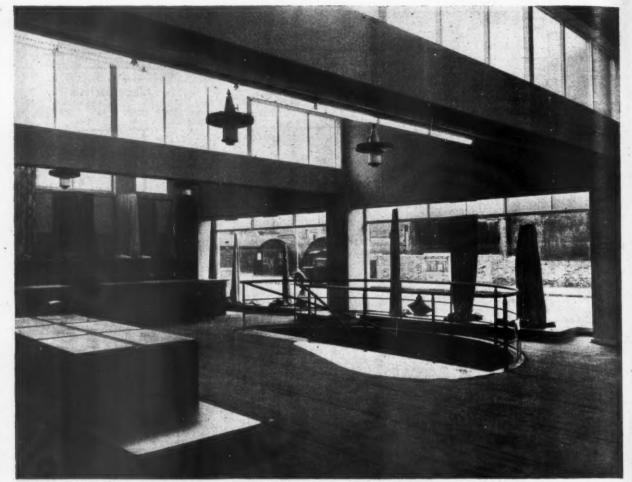
> ground floor levels, and these, with some strengthening, were utilized in the structure. The design allowed for the fact that further extensions might be made along the Oxford Street frontage when conditions permitted.

> PLAN.-The boundary of the plan was pre-determined by the existing walls and piers. The new shop fronts follow the line of those demolished. For this reason there is a break in the main line of building one-third along the Holles

Street front, where the shop-front projects beyond the old first floor building face.

**CONSTRUCTION.**—No permit for new structural steel or timber was granted. All steelwork used was salvaged from the site. It was decided to roof the ground floor in one span to avoid obstruction to the showroom area. The existing col-umns and piers in the basement carry the ground floor. The ground floor area is divided into three bays by two welded beams spanning from the existing masonry pier positions in Holles Street to the existing west wall. Three areas of sloping corrugated asbestos roofing carried on steel rafters and purlins cover the ground floor. The underside of ceiling slopes are lined with fibre board with V-jointed panels. The north wall is strengthened by new brick piers which were carried up to the new ridge level. The space above the old walling is here also filled in with glazing up to The existing rough ridge level. concrete ground floor was levelled

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The ground floor selling space, showing the staircase to the basement.

to receive floor carpet and linoleum. Carpet and linoleum were also laid upon the existing asphalte in the basement showroom.

EXTERNAL FINISHES .- All brick facings used externally are hand-made golden sand-faced stocks. The brickwork to the Holles Street front is weight bearing and also covers the serrated roof line beyond; its horizontal joints are finished to a concave section with horizontals left flush. Plinths to show-windows are in  $4\frac{1}{2}$ -in. brickwork with straight vertical joints and are laid on a slate damp-proof course with asphalte backing. The two showwindows in the main wall to Holles Street are edged with white precast concrete trims and cills and similar cills are carried around the remainder of show-windows. The mullions to projecting show-windows are formed in 2-in. diameter aluminium scaffold polling with

light wood glazing frames screwed to back. This gives the minimum show-window obstruction, with the strength required and economizes in timber. The show-window transomes are similarly constructed with 7-in. diameter vertical aluminium tubes and glazed in 1-in. double rolled rough cast glass.

### INTERNAL FINISHES .- The sloping ceilings to ground floor, together with the screens and soffits to show-windows and a part of the basement ceiling are in fibreboard distempered. All new brickwork is fair-faced finished and left unplastered. Old brickwork requiring making good was rendered in cement and sand. Walls, ceilings, and show-window enclosures are finished in specially mixed distemper pastel colours. The treads and landing of the new staircase are in coloured rein-forced granolithic concrete, with

non-slip tile inserts to nosings, with carborundum dust in exposed surfaces. The back wall of the staircase and the risers between treads are in coloured concrete bricks. The back wall, being nonstructural, has vertical straight joints raked out to a concave section with flush horizontal joints, and is finished at ground floor level with a coloured reinforced concrete band and curb. The open metal balustrading is formed in mild steel, with flats as uprights and tubes forming horizontal railings and handrail. The handrail is painted in three colours. Clear perspex is attached to this balustrading for two-thirds of its height between the show-window and stair well at ground floor level. New specially designed plastic, veneered chestnut shelf fittings and display units have been installed on the ground floor. Existing fittings have been used in the basement.

SHOP IN OXFORD STREET, LONDON

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li, tl T THE ARCHITECTS' JOURNAL for September 22, 1949 [311

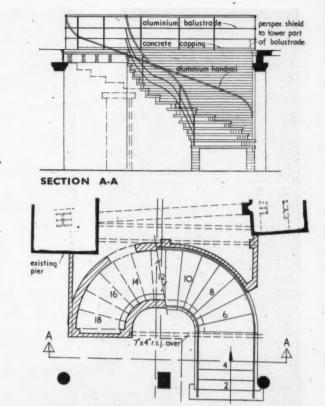
HEATING.—In order to conserve floor space and obviate a long run of mains from the existing boiler house, overhead radiant type gas heaters, incorporating a special heat-resisting glass cylinder to suit the general decorative scheme, are installed in the ground floor show-room. This type of heating could not be employed in the basement owing to insufficient headroom ; standard floor type gas radiators are used here.

LIGHTING.—The ground floor show-room is lit by natural fluorescent tubes which run in two continuous rows on each ceiling slope, with metal louvre screens. Standard type tungsten floodlights are installed in show-windows. In the basement, colourcorrected fluorescent tubes in continuous troughs are positioned over the counters with tungsten general lighting and local spot lights for the display areas.

The main contractors were Messrs. John Lewis Building, Ltd. For list of sub-contractors see page 328.

The ground floor selling space, looking towards the entrance lobby.

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PLAN OF STAIRCASE AT BASEMENT LEVEL [Scale: ]"=1"0"]



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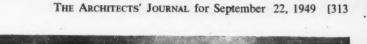


The factory interior from the north-west.

FACTORY AT GATESHEAD

DESIGNED BY F. R., S. YORKE, E. ROSENBERG AND C. A. MARDALL ASSISTED BY I. B. WILSON, P. BADCOCK, T. R. EVANS, MISS PAULINE WHITING AND R. R. TOMALIN

GENERAL.—This plant was built for the manufacture of pumps and replaces a number of smaller standard factories. The stipulated requirements included provision for future extension; large covered loading bays and storage areas; testing tanks below floor level; administrative and canteen buildings of high standard, and good factory lighting. Factory and administrative block from the south.



SIGMUND PUMP

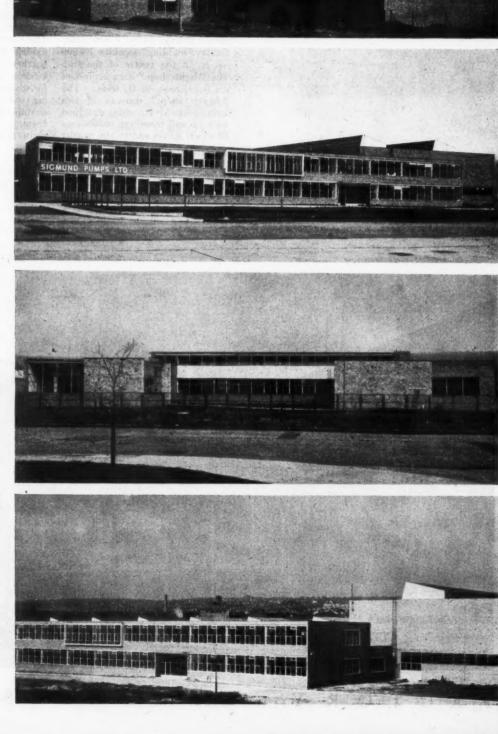
Administrative block from the west.

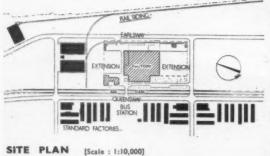
Canteen block from the west.

Factory and administrative block from the south-west.

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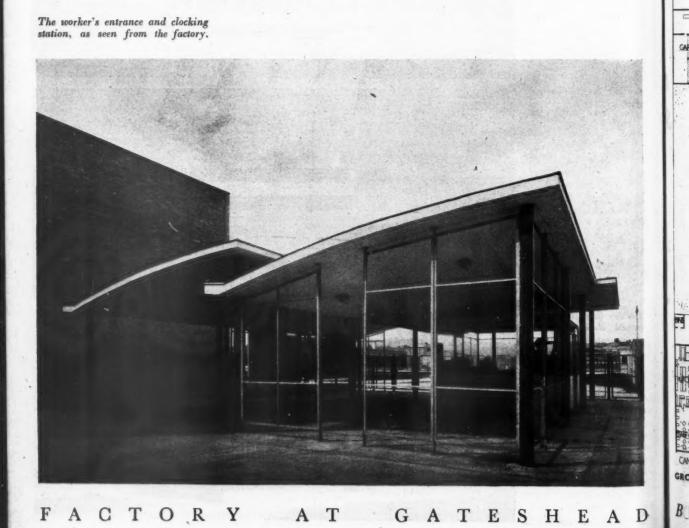
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SITE.—The site, on the Team Valley Trading Estate, is approximately nine acres. Originally the river Team crossed the area, but was diverted to form a canal, the old bed being filled in and levelled. A new bridge across the river from an estate main road forms the main approach to the factory, and goods traffic enters from the east of the site.

PLAN.—The total area of all buildings is approximately 144,000 sq. ft.; of this 24,000 sq. ft. is roofed storage space. The main factory building occupies 85,000 sq. ft. in the centre of the site. The "light shop " area comprises six bays, each 40 ft. wide. The "heavy shop" consists of two bays, each 55 ft. wide, equipped with jib and travelling cranes, one of which moves out to the nearby railway siding for direct loading. The joiner's and pattern shop is separated from the main factory by a 131-in. brick wall as a fire precaution ; the remaining factory space is undivided except for stores formed by steel partitions. The two-storey administrative block is to the west of the main factory, with single storey lavatory and locker rooms between. Provision is made for adding a third First-aid rooms at the storey. north end of the factory are easily accessible from all parts of the site. The canteen block, with its small garden facing the river, is in the north-west corner of the site ; the kitchen serves separate canteens for workers and staff. The building is also used for recreation, and contains a games room and a quiet Immediately inside the room. main gates at the north-west



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CON

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corner of the site is the gatehouse with the clocking station. At the cast side of the site, a road links the goods entrance and weighbridge with the garages, loading bays and boiler house.

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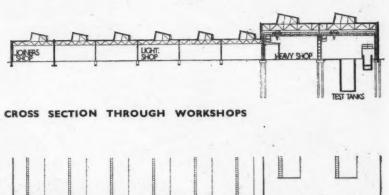
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**CONSTRUCTION.**—The canteen administrative block, boiler house and heavy shop are on piles; other buildings are on normal foundations. The factory is constructed of welded lattice girders and a steel decked roof with insulation board and bituminous felt finish, which is turned up at the parapets and bonded to the protected metal coping. The monitor roof lights are constructed on steel frames carried on the roof trusses, and are roofed in the same way as the normal factory roofing. The

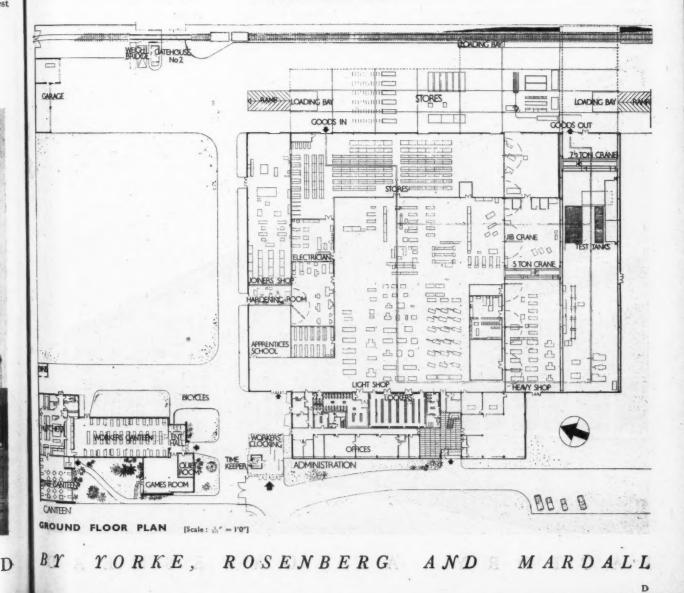
[Text continued on page 317]

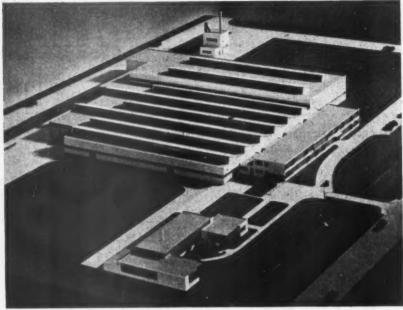


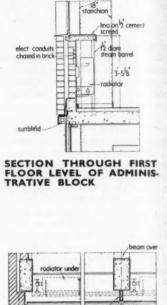




ADMINISTRATION







Model of factory. Below, entrance to administrative block, showing the projecting windows of the board room and managing director's office. Opposite, two views of the staff canteen.

PLAN [Scale: {"=1'0"]





#### [Continued from page 315]

external walls are placed clear of the stanchions, leaving a space of approximately 4 in. to enable pipes and conduits to be fixed in straight runs along the walls. This con-struction also allows the continuous factory windows to run past the stanchions. External walls are 9-in. brick below window level and above the windows the walling is carried on steelwork bracketted off the stanchions. It consists of a 41-in. brick outer skin, 2-in, cavity, and a 2-in. foamed slag inner skin. Vertical expansion joints filled with mastic are provided at 40-ft. centres along the external walls. Internal walls are 41-in. brick, and the standard office partitions are steel and glass. The testing tanks, generally 10 ft. below floor level, are in reinforced concrete ; the depth of one section of tanks is 30 ft., and here poured concrete piles are used as perman-ent shuttering. Natural lighting to the factory is by roof monitors with patent glazing on the north side and low windows on the south side. The windows have projecting eaves and vertical fins to avoid glare from direct sunlight.

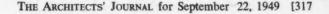
The administrative block has reinforced concrete columns, beams and slabs with 11-in. brick external walls. The internal walls generally are 4½-in. brick, with some standard steel and glass partitioning. The main staircase is of steel, with a rubber finish to the wood treads. The secondary staircase is of reinforced concrete with a terrazzo finish.

The canteen block has reinforced concrete columns, beams and slabs. The workers' canteen has two rows of columns beyond which the roof slab is cantilevered approximately 8 ft. The circular columns are cast in asbestos pipes, which are left in position and painted.

FINISHES.—All windows and external doors are of steel. The factory floor is granolithic. Floors in the administrative block entrance hall and corridors are terrazzo; in the offices they are inoleum or composition. Walls and ceilings, in the administrative block, are plastered and distempered. The kitchen has fairfaced brick walls with some tiling. The factory has fair-faced brick walls. The canteen entrance hall floor is Hornton stone. The canteens, games and quiet rooms have asphalte floor tiles. Buff quarry floor tiles are used in the kitchens.

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[Text continued on page 322]

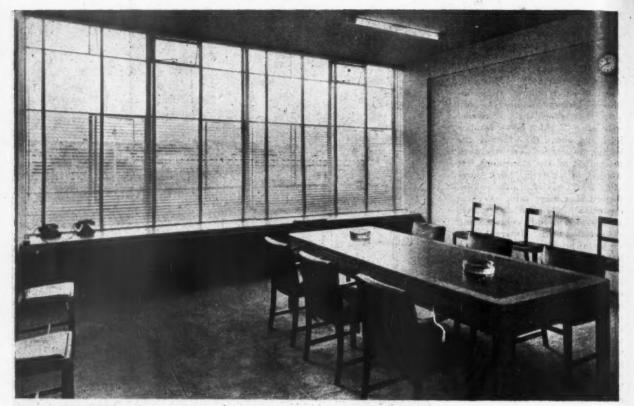




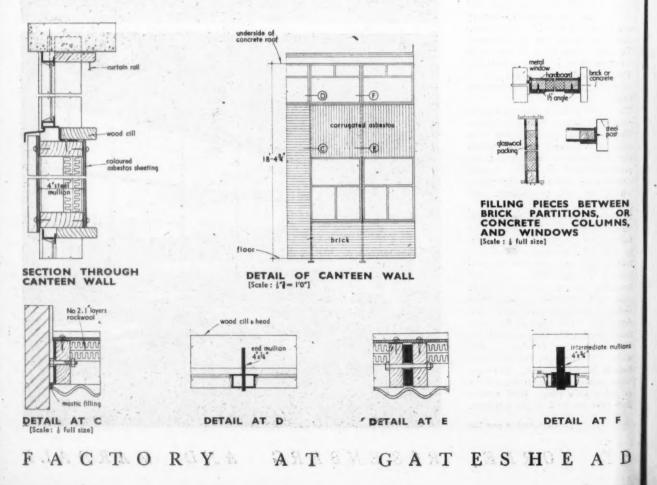


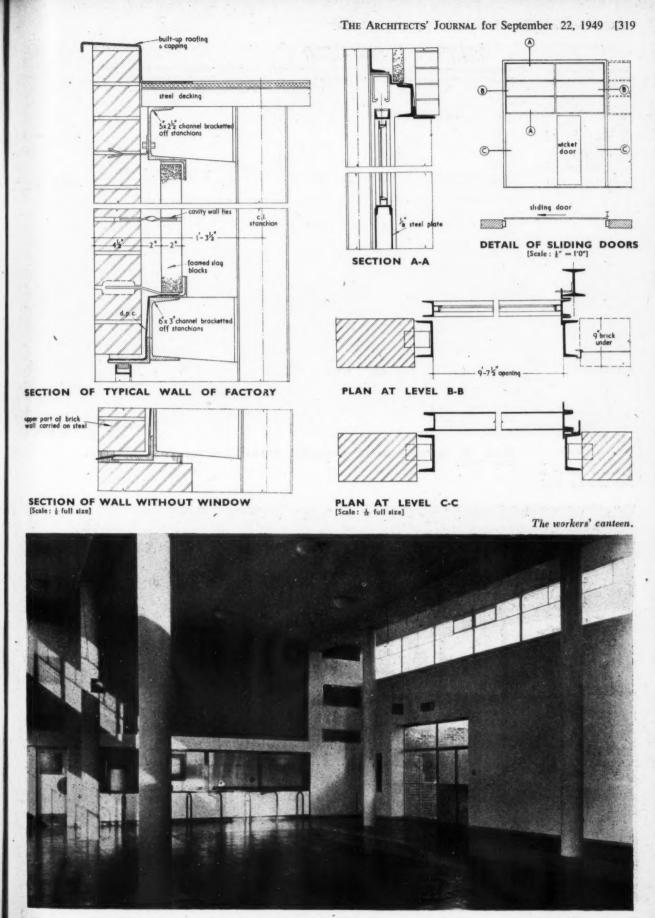
BY YORKE, ROSENBERG AND MARDALL

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The board room in the administrative block.





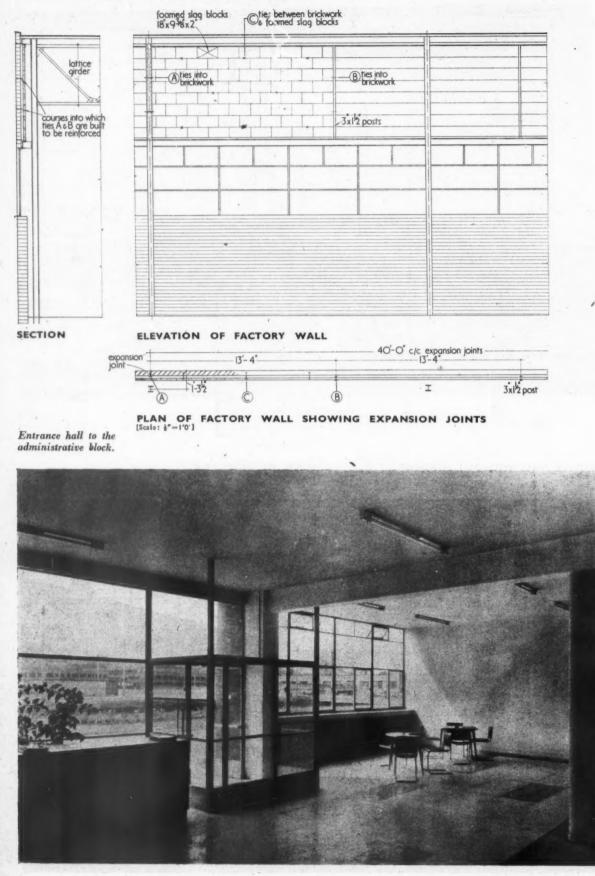
BY YORKE, ROSENBERG AND MARDALL

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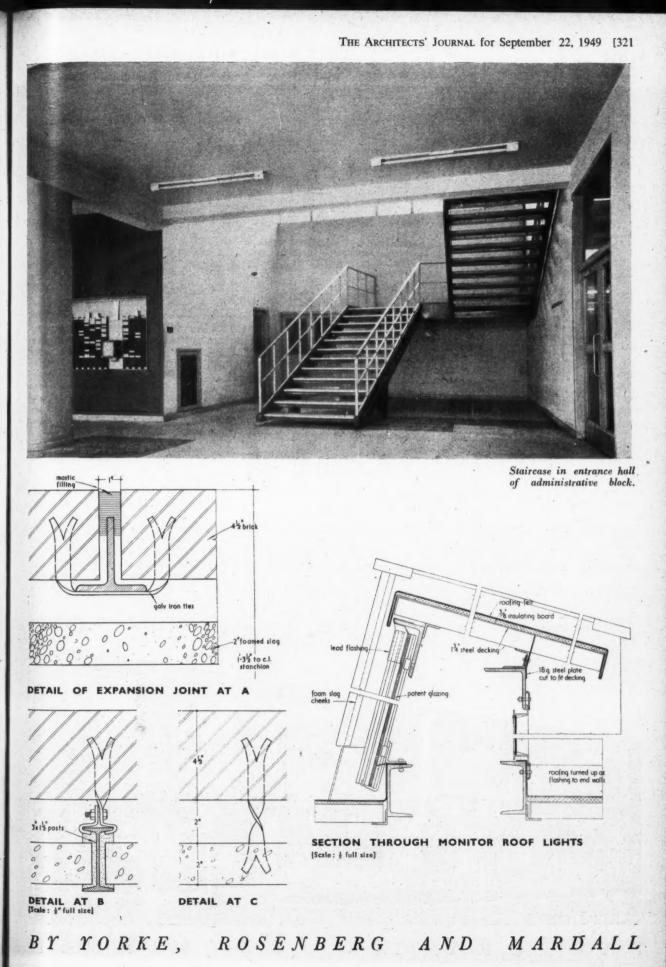
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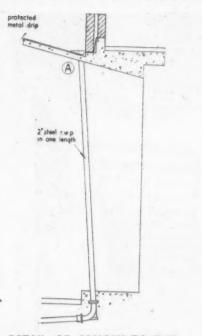


FACTORY AT GATESHEAD



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DETAIL OF CANOPY TO THE MAIN ENTRANCE [Scale : ]" ~ 1'0']



DETAIL OF OUTLET AT A

Entrance to administrative block.



# HEAD OF DOOR SHOWING JUNCTION WITH WINDOW



HEAD OF DOOR SHOW-ING JUNCTION WITH CON-TINUOUS FACTORY WIN-DOWS



BLIND BOX FIXING DETAIL



#### DETAIL OF WINDOW HEAD IN ADMINISTRATIVE BLOCK



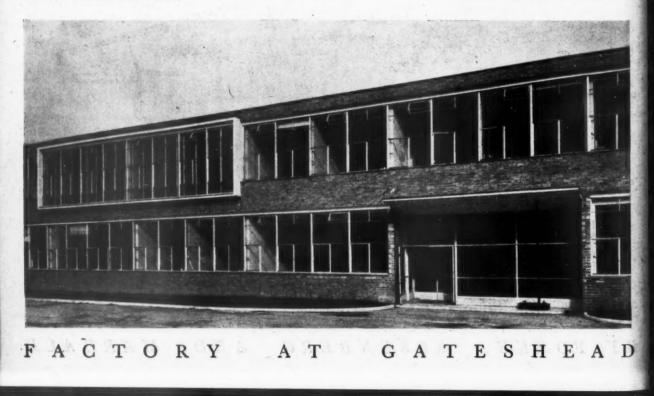
NORMAL DETAIL AT A [Scale : } full size] [Continued from page 317 Walls generally are plastered and distempered.

COLOUR SCHEME. — External walls, red brick; monitor end walls, white; windows, silver grey; doors, light blue. The interior brick walls are painted in pastel shades, with small areas of bright colours in special positions. Varying colours have been used on different surfaces in individual rooms to give interest and variety. The steel decking used for the factory ceiling is finished in high gloss cream paint. The pipes and conduits, are in the colours of the British Standard Specification.

HEATING .--- A mechanical conveyor fills the overhead storage bunker in the boiler house. A vertical boiler supplies steam for the testing tanks, for unit heaters in the factory, for all hot water radiators in the administrative block, and for all domestic supply. The main locker room is heated by a low-level piping system and extract ducting connected to the top of the lockers. The ventilation of the factory is partly natural, assisted by a small number of extract fans and fresh air connections to some of the unit heaters.

The consultants associated with the architects in the design of the factory were O. M. Marcel (reinforced concrete), John Porges (heating), and R. W. Gregory and Partners (electrical work).

The general contractors were Thomas Clements & Sons. For list of sub-contractors see page 328.

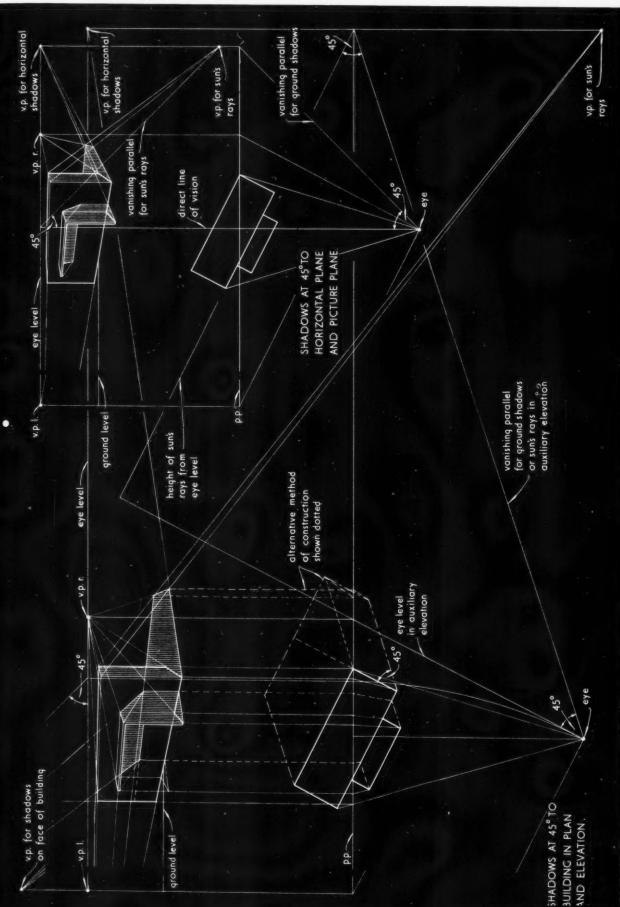






# DRAUGHTSMANSHIP PERSPECTIVE

The Architects' Journal Library of Information Sheets 207. Editor: Cotterell Butler, A.R.I.B.A.



1.836

### 1.B36 PERSPECTIVE DRAWING : SHADOWS CAST BY THE SUN

This Sheet, one of the series on draughtsmanship, describes three methods of construction for showing on perspective drawings shadows cast by the sun. The conventional architectural shadow projection is used in which the rays of light from the sun are assumed to be parallel and their direction in both plan and elevation  $45^\circ$ .

#### Shadows at 45° to Building in Plan and Elevation

In the first example the conventional rays of light are taken in relation to the building itself.

The perspective of the building is set up. From the eye position on the plan a line is drawn to make an angle of  $45^{\circ}$  to the vanishing parallel for v.p.r., i.e., parallel to shadows on the ground that are at  $45^{\circ}$  to the side of the building plan. From the intersection of this line with the picture plane a vertical projection is made to the eye level line, giving the vanishing point for shadows cast by vertical edges of the building on the ground or on horizontal planes.

To obtain the vanishing point for the sun's rays an auxiliary side elevation is set up. On the vanishing parallel for horizontal shadows a  $45^{\circ}$  triangle is constructed. The hypotenuse representing the sun's rays as seen in elevation looking towards the short side of the building, one short side representing the eye level line and the other representing the vertical distance below eye level of the intersection of the sun's rays with the picture plane, i.e., the level of the vanishing point required. On a vertical line drawn through the vanishing point for horizontal shadows this distance is marked off to give the vanishing point for the sun's rays in the perspective drawing.

The shadow of a corner of the building falling on the ground is found by drawing a line from the base of that corner to the vanishing point for horizontal shadows; from the top of the corner another line is drawn down to the vanishing point for the sun's rays to intersect the shadow line on the ground. This intersection gives the shadow point of the top corner of the building and consequently the length of the shadow.

The shadow of the left hand corner of the canopy is found in a similar way. A point immediately below the corner is found on the ground in the perspective drawing and a shadow line is cast back to the vanishing point for horizontal shadows to cut the base of the wall. From this point a vertical line is drawn up the wall face until it is cut by a line drawn from the front corner of the canopy to the vanishing point for the sun's rays. This intersection locates the shadow position of the corner of the canopy on the wall face.

A vanishing point may be found for the shadows falling across the face of the building at 45° which are cast by projections such as the canopy. This might facilitate drawing if a great amount of small detail occurs in these shadows. The shadows fall on the same plane as the face of the building so their vanishing point will occur on a vertical line drawn through v.p.l. Their angle is at  $45^{\circ}$  to the horizontal in true elevation, therefore a true elevation is projected to obtain the height of this vanishing point above eye level. The vanishing parallel from the eye to v.p.l. is swung round on to the picture plane, projected vertically to the eye level line and from this point a line at  $45^{\circ}$  to the horizontal is set up to cut a vertical drawn through v.p.l thus locating the vanishing point required.

#### **Alternative Method of Construction**

An alternative method is to cast all shadows on the plan and elevations that are used for the construction of the perspective. The points of shadows on the ground and on the vertical faces of the building are set up in the same way as those of the building itself. This method of construction is shown by the dotted lines on the drawing.

#### Shadows at 45° to Horizontal Plane and Picture Plane

In the second example the conventional rays of light are assumed in relation to the picture plane and to the eye or ground level. The projection of shadows from the sun in this position may only be suitable for examples where one axis of the building is at a fairly acute angle to the picture plane. If this is not the case the shadows cast may be too narrow to be effective.

The perspective of the building is set up. On the plan a line is drawn from the eye to meet the picture plane at an angle of  $45^\circ$ , i.e., parallel to the sun's rays on plan. The point of intersection with the picture plane when projected up to the eye level line gives the vanishing point for shadows cast from vertical edges of the building which fall on a horizontal plane. Through this point a vertical line is drawn on which the vanishing point for lines descending at  $45^\circ$  will fall. From the central point in the perspective a line is taken down at  $45^\circ$  to the eye level line to cut this vertical, locating the vanishing point for lines descending at  $45^\circ$  to the eye level or ground line, i.e., the sun's rays in the perspective drawing. The shadows are constructed in the way already described for the previous example.

This Series of Sheets covers geometrical drawing, orthographic, isometric and axonometric projections, perspective, rendering, lettering and draughtsmanship generally.

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Architects' Journal 22.9.49

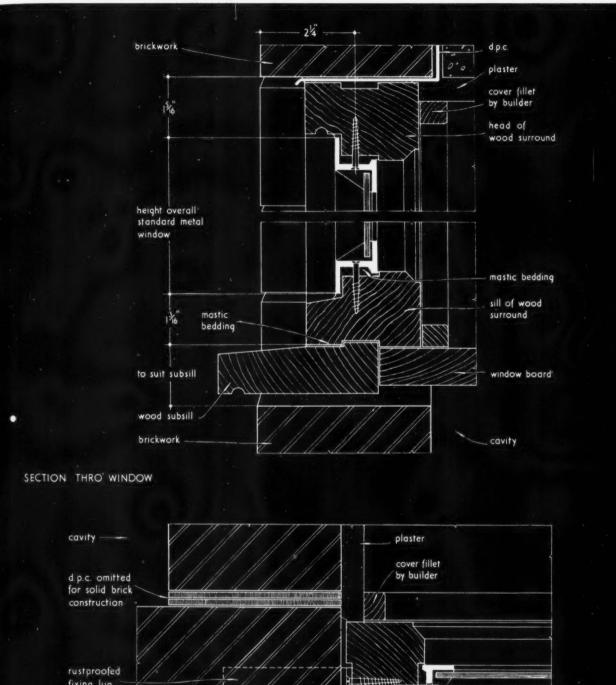
fixing lug

brickwork

PLAN OF WINDOW

# WINDOWS STEEL APPLICATIONS

The Architects' Journal Library of Information Sheets 208. Editor : Cotterell Butler, A.R.I.B.A.



24.DI

mastic bedding

width overall

standard metal window

jamb of

15/1

wood surround

mastic pointing

STANDARD METAL WINDOWS WITH WOOD SURROUNDS (AS B.S. 1285): FIXING TO II" CAVITY OR SOLID BRICKWORK. (scale: 2 full size). Compiled from information supplied by The British Metal Window Manufacturare Accounting 1:-

# 24.D1 STANDARD METAL WINDOWS WITH WOOD SURROUNDS (AS B.S. 1285) : FIXING TO 11 IN. CAVITY OR SOLID BRICKWORK

This Sheet gives details of fixing standard metal windows with wood surrounds to 11-in. cavity or solid brickwork. Sheet 24.C1 illustrates the method of specifying standard metal windows and Sheets 24.C2 and 24.C3 give standard sizes and types. Further fixing details will be given in subsequent Sheets in this series.

# **Brickwork Openings**

It should be noted that where these surrounds are used  $2\frac{1}{2}$  in. (plus depth of subsill used including mortar joint) must be added to the total height and  $2\frac{5}{6}$  in. to the total width of the standard metal windows to determine the sizes of the actual brickwork openings.

### **British Standards**

The wood surrounds shown are in accordance with B.S. 1285: 1945.

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# TECHNICAL SECTION

# BUILDING RESEARCH

There has been a very serious time lag in bringing the Annual Reports of the Building Research Station up to date after the war-time gap. The latest publication\* deals only with 1947, but, nevertheless, it is an important document well worthy of comment. The detailed report of the Director, which deals with individual programmes of research, will be referred to in the Information Centre of this Journal, but the broader matters covered by the introductory report of the Building Research Board are of sufficient importance to warrant special mention.

There is no doubt that in recent years architects have received increasing benefits, both direct and indirect, from the work of the Station. Much of the direct benefit has resulted from the very large amount of the work of BRS having been given up to short-term programmes dealing with matters of immediate importance. Up to a point this is an excellent thing, and it must be one of the important reasons why architects now tend to grumble much less about the "unworldliness" of the scientists. There is, however, a very real danger—as the Board points out in its report—that this concentration upon short-term work takes the staff away from the longer-range and more fundamental work. The success of the recent short-term investigations has depended very largely upon having a sound background of past fundamental work and unless this can also be ensured for the future the situation becomes similar to that of any concern which is living on its capital.

It is also interesting to note the considerable increase in effort towards publicising the results of the research work. There have been more exhibitions, a return of the excellent BRS Digests inserted in the RIBA Journal and the beginning of the useful series of National Building Studies. The decision to open a branch of the BRS in Scotland should also materially help to improve contacts in the North.

Two aspects of the Station's work of very obvious appeal to architects are the continued development of full-scale buildings on the Abbots Langley site and the decision to carry out studies of building types rather on the lines of the studies made for the Post-War Building Study on House Construction. The Abbots Langley development now includes three blocks of flats for full-scale trials on sound insulation related to varying types of structure. All this shows that there is plenty of imagination and activity. The real danger appears to be the lack of resources to deal with all urgent needs and at the same time to keep moving with the more fundamental work.

Building Research, 1947. HMSO, price 2s. net.

3241

### TECHNICAL SECTION

A digest of current information prepared by independent specialists; printed on one side of the paper only, to allow readers to cut out the items for filing and paste them up in classified order. Headings below.

# INFORMATION CENTRE

I SOCIOLOGY. 2 PLANNING : General. 3 PLAN-NING : Regional and National. 4 PLANNING : Urban 5 PLANNING : Public Utilities. 6 PLANand Rural. NING: Social and Recreational. 7 PRACTICE. 8 SURVEYING, SPECIFICATION. 9 DESIGN: General. 10 DESIGN : Building Types. 11 MATERIALS : General. 12 MATERIALS : Metal. 13 MATERIALS : Timber. 14 MATERIALS : Concrete. 15 MATERIALS : Applied Finishes, Treatments. 16 MATERIALS : Miscellaneous. 17 CONSTRUCTION : General. 18 CONSTRUCTION : 19 CONSTRUCTION : Details. 20 CON-STRUCTION : Complete Structures. 21 CONSTRUC-TION : Miscellaneous. 22 SOUND INSULATION-ACOUSTICS. 23 HEATING, VENTILATION. 24 LIGHT-ING. 25 WATER SUPPLY, SANITATION. 26 SERVICES EQUIPMENT : Miscellaneous. 27 FURNITURE, FIT-TINGS. 28 MISCELLANEOUS.

### 2.97 planning: general SURVEY TECHNIQUE

Basic Surveys for Planning. Edited for Association for Planning and Regional Reconstruction by J. Tyrwhitt and W. L. Waide. (Gilbert Wood & Co. Ltd.; Iliffe & Sons Ltd. 1949. 5s.)

Informative and very useful report on an attempt by specialists in conference with Kent County officers to outline a scheme for surveys satisfying the requirements of the Town and Country Planning Act, 1947. Illustrated. Index.

This conference of a group of specialists meeting as an expert survey team took place in August, 1947, and was called to investigate the difficulties that would face town planning officers concerned with the preparation of the survey material obligatory under the 1947 Act. The Kent County Council, whose County Planning Officer, Mr. J. W. R. Adams, F.R.G.S., PP.T.P.I., F.I.L.A., had just completed a general survey of the county, acted as hosts, placed all available survey material before the group of experts and permitted the officers of the County Planning Department and other departments to take part in the discussions. The programme of work included the following aspects: The examination of a special exhibition of the county's survey material; the preparation of reports by each member of the team on survey material required for Kent after a discussion on those points that should receive special study in connection with the county survey programme; and, lastly, an investigation into questions of priorities and taffing concern

questions of priorities and staffing concerning each part of the survey. The members of the group included, besides others, an industrialist, an agriculturalist, a sociologist, a geographer and a traffic expert.

Before summarizing the results of the team's deliberations the editors give a short general introduction. They state that the survey and its appropriate organization form the essential basis of the work of any planning department responsible for a region, a county or a town. "Not only is the survey organization necessary for the preparation of the development plans but it is the means

### by which an efficient administrative system is established for the day-to-day control of development and for the implementation of the plans." Without such an organization responsible for the efficient recording and analysis of continuously changing conditions

THE ARCHITECTS' JOURNAL for September 22, 1949

planning as a whole would fail. Under the 1947 Act three types of plans have to be prepared and submitted to the Minister within three years of. the Act's appointed day, July 1, 1948. They are:— Development plans for counties; development plans for areas ripe for immediate detail plans for areas ripe for immediate development and those in which redevelopment is considered necessary. The survey aspects which should be investigated in connection with these plans are set out in the report in two different sections, the first representing a summary and the second a detailed analysis of basic survey data. Both these sections are subdivided under the same headings: County surveys of first priority; county surveys of second priority; basic surveys for development plans for towns within the county; and examples of local surveys necessary for certain detailed aspects of the plan.

The summarized version contains merely lists defining the headings under which information should be collected, giving the sources from which relevant information may be obtained, and indicating the type of specialist who should be in charge of each particular survey aspect. The detailed version analyses each of the various subjects outlined in the preceding lists in a uniform manner. It determines the objectives to be aimed at by the survey, gives an outline of the scope, contents and basis of information to be recorded, discusses methods and standards of survey notation and presentation, and suggests types, qualifications and numbers of planning staff required for the efficient preparation of the relevant material. There are two appendices, the first of which gives a specimen of a transport survey together with a chart showing the inter-relationship of transport with other survey data. The second appendix contains a summary of these problems which the group examined in their study of Kent.

Although all the investigations undertaken during the conference were closely connected with and based on work concerning one particular county the findings and recommendations as set out in the report are equally applicable to any town or county area whether in this country or abroad. The documentation of these findings within a booklet of 42 pages only is a model of concise and clear presentation of factual data and, as a reference guide, a most valuable contribution to the comparatively new science of planning survey technique.

### 11.18 materials: general BUILDING RESEARCH

Building Research 1947. (HMSO, 1949. 2s.) Annual Report of BRS for 1947. A valuable summary of the work of the Station. First comes a brief report of the Building Research Board in which important points of policy are mentioned. (See Technical Leader 22.9.49.) Then follows the Director's report of the year's work. This covers Materials, Building Construction, Design and Performance of Structures, Soil Mechanics, Efficiency of Buildings, Fire Research and certain other matters. It describes in a dry and matter of fact tone the vast range of subjects studied. It is always worth glancing through these Annual Reports if only to remind oneself of the vast scope of the work covered. A more careful reading is also worth while, however, as even in the very condensed form in which the report is given there is much to set the architect thinking and to suggest that further enquiry on a particular subject would be profitable.

## 12.37 materials: metals CORROSION OF METALS

The Corrosion of Metals I & II. W. H. J. Vernon. (J. Royal Society of Arts, July, 1949, pp. 578-610.)

Two papers dealing exhaustively with the theory of metal corrosion, and with practical preventive measures. Notes on use of different metals together. Valuable to architects. Illustrated with photographs and diagrams.

The author emphasizes the national importance of checking inefficiency and wastage due to corrosion, particularly of ferrous metals. The various types of corrosion are discussed and its electro-chemical characteristics clearly explained. "Noble" metals, *i.e.*, gold, platinum, and silver, being in their natural state, are stable, whilst others in various degrees tend to revert to their original states of combination in nature. The products of this corrosion sometimes, as in aluminium and copper, suppress future attack. Corrosion resulting from the action of a simple voltaic cell occurs where two metals of widely differing electrode potentials are in the presence of a suitable electrolyte, commonly acid industrial waters and neutral salt solutions. The mechanism of surface pitting, which is much more dangerous than uniform corrosion, is of this nature. Atmospheric pollution is considered more

Atmospheric pollution is considered more dangerous to mild steel than humidity alone, the rate of rusting in Sheffield, for instance, being about five times that of Llanwrtyd Wells, a rural district with more than double the rainfall of Sheffield. Sulphur compounds freed as the result of burning coal are largely responsible for this and more action should be taken to limit pollution.

The second paper deals with preventive measures, based on modifications of design or procedure, of environment, of the metal, and on protective coatings. In the consideration of the first of these the bad effects of building steel into masonry are illustrated, and the increased volume required by the corrosion products are shown to cause additional damage.

tional damage. Warnings are given against designs involving crevices between metal parts, against water systems including copper pipes and galvanized iron cylinders, against steel gutters on lead or copper roofs, and gutters of zinc and lead on roofs covered with cedar shingles.

The last section gives a brief but clear picture of the numerous protective coatings, both natural and applied, and the factors determining their success.

### 14.26 materials: concrete VEGETATION GROWTHS ON CONCRETE

Vegetation Growths on Concrete. V. M. Webb. (Building Topics, July, 1949.)

Conditions favourable to growth of algæ, lichens and mosses, their danger, and preventive measures.

Generally this occurs only on old damp concrete walls and renderings, especially where cracks exist. Algæ, lichens and mosses are not seriously harmful, but they prepare the ground for ferns, weeds, and creepers, whose roots penetrate the wall.

No precise preventive or curative methods are given, but scrubbing with soapy water is said to be effective.

### 15.60 materials : applied finishes PAINTING IRON AND STEEL

Protective Painting of Iron and Steelwork. S. Endwick. (Building Topics, July, 1949, pp. 9-12.)

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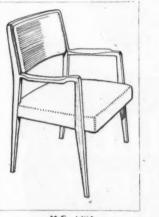
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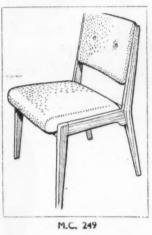
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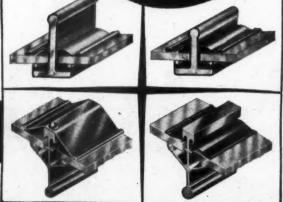
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# HILLS PATENT GLAZING

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Top illustrations show section of Hills Lead Clothed Glazing Bars. Bottom illustrations are of Hilumilux Roof Glazing System, (a) with Aluminium Capping, (b) with Lead Windows

# TECHNICAL SECTION

short description of principal types of protective paints, giving separately pigments for priming and finishing coats and media. Chlorinated rubber films and bituminous coatings also mentioned. Importance of correct surface preparation emphasized.

## 16.53 materials : miscellaneous STONE WALL EXPOSURE TEST

Stone Wall Exposure Test. D. W. Kersler and Ross E. Anderson. (J. of the Clerks of Works of Great Britain Incorporated, July, 1949.)

Observation of natural weathering processes in relation to laboratory tests at National Bureau of Standards, USA. No results available yet.

Thirty different types of stone have been built into a wall including various types of dampcoursing, and set part in high calcium lime mortar (1:3) and part in cement mortar ime mortar (1:3) and part in cement mortar (1 part cement, 0.4 parts ground limestone and 3 parts sand). The tests aim at dis-covering agents most destructive to specific types of stone. The theories suggested are that stone contains small amounts of mineral impurities which react chemically with each other on exposure, and also that internal stresses are set up in stones composed of two minerals having different rates of expansion.

### 19.73 construction : details **ALUMINIUM BUILDING**

Aluminium. New Alcoa Administration Building at Davenport. Harrison & Abramo-vitz, architects. (Architectural Forum [USA], June, 1949, pp. 76-80.)

Steel framed building with a diversity of aluminium products in facings, window frames, ducts, fixtures, etc.

The most interesting feature of this building, in which all sorts of aluminium products have been used extensively, is the external facing formed by corrugated panels in cast aluminium alloy. These panels have a standard size of 4 ft. by 7 ft.  $3\frac{1}{10}$  in, weigh 162 lb, and are bolted to the steel frame, which also supports the inner skin of wall consisting of 4 in. thick precast panels in lightweight concrete.

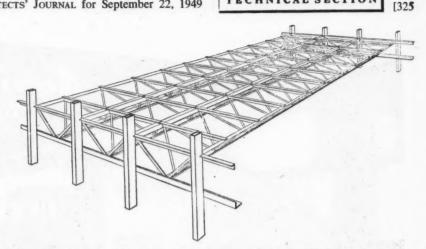
The total thickness of the wall is  $9\frac{1}{2}$  in., including the interior furred finish and the air space between aluminium and concrete. An impervious weather seal was not sought in the joints of the exterior aluminium panels; what water penetrates this shield drains off before it presents a real problem for the concrete slabs.

### 19.74 construction : details. 50-FT. SPAN FLOOR TRUSSES -

G.M. Technical Centre. Saarinen, Saarinen & Associates, architects. Smith Hinchman & Grylls, architect engineers. Thomas D. Church, landscape architect. (Architectural Forum [USA], July 1949, 70-78).

Proposed large grouping of industrial buildings. New type of floor structure of 50-ft. span

Out of the four separate building groups at the technical centre of General Motors near Detroit, the Advanced Engineering Section is scheduled as first for immediate construction. For the 50-ft. span an original construction. For the 50-ft span an original truss of triangular cross-section has been developed. The lower chords of these trusses avoid the columns, leaving the column lines free, across the building, for all kinds of connections. Air conditioning ducts can easily be passed through and a high degree of lateral stability achieved.



New type of 50-ft. span floor trusses for General Motors Technical Centre, near Detroit. See 19.74.

### 24.120 lighting **CHURCH LIGHTING**

Lighting of Churches. L. C. Rettig. (Trans. Illum. Eng. Soc., Vol. XIV, No. 5, 1949, p. 177.)

Different lighting system applied to ancient and modern churches. Limited usefulness. Illustrated.

It is admittedly difficult to generalize on how to light such varied types of buildings as churches, but the author unfortunately chose to try to date every kind of lighting system, direct, indirect, and all the rest, to the various types of churches without thinking strongly enough about the visual con-ditions for people in the congregation. Some facts emerge. He recommends general light to enable all readings to be

done without local lights. He notes the necessity for more light in the chancel than the nave to hold attention. And he records the point that flat, polished gold and silver ornaments are impossible to light because they are luminous.

### 26.52 services and equipment: miscellaneous PLUMBING AND WATERFITTING

Newnes Plumbers' Pocket Book. Woolgar. (George Newnes, Ltd. W. 1949. 5s.)

Pocket book containing information concerning all branches of plumbing and water fitting.

Though primarily intended for plumbers, this little book should also prove useful to architects. It contains, in immediately accessible form, information on pipework, cold water supply, hot water supply, drain-age and sanitation, glass and glazing, and humbers' tools plumbers' tools.

The first section deals with pipework and the sizes and weights of pipes and jointing methods; whilst the part concerning the setting-out of bends should assist architects in designing pipe ducts, sink enclosures and the like in such a way that the plumber does not have to perform miracles of contortion in fitting his pipework into an illconsidered space.

The sections on water supply give useful information concerning the relevant regulations, quantities required, sizing and capacities of pipes, and equipment such as pumps, water softeners and boilers. That on drainage includes soil and vent

pipes and wastes, both on the one- and twopipe systems, and storm water gutters and drains, with regulations, materials, capacities and methods of protection.

Altogether a useful little book; and, urthermore, unlike many "pocket books," furthermore, unlike many it will go in the pocket.

### 26.53 services and equipment: miscellaneous THERMAL INSULATION

Mechanical Refrigeration, Part B. Thermal Insulation. Draft BS C of P 406: 1949. British Standards Institution. 3s.)

Code of Practice covering materials and constructional methods for use in lining cold stores and other refrigerated rooms.

Architects will find this Code of Practice of great assistance in specifying for the in-sulation of cold stores and in ensuring that no damage to the structure arises from their presence in a building. This is particularly important at the present time, when the storage of foodstuffs at temperatures around

0° F. is becoming common practice. The Code covers insulating materials and vapour barriers and their installation; the Vapour barriers and their installation; the protection of timber against fungus attack; the avoidance of structural damage, due to expansion and contraction, or the freezing of the earth beneath; the fixing and insulation of the pipework; and finishes for walls, ceilings and floors.

This feature answers any question connected with building confiden-tially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.

### QUESTIONS ANSWERS AND

### 3002 CONVERSION TO FRIED FISH SHOP

Wy clients have bought a shop which is still war-damaged. Its last use was as a lady's hat shop (1944). My clients own a number of fried-fish shops and bought this for an additional branch. I believe that it is now necessary to obtain the permission of a local authority to change this use; does this mean that a development charge will be payable?

A No. Class 6 of exemptions under Order 1188 of 1948 includes "the use of any type of shop as a shop of any other type." Planning permission is needed. Payment of a development charge is not.



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xxxvii

This feature covers both the production and marketing of new materials and designs of equipment, as well as the general trend of developments within the Building Industry.

### INDUSTRY THE

### By Brian Grant

### CEMENT AND NATIONALIZATION

am not sure whether the pros and cons of the nationalization of any particular in-dustry really come within the scope of these notes, but most of us know that the these notes, but most of us know that the cement industry is nearly at the top of the list if the present Government is in power after the next election. The Cement Makers' Federation, however, rather naturally maintains that there is no basis, in common sense or in economics, for this decision, and has produced a booklet decision, and has produced a booklet called Facts About the Cement Industry. In this booklet it is claimed:— (a) That cement in the British market to-

day is cheaper than in any other country of the world; 70s. a ton in London against

(b) That total deliveries and exports deliveries were last year greater than ever before.

(c) That in productivity per worker the British cement industry excels even that of the United States (cement is 121s. 7d. a ton in New York).

a ton in New York). (d) That the policy of the industry is to promote new and better uses for cement and to provide for the consequent increase of demand by the improvement and ex-tension of plant, to be financed without Government aid.

(e) That to the same end it has greatly enlarged its research and development work. (f) That its structure as an integrated industry is responsible for its notable record of achievement and ensures the stability which makes it able to plan for the stability which makes it able to plan for the future. It is also pointed out that no industry has been less worried by abour troubles than cement. Since the General Strike of than cement. Since the General Strike of 1926 there has been neither a national strike nor a lock-out in the industry. Well, there you are. It's not my job, fortunately, to sum up and come to any final decision. Copies of the booklet, if you would like the full story, from The Cement Makers' Federation, Terminal Journe 52 Constance Conduct Lordon House, 52, Grosvenor Gardens, London, S.W.1.

## MOSAIC WOOD FLOORING

T

After some years of experiment and testing, a new type of mosaic wood flooring is now being produced under the trade name of Marquetone.

Consisting of 75 per cent. hardwood chips set in a patent bonding matrix, the flooring has something of the appearance of a marble terrazzo finish and combines a warmth of touch and resiliency not usually found in

By making the chips of different hard-woods and setting them in different colour matrices, various designs and patterns can be laid. Furthermore, by the special treat-ment and orientation of the wood chips in a multitude of different directions in the matrix, this flooring has maximum resistance to abrasive wear combined with no lines of to abrasive wear, combined with no lines of weakness, and can be laid, *in situ*, directly on to old or new concrete, wood or tiles. Marquetone has also the great advantage of being fire-resisting, and is suitable for use

with under-floor heating. By reason of a hygienic, smooth and continuous surface, its maintenance is simply a matter of an application of wax polish from time to time, and an occasional rub over with a damp cloth. Prices vary from 30s, to 35s, per square yard for normal straightforward jobs, but for small areas, etc., an extra percentage is

added accordingly. A report by the DSIR comments that " this floor has now been in use for approximately six months during which time it is estimated that 184,000 persons have crossed it. It has received light maintenance—sweeping and occasional washing but no polishing—and since it is in the entrance to a canteen has occasionally had milk churns rolled over it. The appearance is unaltered from the time of laying, apart from the removal of the polish." (Chittenden & Simmons Ltd., Ditton Place, Larkfield, Maidstone, Kent.)

## CONVECTION HEATERS

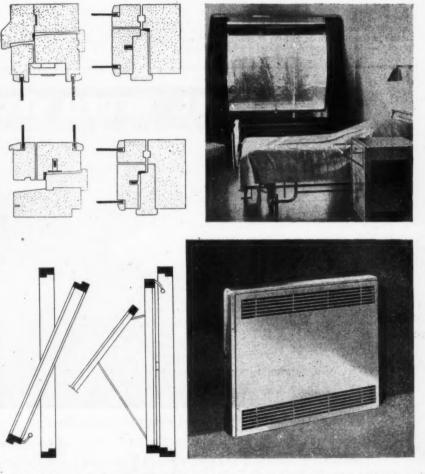
The Wellington Tube Works has recently introduced a range of wall and floor mounting convection heaters for use with high or low pressure hot water, or with steam. The heating elements consist of 13 gauge steel tubes with gills spaced for easy cleaning, each type of heater being available in double or single banks according to the heat output required. The photograph shows the floor mounting unit with the air inlet and outlet grilles at top and bottom. The front panel TECHNICAL SECTION

is easily removable, giving access to the inside of the casing for the concealed pipe connections, and there is a special sealing strip in the top cover of the casing to make certain that all the warm air is emitted through the grille and that discoloration of the wall is avoided. Heating surfaces vary from 11 to 52.6 square feet, the corresponding heat emissions are at 60 degrees F, room temperature being 3,850 and 18,410 B.Th.U per hour. (Wellington Tube Works Ltd., Great Bridge, Tipton, Staffs.)

# PUMPING LIQUIDS AND SOLIDS

A business-like publication from Ames Crosta Mills, sewage purification engineers, deals with their Pneu pump range. This pump, claimed to be one of the simplest ever invented, is designed for pump-ing liquids containing solid matter, and viscous fluids such as oil, mud, treacle, paint, the containing arbitic matter metale. tar, acids, alkalis, molten metals, molten salts, slurries, sludge and abrasive liquids, at any temperature up to boiling point. It is made in a variety of models and sizes with a maximum output of 60 gallons per minute. A very small supply of compressed air is enough for all working needs, and as there are no moving parts, except a ball valve, it is claimed that this pump is troublefree.

In addition to the standard models, there is a range in cast iron having advantages in some circumstances and for some corrosive



Top, left, a vertical section through the head and cill of the Swedish Carda Window; centre, a horizontal section above and below the central pivot; right, the window used in a hospital at Uppsala. Bottom, left, sections showing the window open and with the double sashes separated for cleaning; right, the Weldex Convector Heater.

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TECHNICAL SECTION

liquors. There is also a model built throughout in chemical stoneware, another in stainless steel, and the rubber-lined and lead-lined models have special applications in the chemical industry. This publication covers the range very fully, and should be very useful to anyone who has any unusual liquids to move: it seems that these pumps will deal effectively with any liquid which will flow into them. (Ames Crosta Mills & Co. Ltd., Heywood, Lancs.)

## DOUBLE GLAZED WINDOWS

Readers may remember seeing the Swedish Carda window at the 1947 Building Exhibition. At that time there was little to be said about it owing to the various import restrictions, but arrangements have now been made for it to be manufactured, in either hardwood or softwood, at Uxbridge, only the hinges and espagnolette bolts being imported. The marketing is in the hands of Holcon Ltd.

The window consists of a double glazed casement pivoted horizontally at its centre and able to rotate through 180 degrees for cleaning, the normal opening for ventilation being about 30 degrees. When turned for cleaning the casement opens into two sections so that the inner faces of the double glazing can be cleaned. It is also possible to fix a Venetian blind in between the panes of the double glazing, and this can be adjusted whether the window is open or closed, while in this position it is obviously far less liable to become the usual dust trap. At normal openings the window is held in position by its friction hinges; when closed the bolts hold it at four points at the top and bottom of the frame, a double rebate and sealing cords making it draughtproof, while the double glazing provides

good insulation against heat and sound. Sizes are flexible within a maximum area of 43 sq. ft., the maximum figures for width and height being 8 ft. 10 in. and 7 ft. 6 in. (Holcon Ltd., 4, Drapers Gardens, Throgmorton Avenue, London, E.C.2)

# Buildings I-llustrated

Temporary shop for Messrs. John Lewis & Co. Ltd. (Pages 308-311.) Designed by the Architect and Technicians of the John Lewis Partnership; Architect in Charge, R. H. Pearson. General Contractor: Messrs. John Lewis Building Ltd. Sub-contractors: joinery, electrical work, gas heating, decorations, Messrs. John Lewis Building Ltd.; fabrication of structural steel, Advance Welding Co. Ltd. (in association with Dr. Gottfeldt. M.INST.W., and Messrs. Steel Ceilings Ltd.); dismantling and erection of structural steel, Richard Abel (Steel Erectors) Ltd.; bricks (external facings), A. H. Herbert & Co. Ltd.; bricks (internal facings), Dunbrik Ltd.; asbestos roofing. E. H. Smith; precast concrete work (external and staircase), Malcolm McLeod & Co. Ltd.; asphalte (gutters, pavements and floors), Firenzi Asphalte; tubular work to showwindows, Carlton Metal Moulding Co. Ltd.; metal lettering, Signerafts Ltd.; canopy edging, Bull (Ely) Ltd.; shop-window blinds, E. H. Fisher & Son; pavement lights, Haywards Ltd.; lesnitary fittings, Associated Clay Industries Ltd.; leazing, H. & C. Davis & Co. Ltd.; Perspex to stair balustrading, Messrs. S. C. Errington (Hanwell)

Ltd.; plastering, Proberts Bros. Ltd.; ironmongery, Radiant Heating Ltd. (inc. Arthur Docking & Co.). Electrical fittings: fluorescent fittings (ground floor), Wembley Appliances Ltd.; counter fluorescent fittings (basement), Edison Swan Electric Co. Ltd.; tungsten fittings (basement), Harcourts Ltd.; spot lights and fluorescent louvres, Courtney Pope (Electrical) Ltd.; shop fitting (ground floor shelf units), Kandya Ltd.; metal display arms, Fredk. Sage (Display Fittings) Ltd.; metal work to show-window enclosures, Finney, Smiley & Co. Ltd.; chairs, Forward & Donnelly; paint, The Leyland Paint and Varnish Co.

New Factory at Gateshead on the Team Valley Trading Estate. (Pages 312-322.) Architects: F. R. S. Yorke, E. Rosenberg and C. A. Mardall. General Contractors: Thomas Clements & Sons. Sub-contractors: dampcourses, roofing felt, H. R. Vaughan & Co.; reinforcement, The Square Grip Reinforcement Co.; structural steel, Durham Steelwork Ltd.; steel decking, roofing felt, The Ruberoid Co.; patent glazing, Williams & Williams; flooring. Armstrong Todd, Commercial Marble & Tiles, Armstrong Cork Co., Denton & Co.; heating, ventilating, G. N. Haden & Sons; electrical installation, Reid Ferens; sanitary fittings, Stirson's Sanitary Fittings; pumps, Sigmund Pumps; door furniture, Dryad Metal Works; metal windows, Crittall Manufacturing Co.; clocking system, telephones, Telephone Rentals (Northern); rolling shutters, G. Brady & Co.; fireproof doors, John Tann; iron staircases, Wainwright & Waring; tiling, Commercial Marble & Tiles; canteen furniture, Pel; travelling cranes, Herbert Morris; "Pudlo" brand cement waterprofer, Kerner-Greenwood & Co. Ltd.



are particularly suitable for Industrial roofing and vertical sheeting. A special feature is the patented side lap which imparts additional strength to the last cover roll and increases the depth of weathering. Full technical details and fixing instructions are contained in catalogue Super Six/C.

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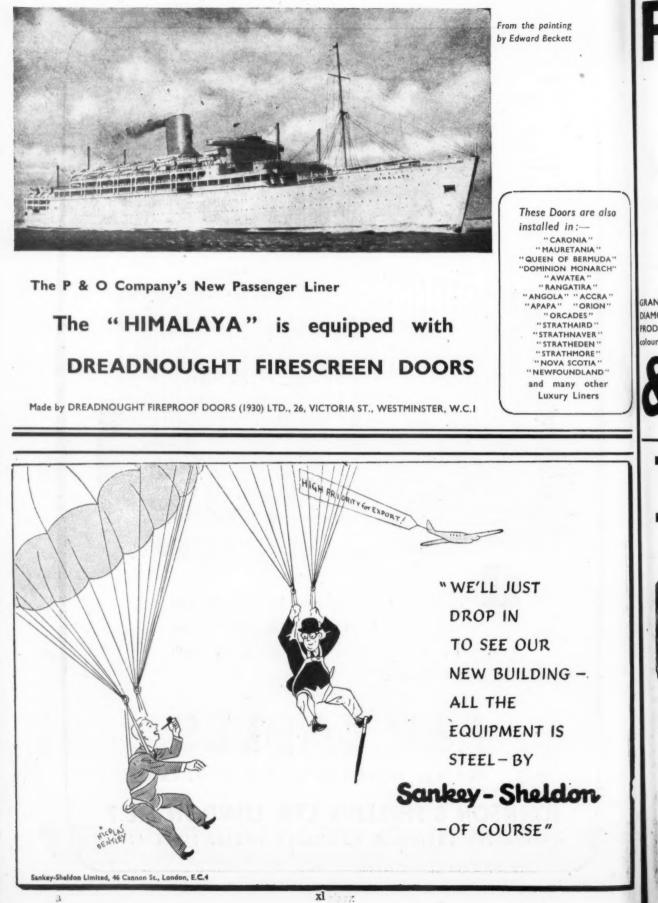
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THE ARCHITECTS' JOURNAL for September 22, 1949



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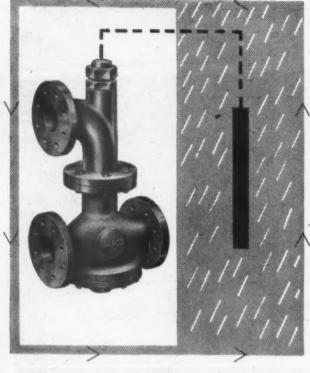
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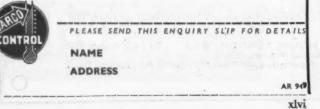
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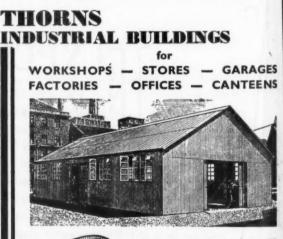
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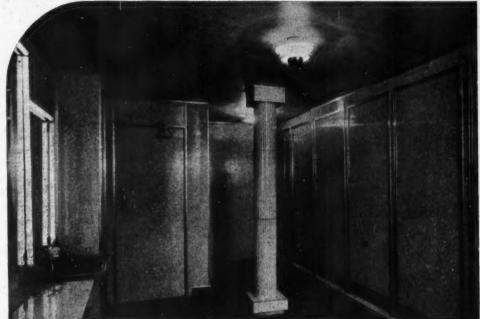
# THE ARCHITECTS' JOURNAL for September 22, 1949

# **COMPACTOM PARTITIONING**

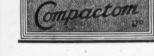
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saper. Replies to Box Numbers should be addressed ears of "The Architects' Journal," at the address suren above.

date of The Architects Southern and Sove. Available only to applicants excepted from the Control of Engagement Order, 1947.

# Public and Official Announcements 21s. per inch; each additional line, 2s.

THE INCORPORATED ASSOCIATION OF ARCHIVECTS AND SURVNORS maintains a register of qualified architects and surveyors (including assistants) re-quiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: EMPLOYMENT REGISTRE, WREN PARE, WHYTELEAPE. Tel.: Uplands 0935. 991

ADDRESS : EMPLOYMENT REGISTER, WARE PARK, WARTLARF, Tel: Uplands 035. 931 IONDON COUNTY COUNCIL. Applications are invited for unestablished posi-tions of (i) ARCHITECT, Grade III (salaries up to 2700 a year) and (ii) ARCHITECTURAL ASCHATATTE (salaries up to £590 a year), in the Honsing and Valuation Department. Com-mand according to qualifications and experi-neck according to qualifications and experi-and the Honsing and Valuation Department. Com-mand according to qualifications and exper-neck fing agement will be subject to the Local deverment Superanuation Acts, and successful experiment to the permanent staff on the currence of vacancies. Bucceasful candidates holding a recognized pro-tement qualification. To daphicture and proparation of work-minstar Bridge 8.E.I. (samped addressed envelope administering and apolication may be obtained from minstar Bridge 8.E.I. (samped addressed envelope qualifies. (2269)

COUNTY OF ESSEX. ILFOED COMMITTEE FOR EDUCATION. The Essex County Council invite applications for a SECTIONAL ASSISTANT ARCHITECT in the Office of the Borough Engineer of Ilford. Applicantis should be Members of the Royal Institute of British Architects, and have had con-siderable experience in the planning, designing, construction and supervision of School buildings and have had administrative experience. The scale of salary will be in accordance with the National Joint Council. A.P.T. Division, Grade VII. £635×£25 to £710, plus the appro-prisate London area allowance. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council.

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ASSISTANT ARCHITECTS. A.P.T., IV, £460-£555 per annum. The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be re-quired to pass a medical examination. Application forms can be obtained from C. H. Elkins, F.B.I.B.A., A.R.I.C.S., Shire Hall, Warwick.

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Vacancies. Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.C.10/T, Ministry of Works, Abell House, London, S.W.1. 2066

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Intermediate examination of the Town Planning Institute. Each appointment will be subject to (i) the National Scheme of Conditions of Service, (ii) the provisions of the Local Government Superannua-tion Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written notice on either side. As far as the appointments under (d) are con-cerned, the advertisement is inserted with the approval of the Ministry of Labour and National Service under the provisions of the Control of Engagement Order, 1947. Applications, stating age, qualifications and ex-perience, together with the names and addresses of two Referees, must reach the undersigned not later than Tuesday, the 4th October, 1949. Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment. No housing accommodation for the successful applicants can be provided by the Council. *Clerk of the County Council.* 2086

County Hall, Brecon.

COUNTY AECHIERENT. 2026 SALOP COUNTY COUNCIL. COUNTY AECHIERCT'S DEPARTMENT. Applications are invited for the following appointments to Established posts in the Depart-

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C. J. MORTON, Town Clerk. District Bank House, Penkhull Street, Newcastle, Staffs. 212 2122

measurement of variations and settlement of final accounts. Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required), quoting Q.S.1.

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medical examination by the County Medical Officer. Further particulars regarding the appointments may be obtained from the County Architect, N. Sq. Johnson, A.R.I.B.A., A.M.T.P.I., County Architect's Department, Shire Hall, Llangefni. Applications, stating age, training, experience, qualification, past and present appointments, names of two referees, and accompanied by a copy of one recent testimonial, are to be sent so as to reach the undersigned not later than Monday, the 3rd October, 1949. WILLIAM JONES, Clerk of the County Council. Shire Hall, Llangefni. 9th September, 1949. UNINETRY OF DEVICATION

MINISTRY OF EDUCATION. Applications are invited for the following tem-porary posts in the Development Group of the Architects' and Building Branch :-(i) QUANTITY SURVEYOR. Men. £1.050× £35-£1.270; women. £900×£30-£1.100. (ii) ARCHITECTS. Men. £750×£25-£1.000; women £550×£25-£880.

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 (iii) ARCHITECTS. Men. 2750×225-£1,000;
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Shrewsbury. September, 1949.

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Town Clerk. 2156 WEST SUSSEX COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT. Applications are invited from persons who have assed the Intermediate Examination of the R.B.A. for a permanent appointment in accord-ance with Grade II, A.P.T. Division (2420-2465 per annum) of the Consolidated National Scales, in accordance with the recent National Scales, in Accordance with the scale of the Scales, in Accordance with the scales of the Scales, in Accordance with the

 Hall, Chichester, to whom detailed applications must be submitted not later than the 30th September, 1949.
 T. C. HAYWARD, Clerk of the County Council.

 Canty, Clerk of the County Council.
 Clerk of the County Council.

 Canty, Clerk of the County Council.
 2155

 WARWICKSHIRE COUNTY COUNCIL.
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 WARWICKSHIRE COUNTY COUNCIL.
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 WARWICKSHIRE COUNTY COUNCIL.
 2000

 OUTY PLANNING DEPARTMENT.
 Applications are invited for the following applications and the second and the second application of the County Development Plan.

 The successful candidates will be engaged on and will be stationed at Warwick.
 Applicate should have had experience in a flaming office, and preference will be given be these candidates who have passed the Interguediate Examination of the Town Planning office, and preference will be given be the following office, and preference will be given be added by the Local Government Superannuation Act, syn, and the successful applicants will be returned to a sea medical examination.

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Canvassing, directly or indirectly, will be a dis-qualification.

L. EDGAR STEPHENS, Clerk of the Council.

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 L. EDGAR STEPHENS: Cerk of the Council.

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 CUNTY BOROUGH OF NORTHAMPTON. BOROUGH ARCHITECTS DEPARTMENT.
 DOINTY BOROUGH OF NORTHAMPTON.

 OUNTY BOROUGH OF NORTHAMPTON.
 BOROUGH ARCHITECTS DEPARTMENT.

 Applications for the above post, stating age, works and salary, whether related to any works.
 Main and present works.

 Applications and selary, whether related to any works or senior officer of the Council, and two persons to whom reference.
 Norther the selary whether related to any works or senior officer of the Council, and two persons to whom reference.

 Worksey, A.R.I.B.A., A.M.T.P.I.
 Borough the decider, 1949.

 The salary will be 7 guineas weekly, and candi-taiding trade and must be thoroughly con-versation with Bills of Quantities. Specifications and prawings, and be able to draft normal build the should have a sound knowledge of the distant brawings, and be able to draft normal build the senior of the senior of the to the toroughly con-versation with Bills of Quantities. Specifications and prawings and be able to draft normal build the senior of the senior of the to the toroughly con-versation of the senior of the to the toroughly con-ter torough the senior of the torough to the torough torough the senior of the torough to

Town Hall, Barking.

E. R. FARR, Town Clerk

COUNTY BOROUGH OF BIRKENHEAD. APPOINTMENT OF ARCHITECTURAL ASSISTANTS. Applications are invited for the following appointments on the staff of the Borough Sur-veyor: (a) ARCHITECTURAL ASSISTANTS (TWO). (b) ARCHITECTURAL ASSISTANT (ONE). (b) ARCHITECTURAL ASSISTANT (ONE).

Grade A.5. 5:520-5:70. (b) ARCHITECTURAL ASSISTANT (ONE). Grade A.2. £420-2465. (c) ARCHITECTURAL ASSISTANT (JUNIOR) (ONE). Grade M.1. £315-2:30. Applicants for (a) should be preferably Members of R.1.B.A. and Registered Architects, and have a sound knowledge of Architectural design and construction, and be capable of proparing com-plete set of drawings and details, etc. One appointment is required for School Buildings and one appointment for Housing and General works. Appointments for (b) and (c) should be capable of preparing working drawings, details, etc., and have had reasonable architectural experience. The posts are subject to the Local Government Superannuation Act, 1937, and the persons appointments for thousing should be proper-priate percentage of their salaries to the Cor-poration's Superannuation Scheme. The appointments are subject to one month's notice on either side, and the successful candi-dates will be required to pass a medical examina-tion. Annifications must be submitted in accordance

tion. Applications must be submitted in accordance with the instructions to be obtained from the Borough Engineer and Surveyor, Town Hall, Birkenhead. Completed applications must be submitted in a plain envelope endorsed "Archi-tectural Assistant (a) or (b), or "Junior Archi-tectural Assistant," as the case may be, and delivered to me not later than the date specified on the form to be supplied.

DONALD P. HEATH, Town Cletk.

2166

# Town Hall, Birkenhead. September, 1949.

COUNTY OF MONMOUTH. COUNTY PLANNING COMMITTEE. Applications are invited for the following appointments in the County Planning Depart-

COUNTY PLANNING COMMITTEE. Applications are invited for the following appointments in the County Planning Depart-ment:-(a) TWO JUNIOR PLANNING ASSISTANTS. Grade I. Salary 2590, rising by annual incre-ments of £15 to £455 (A.P.T. D. (b) THEED BRAUGHTSMEN. Salary accord-ing to age-£135 at 16 years of age. rising by annual increments to £285 at 2 (General Scale). Applicants for appointments (a) should be neat and efficient draughtsmen, and have a good know-iedge of surveying and levelling and ordnance survey revision, and preferably should have ex-perience in a Planning Department. Any technical qualifications will be an additional recommendation. Applicants for appointment (b) should be neat and expeditious draughtsmen, tracers and colourists, with experience of work on 1/2,500th and 6 in. to the mile ordnance maps. Ang-levelling will be and ditional recommendation. Appointments will be subject to the Local Government Superannuation Act, 1937, and to passing a medical examination, and will be terminable by one month's notice on either side. Applications, stating age, qualifications, train-ing and experience, and giving particulars of past and present appointments, accompanied by cories of two recent testimonials, or in the case of H.M. Porces the names of two referees, and chorsed "Planning Assistant" or "Draughtsman." must be delivered to James Kegle, A.M.T.P.I.; A.R.I.C.S., County Planning Officer, Cambria House, Caerleon, Mon., not later than 10th Ocober, 1949. VERNON LAWRENCE, Clerk of the Council. September, 1949. 2053 BOROUGH COUNCIL OF ENNISKILLEN. APPOINTMENT OF ARCHTECTURAL STAFF.

The persons appointed will be engaged on the preparation of plans, etc., for the Council's Housing Schemes, Planning Schemes, and other public work. The appointments will be on a temporary basis, but as far as can be foreseen will last for several years, and may be terminated at any time by one month's notice in writing on either side. Preference will be given to suitably qualified ex-Servicemen. Applications, stating age, and giving full par-ticulars of qualifications and experience, together with copies of two recent testimonials, to be de-livered to the undersigned not later than 12 noon on Saturday, 1st October, 1949. NOBLE J. CONNOB, Torus Clerk

# NOBLE J. CONNOR, Town Clerk.

Town Clerk's Office, Town Hall, Enniskillen, N. Ireland. 8th September, 1949. 2109

BOROUGH OF CHATHAM. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT. APPOINTMENT OF ARCHITECTURAL ASSISTAN. ASSISTAN. Applications are invited for the appointment of Architectural Assistant, at a salary in accord-ance with Grade V of the A.P. and T. Division (520-2570 per annu). Applicants should have good architectaral ex-perience, and be competent to undertake the proparation of working drawings and details for nousing schemes, including multi-storey flats. The appointment will be terminable by one month's motice on either side, and will be subject to the Provisions of the Local Government Super-annualion Act, 1937, and to the successful candi-date passing a medical examination. The conditions of service will be those of the National Joint Council for Local Authorities' Ad-ministrative, Professional, Technical and Clerical ervices.

ministrative, Professional, Technical and Ciercal Services. Housing accommodation will be made available if required. Applications, stating age, qualifications and ex-perions to whom reference may be made, should be forwarded to Mr. H. D. Peake, M.Sc.(Eng.). Borough Engineer and Surveyor. Town Hall, Chatham, not later than Tuesday. 2th September, 1949, envelopes being suitably endorsed. Can-vassing, either directly or indirectly, will dis-qualify. ROWLAND NEWNES,

ROWLAND NEWNES, Town Clerk.

2132

Town Hall, Chatham. 13th September, 1949.

13th September, 1949. 2132 URBAN DISTRICT OF FELTHAM. APPOINTMENT OF ARCHITECTURAL ASSISTANT. Applications are invited for the temporary appointment of Architectural Assistant in the Engineer and Surveyor's Department, at a salary in accordance with the recent decisions of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services regarding the grading of Archi-tectural Assistants (Grades III, IV or V of the National Scales), plus the appropriate London "weighting," Preference will be given to candi-dates who have had previous experience in the department of an Engineer and Surveyor to a local authority. The appointment will be subject to the National Scheme of Conditions of Service and to month's notice in writing on either Berme of anniha notice in writing on either and the subject on the subject of the National Scheme of Conditions of Service and the month's notice in writing on either Berme of anniha subject on the S

to the National Hamilton in writing on either side. Forms of application may be obtained from the undersigned, to whom they should be returned, accompanied by copies of two recent testimonials not later than the 3rd October, 1949. Canvassing will disgualify, and applicants must disclose in writing whether, to their knowledge, they are related to any member of or the holder of any senior office under the Council. M. W. COUPE, Council Offices, Feltham, Middlesex. 10th September, 1949. DOAD, HAULAGE EXECUTIVE.

ROAD HAULAGE EXECUTIVE. THE ROAD HAULAGE EXECUTIVE. THE ROAD HAULAGE EXECUTIVE are pre-pared to receive applications for the following post in the Department of the Chief Surveyor and Architect at Headquarters :-DRAUGHTSMAN (Ref. S.36). Applicants, pre-ferably qualified, must be able to carry out land and building surveys, be good draughtsmen, tracers and printers, and have experience in the keeping of plans and their records. Salary within the range £400-£500 p.a., according to qualifica-tions and experience. Applications are also invited for the under-mentioned post in the Divisional Offices indi-cated :--

IONDON COUNTY COUNCIL BRIXTON SCHOOL OF BUILDING, FERNDALE ROAD, S.W.4. Required, to commence as soon as possible-Part-time Day and Evening TEACHERS of Build-ing Construction and allied subjects. Applications (stamped addressed foolscap envelope necessary) should be made to the Secre-tary at the School. (1075)

THE ARCHITECTS' JOURNAL for Septemble of the construction of the permanent establishment of the construction of the constructi

side. The successful candidate will be required to pass

side. The successful candidate will be required to pass a medical examination. Application forms for these appointments may be obtained from L. E. Gower, F.R.I.B.A., County Architect. County Hall, Cardiff, to whom appli-cations must be returned in scaled envelopes, appropriately endorsed, not later than the 30th September, 1949. Canvassing, either directly or indirectly, will disqualify. An officer maintaining a home elsewhere and who is unable to obtain suitable acommodation. may be granied a lodging allowance of 275 per annum for a period not exceeding aix months. A CLIFFORD WAITER, Deputy Cierk of the County Council. Glamorgan County Hall, Cardiff. 1248 September, 1949. 2128 MENDED ADVERTISEMENT. WILLENHALL URBAN DISTRICT COUNCIL. APPOINTMENT OF HOUSING ARCHITECT. The Council invite applications for the appoint-ment of Housing Architect. Candidates must be at least Associates of the Royal Institute of British Architects, and have have be accessful candidate will be responsible

Royal Insultate of British Architects, and have had wide experience in architectaral design and construction, particularly in relation to the building of houses.
 The successful candidate will be responsible directly to the Council, and the appointment will be subject to the Local Government Superannuation Act, 1937, the National Scheme of Conditions of Service, and to termination by one month's notice on either side.
 The Council will be prepared to consider the provision of housing accommodation for the successful applicant.
 Applications, stating age, qualifications, present and previous appointments, grade or salary required, particulars of experience, the names of three persons to whom reference can be made, and whether the candidate is to his knowledge related to any member or senior officer of the Council, must reach me not later than Monday. DOHN Chef 1949.
 TAT PLANNING ASSISTANTE (A.P.T., YI, Se35, ring to £690 p.a., if 26 years or over). Applications, shall be given to qualifications in planning practice and hold a professional qualifications in planning, architecture, surveying or engineering, Established, pensionable posts, subject to medical examination, and prescribed conditions of service. Applications, to the undersigned by 21st October, 1949.
 Clerk Oth Council. Flore Clerk Of the Council.

Middleser Guildhall. Westminster, S.W.1. 2121 CORPORATION OF KIRKCALDY. CLERK OF WORKS FOR NEW MUNICIPAL BUILDINGS. Applications are invited for the above post. Salary £8 8s. per week. Applications will be con-sidered oaly from those with considerable practical experience of similar work. Applications (which must be submitted upon the prescribed form obtainable from the under-signed), accompanied by copies of two recent setsimonias, to be lodged with the undersigned not later than noon on 15th October, 1949. CHARLES D. CHAPMAN. Town Clerk.

EAST GRINSTEAD URBAN DISTRICT COUNCIL ENGINEER AND SURVEYOR'S DEPARTMENT. Applications are invited for the appointment of TECHNICAL ASSISTANT (Temporary), in the Fogineer and Surveyor's Department, at a salary equivalent to Grade I of the A.P.T. Division of the National Scheme (2390-435). Applicants subscription of the subject to the Local Govern-ent Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will also be subject to termination by one month's notice given in writing on either side. Applications, stating age, qualifications, train-ing and experience, accompanied by copies of the September, 1949, and endorsed "Technical Assistant". Applicatis must state whether they concil Canvassing, either directly or indirectly, will canvality. L.R. BENNETT. will disqualify.

L. R. BENNETT, Clerk of the Council. Clerk's Office, East Court, East Grinstead. 2124

LONDON COUNTY COUNCIL. BRIXTON SCHOOL OF BUILDING, FERNDALE ROAD, S.W.4. Required, to commence as soon as possible, Two Temporary Full-time TEACHERS OF BUILD-ING. Applicants should hold Higher National Certificates or Diplomas in Building or compar-able technical or professional qualifications, possess good industrial experience, and be com-petent to teach Building Construction and associated subjects. Applications (stamped addressed foolward

possess good industrial experience, and be com-petent to teach Building Construction and associated subjects. Applications (stamped addressed foolscap envelope necessary) should be made to the Secretary at the School. (1073) 207 URBAN DISTRICT COUNCIL OF HAYES AND HARLINGTON. ENGINEER AND SURVEYOR'S DEPARTMENT. APPOINTMENT OF ARCHITECTURAL ASSIGTANT. Applications are invited from suitably experi-enced persons regularly trained as Architects, for the appointment of Architectural Assistant, in the permanent establishment of the department, at a salary in accordance with A.P.T. Division. Grade IV (2480, rising to 2525 per annum, plus appropriate London "weighting"). The appointment of Excent A. Considerable housing programme to include flats, maisonetite, shops with fiving accommodation, as well as two-storied dwelling houses, is al present in hand and proposed. Echomes of general building are degred for excention when circumstances permit. Bhould the same be required, the Council may be able to assist the successful applicant in obtaining housing accommodation. Applications, on forms which can be obtained, together with the conditions of the appointment, an engineer and Surveyor at the Town Hall, Hayes, Middlesse, should be returned to him duly completed not later than 3rd October, 1949. A.E. HIGGINS, Clerk of the Council 2259 FIFE COUNTY COUNCIL, 2019

2159 FIFE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the post of ARCHI-TECTURAL DRAUGHTSMAN. Applicants must have had experience in an Architectural Draw-ing Office and be quick and accurate Dranghts-ments of 220 to 2450 per annum. Medical test under Superannuation Scheme. Applications, stating age, experience, and qualifications, to be lodged with the undersigned not later than 30th September, 1940. No canvasing. J. M. MITCHELL, County Clerk.

Memoers oy examination of the rown Planning Institute. Applicants for (3) should be good draughtsman and have had experience of general duties in a planning department. The Council will consider providing suitable housing accommodation (if necessary) for the successful applicants. Details of duties and forms of application to be obtained from me must be delivered not later than Saturday, 8th October. 1949. H. F. ALSTON, Borough Planning Officer. Corn Exchange Chambers, Thomas Street, Newport. Mon. 217

2175

THE POLYTECHNIC, 309, REGENT STREFT, SCHOOL OF ARCHITECTURE, SURVEYING, AND BUILDING. Applications are invited for posts as PART. TIME STUDIO MASTERS, in the Day School of Applications

TIME STUDIO MASTERS, in the Day School of Architecture. Candidates must be Fellows or Associates of the Royal Institute of British Architects, and the Degree or Diploma of a fully recognized School of Architecture will be an advantage. Forms of application may be obtained by send-ing a stamped addressed foolscap envelope to the undersigned. J. C. JONES.

J. C. JONES, Director of Education.

DUNDEE COLLEGE OF ART-SCHOOL OF ARCHITECTURE. The Governors of the Dundee Institute of An and Technology invite applications for the posi-tion of JUNIOR LECTURER AND STUDIO INSTRUCTOR. Applicants should be Members of the R.I.B.A. and should preferably be holders of a degree ø diploma of a recognized School of Architectura. Salary scales: Men. £375 by £15 to £610; women, £350 by £15 to £480, with placing accord-ing to qualifications and experience. Applications should be on the prescribed form, copies of which, with full particulars, may be obtained from the undersigned. G. R. HALL.

Bell Street, Dundee. 15th September, 1949.

Appointments :-(1) QUANTITY SURVEYOR, Grau £710 per annum. (2) SENIOE ARCHITECTURAL ASSISTANT, Grade V. £520-£570 per annum. Grade V. £520-£570 per annum.

ETIO per annum.
(2) SENIOR ARCHITECTURAL ASSISTANT.
Grade V. £520-2570 per annum.
(3) ENGINEERING ASSISTANT. Grade III.
E450-2495 per annum.
Applicants for appointment (1) should be experimened in the preparation of Bills of Quantities, the checking of Interim Valuations, and the settlement of Final Accounts. Preference will be given to Fellows or Professional Associates of the Surveyor's Institution (Quantity Surveyor's Ection), and experience with a local authority will be regarded as an advantage.
Applicants for appointment (2) should have had considerable experience in the design of house and the layout of housing estates. Preference will be given to Associates of the Royal Institute of British Architects.
Applicants for appointment (3) should have had considerable experience in a municipal engineer's office, and preference will be given to candidate holding qualifications of the Institution of Civil Engineers.
Conditions of service are those formulated by

office, and preference in the Institution of Municipal Engineers or the Institution of Municipal Engineers. To a service are those formulated by the National Joint Conncil, and the appointments are on the established staff and subject to the provisions of the Local Government Superannu-ing the staff and subject to the provisions of the Local Government Superannu-ted to pass a medical examination. The provisions of the Local Government Superannu-required to pass a medical examination. The provisions of the Local Government Superannu-ted to pass a medical examination. The provisions of the Local examination. The netice on either side. Tanvassing, either directly or indirectly, will disqualify the candidates, and any relationship to a member or senior officer of the Council must be clearly stated in the application. Burnley, to whom applications should be returned in the envelope provided not later than 9 and Burnley, the th October, 1949. To we Clerk. Town Clerk.

Town Hall, Burnley. September, 1949.

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# D. J. BEATTIE. Town Clerk

Municipal Buildings, Penzance. 17th September, 1949.

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G. R. HALL, Clerk and Treasurer.

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Y n Clerk. 2178

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DURHAM COUNTY COUNCIL. EDUCATION COMMITTEE. BECTION OF TECHNICAL COLLEGE, BILLINGHAMON-TEES. Tenders are invited from Contractors for the work required in connection with the above. The basis of tendering will be on a schedule of prices. Contractors who desire to tender should submit their names to the County Architect's Office, Coart Lanc. Durham, by not laster than Thursday, the 39th September, 1949. model is given to accept the lowest or any tender.

G. R. CLAYTON, F.R.I.B.A., County Architect. 2176

Court Lane, Durham. 15th September, 1949.

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H. H. TOMSON, Town Clerk.

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Drafting Machine stamps your draw-

EFFICIENT. Made of steel tube with

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bearings. The main

angles are located automatically, in-

termediate angles by lock. Scales have inlaid cellu-

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divided to order on two edges. THE HAVITTA DRAFTING

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# **Partnership and Financial**

\* DELIVERY DATE NOW VERY CONSIDERABLY REDUCED

A RCHITECT, at present practising in London, seeks Partnership in active practice in S.W. England or West Midlands; ago & experfemenced (including factories, domestic and pothic work); keen; capital available. Box 2081.

# **Tenders for Contracts**

# CITY OF CARLISLE. EDUCATION DEPARTMENT.

EDUCATION DEPARTMENT. The Authority proposes to commence building, at an early date, a New Technical College. This will be built in two stages:— (a) The foundations and building up to ground floor level. (b) The remainder. Tenders will be invited for stage (a) immedi-ately.

Tenders will be invited for stage (a).
 atoly.
 Firms interested should communicate before
 the Architects, Messrs. Buckland and Haywood,
 Norwich Union Chambers, Congreve Street,
 Birmingham, 3,
 who will supply quantities, drawings, and any
 other information.
 H. D. A. ROBERTSON.
 Token Cierk.
 15. Fisher Street, Carlisle.

6 lines or under, 10s.; each additional line, 1s. 6d.

CIVIC HALL, GUILDFORD. CIVIC HALL, GUILDFORD. The Guildford Borough Council invite ARCHI-TECTS registered in this country to submit De-signs in Competition for the Civic Hall, which they propose to erect in Guildford. Assessor: Mr. G. Jollico, F.R.IBA. Premium: £1,000, £500, £250. Last date for submitting designs, 30th April, 1960. Conditions may be obtained from me. Deposit 2 guineas. HERBERT C. WEILER

HERBERT C. WELLER, Town Clerk.

2179

Guildford. September, 1949.

Architectural Appointments Vacant 1 lines or under, 5a.; each additional line, 1a. 6d. A BCHITECTURAL ASSISTANTS required on Schools, Hospitals, University Buildings. Housing, etc.; salary dependent on experience and qualifications. Apply personally by telephone or in writing. Pite Son & Fairweather, Chartered K.W.1. Whitehall 5576. 1862 ARCHITECTURAL ASSISTANT required im-mediately by Gollins, Melvin & Partners, 2.4.A.R.I.B.A.; capable working drawings: salary E500-2650, according to experience. Telephone Museum 0883 for appointment. 2053

A BCHITECT'S ASSISTANT of Intermediate Standard or higher, required for Archi-tect's Dept. of a Multiple Firm with offices in Birmingham. Applicants should have a sound knowledge of Construction and Surveying and should be able to produce Working Drawings details under supervision. Salary in accordance with experience and qualifications, etc. Apply in first instance to Box 1948, enclosing copies of recent testimonials. recent testimonials.

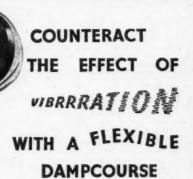
The recent testimonials. Service Action of the contraint contraint of the contraint of the

A SENIOR ASSISTANT required for general practice in busy office; no housing; per-manency to suitable applicant. Particulars to Healing & Overbury, Chartered Architects, Cheltenham. 2072

ACHITECTURAL ASSISTANT wanted for Milands office; accurate draughtsman, with experience in industrial buildings; good prospects. Reply with full particulars, salary required, etc., to Box 2085.

Reply with full particulars, satary required, exo., to Box 2095. A SISTANTS required in Bank's Architect's Office in London; must be neat draughts-men, with good knowledge of construction, capable of surveying buildings and preparing detail drawings and sketch plans; prospect of permanency for suitable applicants. Write, stating age and experience, Box 2090. A for general practice; salary in accordance with experience. Write in first instance, giving details, Roland Sidwell, A.R.I.B.A., 27, Union Street, Coventry. A GCHITECT'S ASSISTANTS required (Senior and Junior); must be capable and have good knowledge of quantity; state wages required. Messis: Matthews, The Square, Nativich, Cheshire. D CULLERD immediately ARCHITECTURAL

**REQUIRED** immediately ARCHITECTURAL or SURVEYING ASSISTANT; some office experience desirable for busy Architect's office in Dorchester; state details of training, experience, and salary required. Box 2113.



Factories are not the only buildings menaced by the damaging effects of vibration. Road traffic can aggravate the settlement of any structure and may seriously damage rigid dampourses. Actos 100% Mineral Dampcourse will absorb normal foundation movement and maintain an unbroken barrier against ground moisture for the life of the building. It is imperishable and more than complies with B.S.S.743/41.

In 8-yard rolls, mica-finished and over-printed with gold bands every 8 ft. for easy recognition. In all widths up to 36 laches.

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THE RUBEROID COMPANY LIMITED 2, COMMONWEALTH HOUSE, NEW OXFORD STREET, LONDON, W.C.J A SSISTANT required, with industrial and domestic experience. Reply, stating par-ticulars and salary required, to E. William Palmer & Partners, #, The Town, Enfield, Middx.

A SSISTANT required by West End Architect specialising in property maintenance, altera-tions, Council housing, etc.; salary £500 p.a.; this is a post with considerable interest and some responsibility. Please reply with particulars of experience, age, etc., to Box 2110.

A N old-established Firm of City Quantity Sur-veyors have a vacancy for a SENIOR SUPERVISING ASSISTANT, with full knowledge of all branches of quantity surveying and exten-sive administrative experience; commencing salary £1,000 p.a., increasing by annual increments of £100 to £1,500 p.a., plus overtime; 5-day week; 3 weeks' summer holiday. Box 2098.

A PPLICATIONS A PPLICATIONS invited from QUALIFIED ASSISTANTS for Senior position in Archi-tect's Department of a commercial firm in London; apart from good architectural training and experience, applicants must have executive ability and be capable of handling all adminis-trative matters connected with busy office; com-mencing salary proposed, £850-£900. Write full details to Box 2116.

QUANTITY SURVEYORS require ASSISTANT for Branch Office, Harrow; must have ex-perience in working-up, measuring, and final accounts. Reply in writing, stating age, educa-tion, training, experience, with dates and salary required, George Lewis & Son, 49, Sheepcote Road, Harrow, Middlesex. 2117

A SCHITECT'S ASSISTANT of Intermediate standard required for varied London practice. Henry J. White, F.I.A.A. North 4114, 2119

S ENIOR ABCHITECTURAL ASSISTANT to Firm of Civil Engineers and Surveyors, Yorkshire. Apply, giving qualifications and salary required, to Box 2118.

A BCHITECTURAL ASSISTANT required. salary according to ability; long term appoint-ment to right man. G. Forsyth Lawson & A. Cyril Cheek, 30, Horse Fair, Banbury, Oxon. 2120

QUALIFIED ARCHITECTURAL ASSISTANT required for good class commercial and industrial buildings; alary 2400 to 2660, plus bonus, according to experience and general ability, A. C. Blackmore & Co., Chartered Archi-tects, Ruskin House, Princes Avenue, Hull. 2125

SENIOR and INTERMEDIATE ARCHITEC-TURAL ASSISTANTS required; knowledge of general practice, industrial work, war damage, etc.; salary according to capabilities. Applica-tions to Mackintosh, Beecrott & Partners, 11, Orchard Street, Bristol, 1.

A RCHITECTURAL ASSISTANT required in the Office of National Brewers; maintenance and improvement of licensed properties; super-annuation scheme; commencing salary about 2500 p.a. Write in first instance to Whitbread & Co., Ltd., 27, Britannia Street, London; W.C.1, 2134

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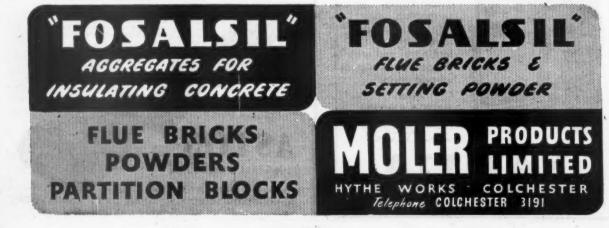
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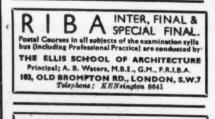
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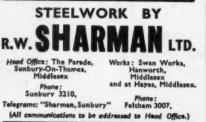
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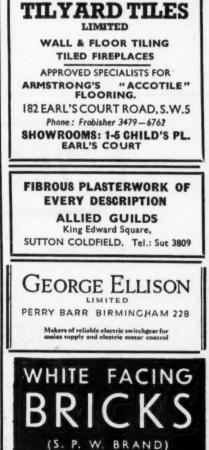
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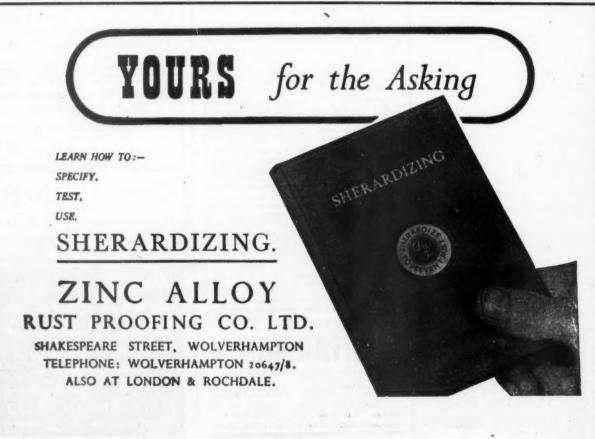
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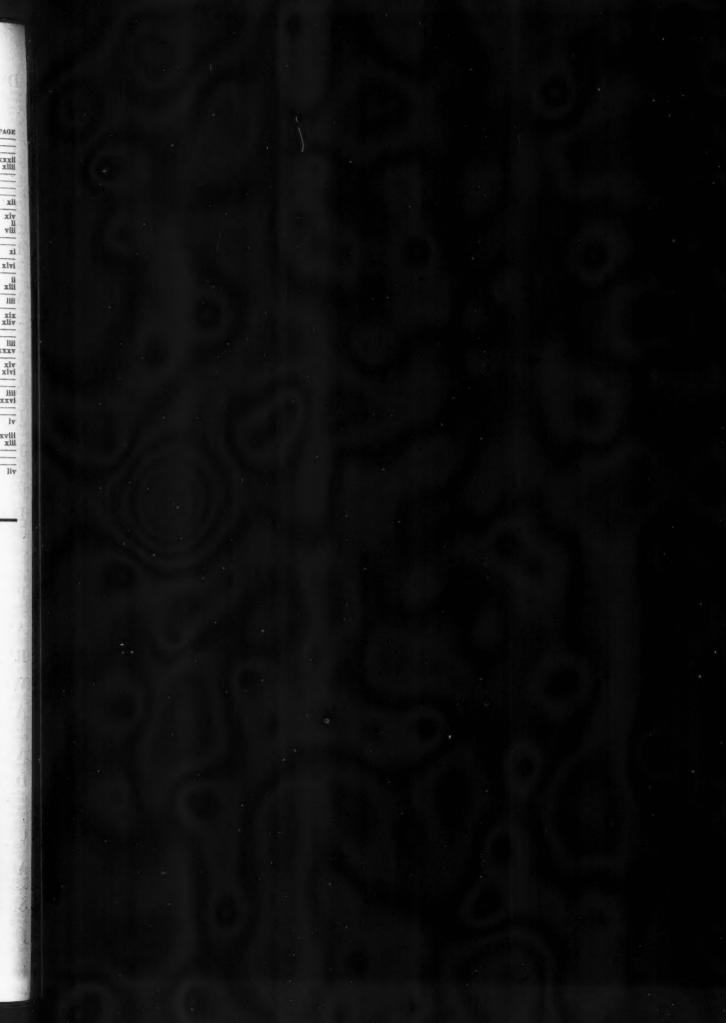
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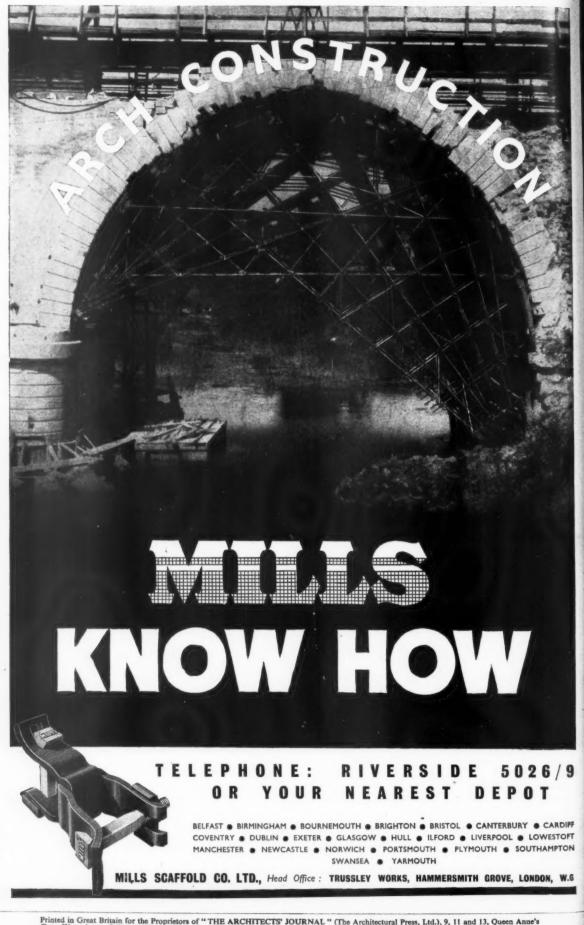
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