

standard

contents

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

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glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ic one week, Ie to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IEE IES	Institution of Electrical Engineers. Savoy Place, W.C.2. Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Temple Bar 7676 Abbey 5215
IGE	Institution of Gas Engineers. 1, Grosvenor Place, S.W.1.	Sloane 8606
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place	
	,	Sloane 3158

Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston 2450 IIBD Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783
Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street,
Strand, W.C.2. Temple Bar 4071 ILA I of Arb.

IOB Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197 Institute of Refrigeration. Empire House, St. Martin's-le-Grand, E.C.1

Monarch 7391 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128-29
Inland Waterways Association. 11, Gower Street, W.C.1. Museum 9200
Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264 IRA ISE IWA LIDC

LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. MARS Group (English Branch of CIAM). 34, Gordon Square, W.C.1 Museum 3891 MARS Euston 2158-9

Whitehall 3400 MOA 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. MOE Mayfair 9400 MOH Whitehall 4300 Ministry of Labour and National Service. St. James's Square, S.W.I.
Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. MOLNS. Whitehall 6200 MOS Gerrard 6933 Ministry of Transport. Berkeley Square House, Berkeley Square W.1. Abbey 7711 Ministry of Town and Country Planning. 32-33, St. James's Square, S.W.1. Whitehall 8411 MOT MOTCP

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

Abbey 1010 Abbey 5277/8 94, Petty France, S.W.1. National Association of Shopfitters. 9, Victoria Street, S.W.1. NAS National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161
National Council of Building Material Producers. 2, Caxton Street, S.W.1. Abbey5111 NBR NCBMP National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham NFBTE

Langham 4041 **NFBTO** 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 NEHS

National House Builders Registration Council. 82, New Cavendish Street, W.1. NHBRC Langham 4041 NPI. Molesey 1380

National Physical Laboratory. Head Office, Teddington. Mo National Smoke Abatement Society. Chandos House, Buckingham Gate, NSAS S.W.1. Abbey 1359 NT National Trust for Places of Historic Interest or Natural Beauty.

42, Queen Anne's Gate, S.W.I.
Political and Economic Planning. 16, Queen Anne's Gate, S.W.I.
Reinforced Concrete Association. 94, Petty France, S.W.I. Whitehall 0211/2 Whitehall 7245 PEP Whitehall 9936 RCA RIAS Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.

Edinburgh 20396 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 RIBA RICS RFAC RS RSA

Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3935 Royal Society. Burlington House, Piccadilly, W.1. Regent 3335 Royal Society of Arts. 6, John Adam Street, W.C.2. Temple Bar 8274 Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. 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. Western 1571 RSI RIB SBPM SCR Western 1571

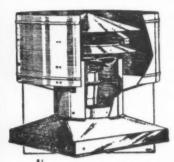
Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244 School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. **SFMA** Structural Insulation Association. 14, Moorgate, London, E.C.2. Central 4444
Society of Industrial Artists. Room 243, Empire House, St. Martin's-le-Grand,
E.C.1. Metropolitan 8344 Metropolitan 8344

SNHTPC Scottish National Housing & Town Planning Council. Hon. sec., Robert Pollock, Town Clerk, Rutherglen. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. SPAB

Holborn 2646 Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. **TCPA** Temple Bar 5006 City 4771 (6 lines)

Timber Development Association. 75, Cannon Street, E.C.4. The Gas Council. 1, Grosvenor Place, S.W.1. TDA TGC Sloane 4554 Town Planning Institute. 18, Ashley Place, S.W.1. Victoria 8
Timber Trades Federation. 81, Cannon Street, E.C.4. City
War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1. Victoria 8815 City 1476 WDC Mayfair 8866

WEDA Welfare Equipment Development Association. 61, St. Paul's Churchyard, E.C.4. City 4263/4 Zinc Development Association. Lincoln House, Turl Street, Oxford. Oxford 47988 ZDA



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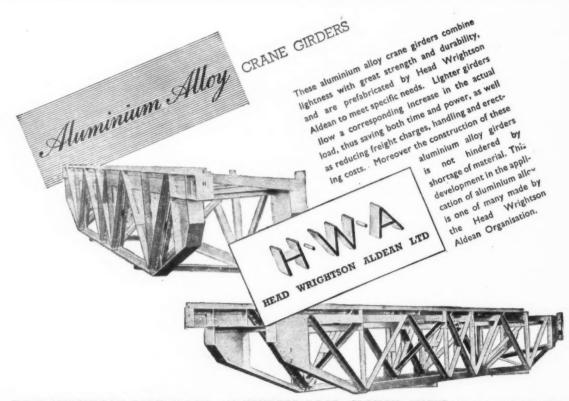
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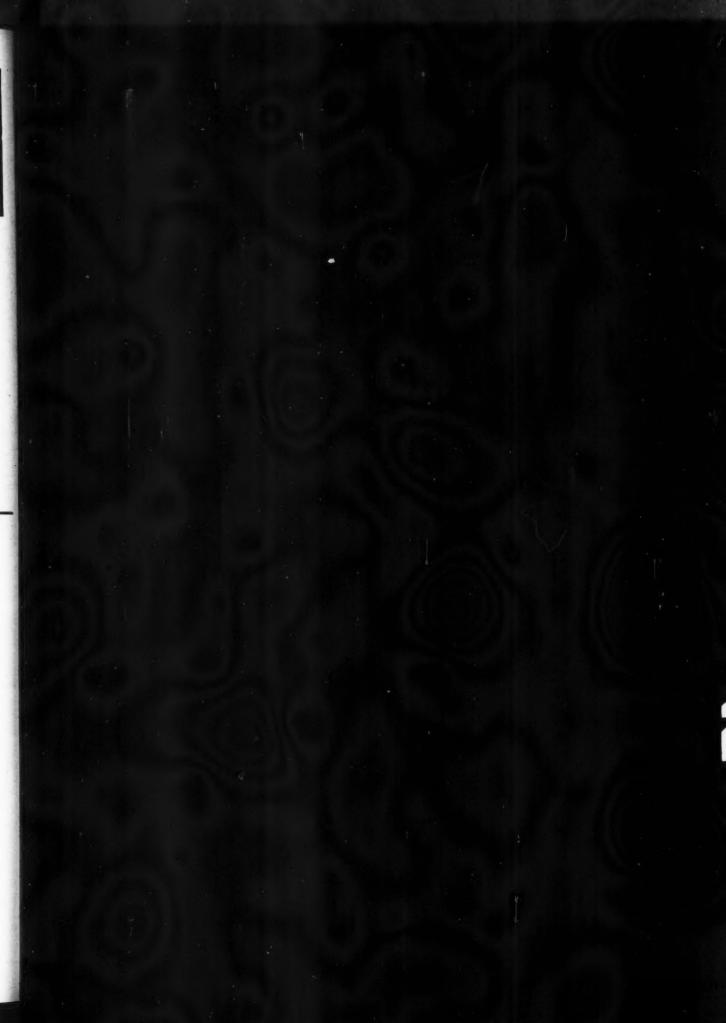
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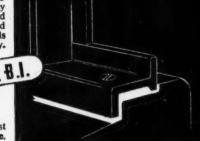
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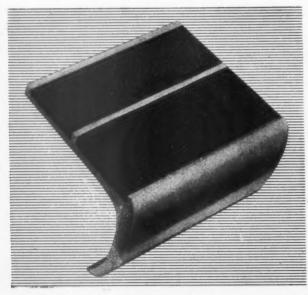
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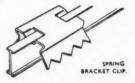
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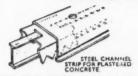
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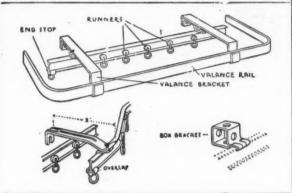




FOR PLASTERED CONCRETE LINTELS







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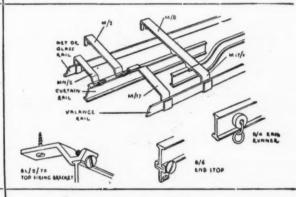
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Architect's journal: the following information Sheets are evailable and will be sent on request to manufacturers. SHEET 44 D.1. ('RUFFLETTE' RECESSED TRACK). SHEET 44 D.2. ('RUFFLETTE' B/L and M Type Rails).

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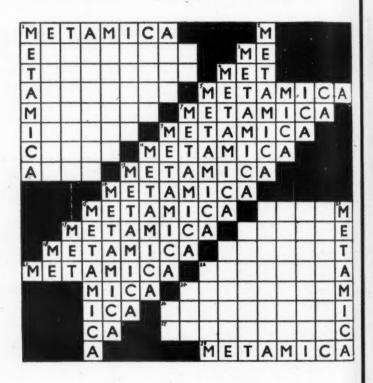
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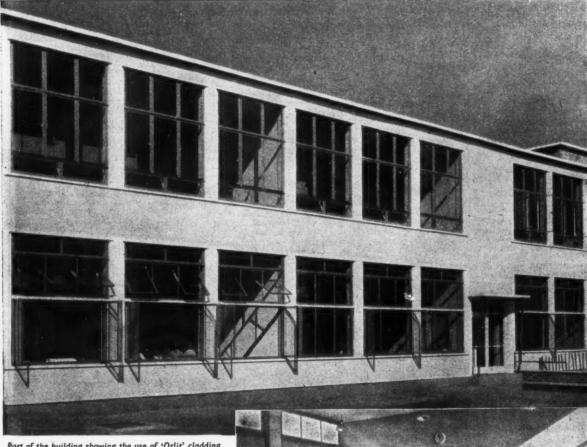
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In the building of Horn Park School the 'Orlit' principle was used

Photographs by courtesy of The Architects Journal

Architect: Mr. Robert H. Matthew, A.R.I.B.A., Architect to the L.C.C.



Part of the building showing the use of 'Orlit' cladding

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> Those interested should get into touch with the nearest Company listed on the left, manufacturing and supplying "Orlit".

ALUMINEX: a modern revolution in patent glazing methods

Although there remain forms of patent glazing today that differ very little from the pioneer-specifications of a hundred years ago, the coming of the Aluminex patent glazing system signified a revolution in this field. It was not until aluminium alloys became available and the extrusion process was introduced that Aluminex became a possibility.

The employment of aluminium alloy and the extrusion process have combined to make Aluminex not simply a superior form of patent glazing, but a method of cladding in its own right. Modern examples in which Aluminex has been treated by the Architect as an integral part of the design — the north sidewall window of the Brabazon hangar 1052 ft. x 50 ft. comes immediately to memory — serve to show how wide is the gulf that separates the old "dry glazing" and the new Aluminex method of construction.

Basic "dry glazing" problems

Yet the early inventors saw the three basic problems of patent glazing—or "dry glazing" as it was then called — quite clearly. Their limitations lay in the materials and manufacturing processes available. The three problems are: (1) How to make weather-tight fixing for the glass without putty, (2) How to drain away water that escapes the main rain seal or which is formed by condensation, (3) How to prevent corrosion of the framework.

To solve these problems a galvanised steel tee bar was at first evolved. It had a large water channel on each side of the stalk of the tee and a bearing upon which the glass could rest. The weight of the glass, together with the pressure of copper spring clips, provided the main seal against the rain flow.

Early types of glazing

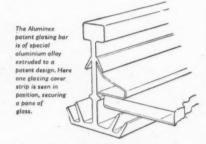
Galvanised iron was replaced in the late nineteenth century by the lead-covered steel bar system.

In this system the steel bar is galvanised after all work on it has been carried out and then further treated with a mordant solution and painted with a bitumastic paint before finally receiving its shroud of

lead. Despite all precautions, however, the risk of corrosion remains the special drawback of this method.

The form of all bars of this type has followed a broadly similar design over the past fifty years. Then, however, came the developments in extrusion and the expansion of aluminium production. This entirely revolutionised Patent Glazing. It was soon possible to extrude in true mass production any section that an achitect chose to draw.

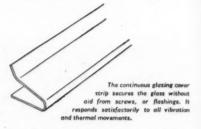
Extruded bronze or aluminium offered a much more nearly perfect answer to the Roof Glazing problem. For example, the Scottish Industrial Estates took several hundred tons of dead-weight from the roofs of their factory buildings by the simple change from lead-covered steel to aluminium.



New aluminium glazing bar

In particular the way was open to the designer to provide a simple and comprehensive answer to the three basic patent glazing problems — puttyless fixing, water drainage and the prevention of corrosion. The designers of the Aluminex patent glazing system invented an extruded glazing bar which was not pierced at any

point and therefore retained its maximum strength throughout its length. The section is in the form of a tee with a series of ribs and flanges which provide large drainage gutters in addition to true condensation channels. This means that the pitch of a roof glazed by Aluminex may be as low as 10 degrees.



The glass is held flexibly by continuous aluminium glazing cover strips which absorb all thermal movements and vibrations. In this way, a neat, efficient system was designed entirely of aluminium alloy. Moreover, after much research an alloy of aluminium, silicon and magnesium was arrived at which possessed the highest resistance to corrosion.

Great advance in ventilation

The outstanding advantage of using a system of the same corrosion-resistant material throughout is redoubled when opening lights are required in a range of Patent Glazing.

Here the inventors of one hundred years ago stopped short. The problem seemed to baffle them and to remain unsolved throughout the nineteenth century. Aluminex ventilators in Roof Glazing are now provided which exhibit the same refinement of detail and complete uniformity in material as do the bronze casements of our greatest architects.

Sidewall opening lights

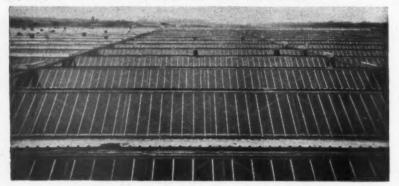
From this point it was a short step towards continuous ventilation in which the whole range of glass opens in lengths up to 100 feet for manual operation and 200 feet for electrical operation with heights up to six feet. This achievement stimulated the development of suitable gearing and in turn the developments in gearing have accelerated the development in glazing technique.

With the continuous ventilator came the question "if for roofs why not for side-walls?" The answer was an emphatic affirmative. Aluminex sidewall glazing with continuous ventilation has been developed until today it offers wide scope in the treatment of sidewall lights in industrial and public buildings. Aluminex Double Glazing provides still more possibilities in the field of light cladding. Aluminex today is a versatile form of construction and architects and engineers who turn to Aluminex for their factory design quickly appreciate its great potentialities.

In this connection it may be stated that the manufacturers particularly welcome communications from architects and engineers concerning the use of Aluminex in current or proposed projects.

Alumincx Patent Glazing is manufactured solely in the Aluminex Division of Williams & Williams Ltd., Chester, England. Telephone: Chester 3600 (7 lines). Telegrams: Reliance, Chester.

The Scottish Industrial Estates took several hundred tons of dead-weight from the roofs of their factory buildings by the simple change from lead-covered steel roof glazing to Aluminex. A view of one of the factories.



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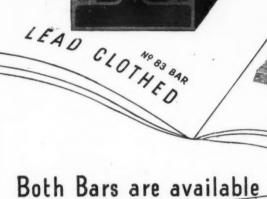
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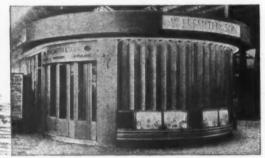
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Patent No. 519406



Patent Pending



Patent No. 519406

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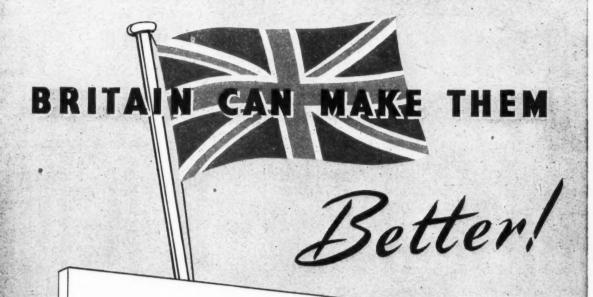


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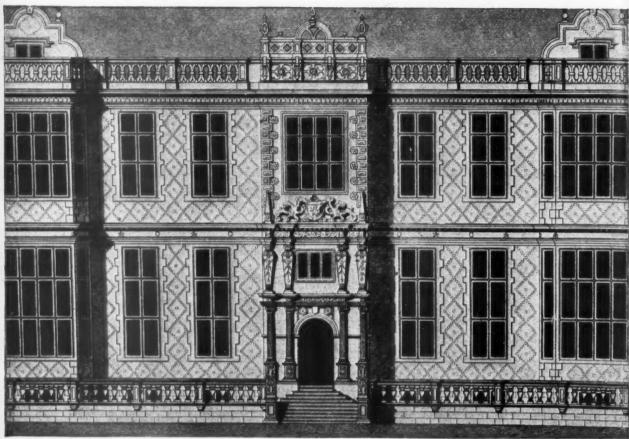
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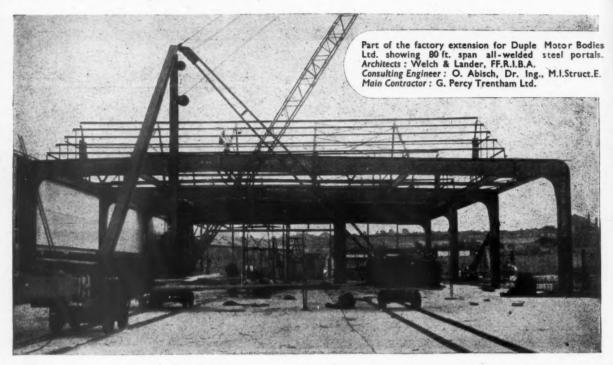
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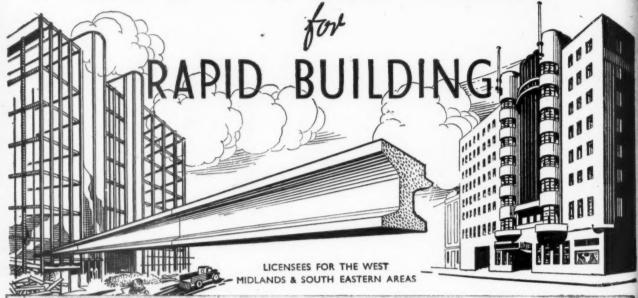
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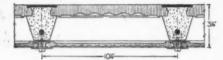
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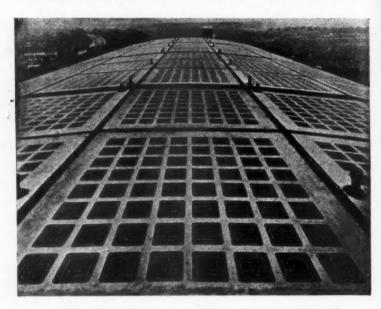
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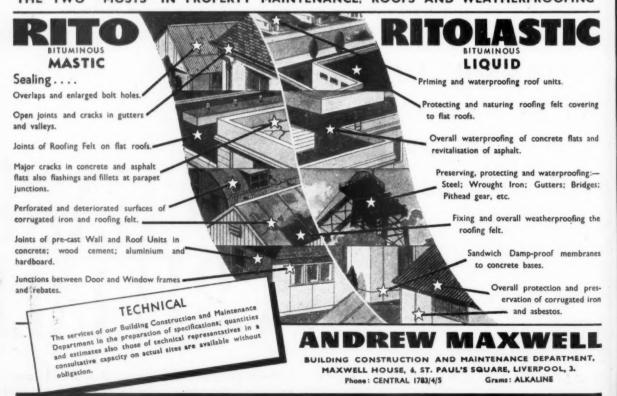
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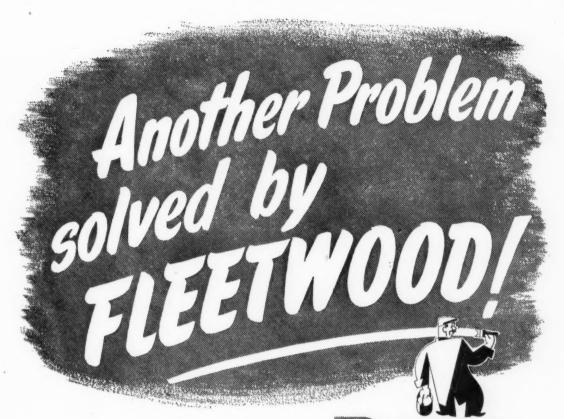
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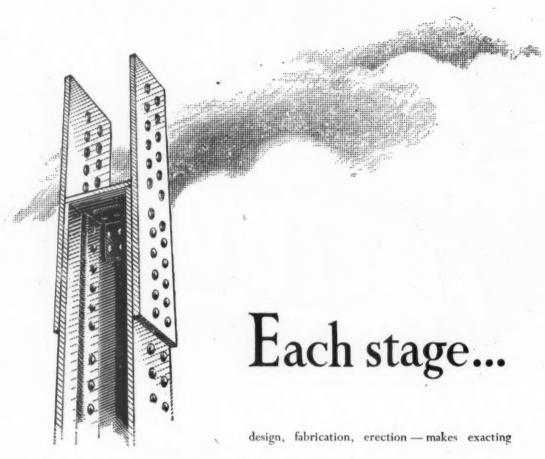
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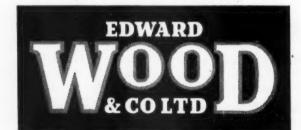
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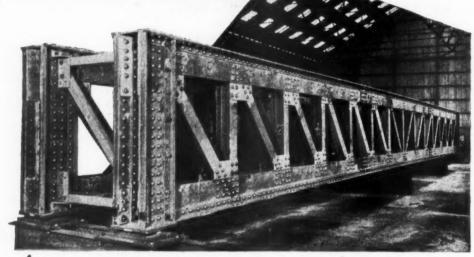
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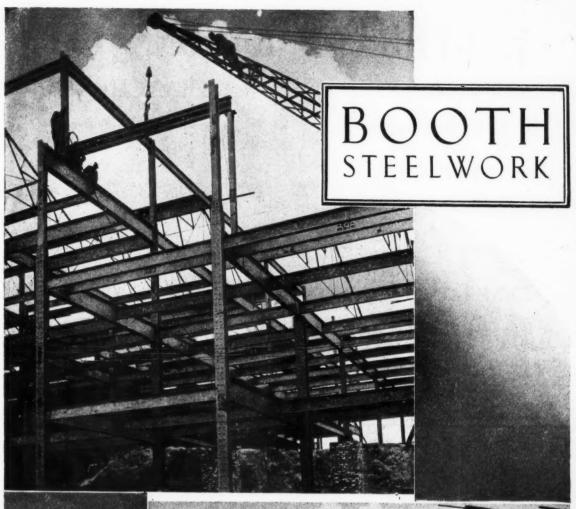
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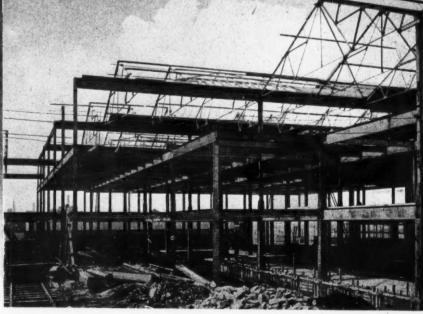
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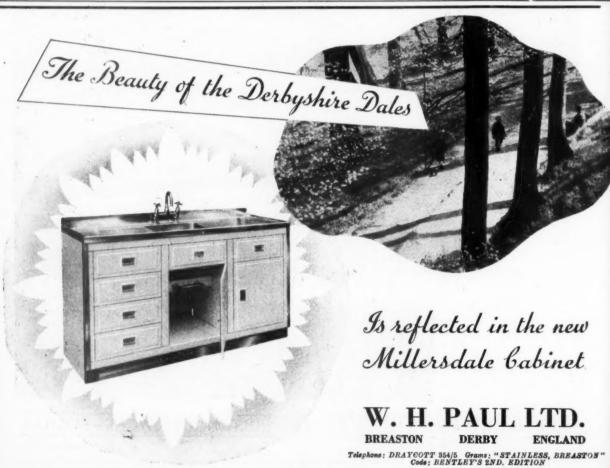
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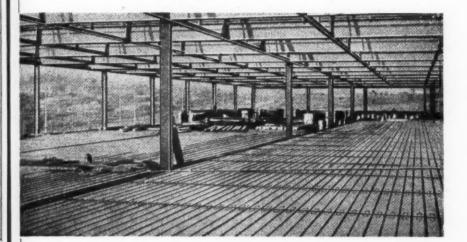
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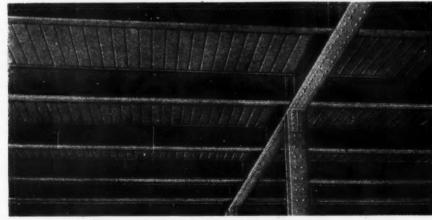


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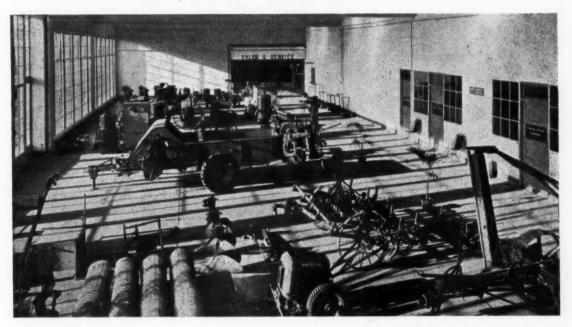
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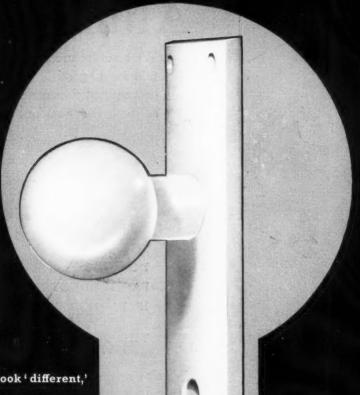
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In common with every other periodical, this JOURNAL is rationed to a small part of its pre-war consumption of paper. Circulation is therefore temporarily restricted but would-be subscribers are advised to have their names put on the waiting-list. Their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



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DIARY FOR DECEMBER JANUARY AND FEBRUARY

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

JAN. 3

BiRMINGHAM. National Exhibition of Architectural Students' Drawings. Birmingham College of Arts, Margaret Street. (Sponsor, Arch. SA in conjunction with NUS.) Daily, 10 a.m. to 4 p.m.

DEC. 31 - JAN. 6

LONDON. Professor L. Dudley Stamp.

The Use and Misuse of Land. 12,

Great George Street, S.W.1. (Sponsor,
RICS.) 5.30 p.m.

JAN. 2

R. E. Enthoven. Pillars of the Past. Three informal talks for boys and girls. Henry Jarvis Memorial Hall. 66, Portland Place, W.1. (Sponsor, RIBA.) Jan. 2, 4 and 6 Hope Bagenal. Concert Halls. 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m.

I. C. Perrot. The Worm Turns—Twenty Years at the AA Press Table. 36, Bedford Square, W.C.1. (Sponsor, AA.) 8 p.m. JAN. 4

The Painting of Buildings. Colour film by ICI. At Waldorf Hotel, Aldwych, W.C.2. (Sponsor, IRA.) 6.30 p.m. JAN. 6

H. R. Humphreys. Acoustics and Sound Insulation. Kent Room, Caxton Hall, S.W.1. (Sponsor, IAAS.) 6 p.m. Jan. 11

W. K. B. Marshall. The Welding of Light Alloys in Structural and Similar Applications. ICE. Great George Street, S.W.1. (Sponsor, ICE.) 6 p.m. Jan. 25

(Sponsor, ICE.) o p.i.i.

Professor L. Dudley Stamp. Planning
and Agriculture. Livingstone Hall, Broadway. Westminster, S.W.I. (Sponsor, TPI.)
6 p.m. FEB. 2

E. S. Hodges. Fire Prevention in Buildings. Kent Room, Caxton Hall, S.W.1. (Sponsor, IAAS.) 6 p.m. FEB. 8

COMPETITIONS

York Festival, 1951, Competition. The York Festival Society, Ltd., invites architects resident in Great Britain and Eire to submit designs in competition for a block of flats in Paragon Street, York, to be built by the corporation of the city of York as part of the city's housing programme. Organized in connection with York Festival of 1951 (June 2-16), when it will be open for public inspection. Premiums: £250; £150 and £75. Assessor, W. A. Eden. Conditions may be obtained, on payment of £2 2s., from Keith Thomson, York Festival, 1, Museum Street, York, Designs to be received by January 18, 1950.

Competition for designs for interior treatment of two saloon bars and two public bars. (Sponsor, The Architectural

Press Ltd.) Prizes: (1) £500; (2) £250; (3) £100. Assessors: Hugh Casson; J. S. Eagles; R. Furneaux Jordan; E. B. Musman; and J. M. Richards (representing the editors of *The Architectural Review*). Designs must be received by mid-day, February 28, 1950.

Art School, Jersey, Channel Islands. The Association of Old Victorians invite architects of British nationality to submit designs in competition for war memorial buildings proposed to be erected in the Victoria College Grounds, Jersey, Channel Islands. Assessor: A. E. O. Geens. Premiums: £75, £50 and £25. Completed designs should be sent to A. H. Worrall, hon. treasurer, The Association of Old Victorians, 25, Cleveland Road, Jersey, C.I., not later than April 3, 1950. Questions must be received on or before December 31 by Mr. Worrall, who will also provide a copy of the conditions on the deposit of £1 is. Following are extracts from the conditions:—The elevation should be treated in a restrained and dignified manner, having regard to the existing buildings of the Victoria College, which are mainly built of granite in the Gothic style. The entrance porch should be approximately 14 ft. by 12 ft. It is the intention of the promoters to use this entrance porch as a War Memorial to past students of the College. Adequate space should be provided for a memorial, tablet. The main studios should be approximately 34 ft. by 20 ft. by 14 ft. in height. Four smaller studios are also required.

New Civic Hall at Guildford. Promoters: Guildford Corporation. Assessor: G. A. Jellicoe, F.R.I.B.A. Premiums: (1) £1.000. (2) £500. (3) £250. Site: Firs Estate, London Road, Guildford. The promoters require a design for (a) a large assembly hall, to seat 1.200 persons, to be used for civic and concert purposes, and (h) a small hall, to seat 500 persons, for lectures with an alternative use as a banqueting hall.

Enquiries must be received by the Town Clerk, Municipal Offices, Guildford, Surrey, with a deposit of £2 2s., to be paid by the competitor for conditions of entry. Designs must be received by April 30, 1950.

Design for Public Hall and Restaurant. The Whitehaven Corporation invite architects resident in this country to submit designs in competition for the Public Hall and Restaurant which they propose to erect in Whitehaven. Assessor: Harold A. Dod. Premiums: £300. £250, and £175. The last day for submitting designs. March 15. 1950. A deposit of £2 is required from competitors. Conditions may be obtained on application to the Town Clerk, Town Hall, Whitehaven, Cumberland.

NEWS

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

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

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

The ARCHITECTURAL STU-DENTS ASSOCIATION has been reorganized.

The Association will now be run on regional lines. In the past few years it has shown signs of becoming remote from the individual centre and member. A statement from the Association admits this fact and points out that in future it will provide students with information on the work of schools within their region.

All activities will be run on a non-political

All activities will be run on a non-political basis and efforts will be made to widen the sphere of the Association abroad as well as in England.

as in England.

The principal aims of the Association remain the same: to become recognized by the RIBA and other professional bodies as the association representing all architectural students; to examine and co-ordinate proposals for the improvement of architectural education; to encourage the interchange of views between members of the Association and those connected with professions and trades relating to building, and to stimulate the interest of students of other faculties and of the general public in architectural education.



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From AN ARCHITECT'S Commonplace Book

SEASIDE SURREALISM. [From Outline: An Autobiography, by Paul Nash (Faber & Faber, Ltd. 305.).] It is already late afternoon when our visitor climbs the Down above Peverill Point and sets his face westward. He is bent on finding a romantic-sounding place the waiter spoke of as an objective for a walk—Durlston Castle, no doubt, a picturesque ruin beyond the headland which stands before him. And now the strangest part of his adventure unfolds. The winter day is ebbing, the light obscured by encroaching shades. The visitor finds himself pursuing a tortuous path, shut in by low hedges, which sometimes runs close to the verge of the cliff. A constant tumult of waves and the daft yelling of gulls begin to confuse his senses, so that he regards the object which presently confronts him with complete bewilderment. It is an immense globe of white stone poised above a tablet and set about by smooth stone walls and bushes of some harsh sea plant. Walls, tablet and globe are carved and incised with words, diagrams and maps, too indistinct to decipher in the deepening twilight. The place at this hour has an atmosphere of doubtful enchantment, a grotesque made awe-inspiring by indefinition. Suddenly a painted notice catches the stranger's nervous glance, a hand pointing a downward path directs him to the Tilly Whim caves. The sound of the name hastens his growing apprehension. The cry of Lop Lop is in his ears. Panic seizes him as he hurries from the spot towards the castle, which now appears close at hand. It is no ruin, he makes out, but a solid structure of turrets and castellated walls, perhaps a sanctuary from the fear which now pursues him. He runs forward and pushes open a great door. Before him is an immense deserted room, tenanted by what seems hundreds of empty tables and chairs. A long empty counter curves away into shadows. Behind the counter stands La Femme 100 Tetes.

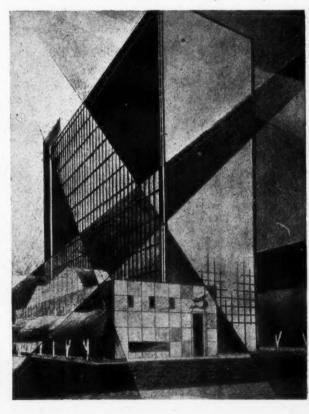
of different viewpoints of manufacturers, designers and consumers. These differing viewpoints formed a vicious circle, said Professor Gregor Paulsson, professor in Fine Art at the University of Upsala, Sweden, when he spoke recently at the Royal Society of Arts, John Adam Street, W.C.2. The blame for ugiy furniture was placed by the manufacturer upon the retailer, who was his customer; and the retailer in turn blamed the public for which he catered. The progressive designer was told by the manufacturer that his designs were not suitable for the manufacturer's production methods, and by the retailer that the public would not buy them. This vicious circle would, he thought, be broken one day by the implementation of recommendations contained in the Furniture Working Party Report which were endorsed by Mr. Jack Pritchard, Director and Secretary of the Furniture Development Council. They were:—Tests for furniture produced as to their technical performance and functioning; good factory conditions; and education for the worker at the bench, the manager, the designer and the consumer.

why had a vicious circle been formed? the speaker asked. There would not be a vicious circle, he said, if the business circle consisted only of two halves: the producer and the consumer—with their connecting link, the retailer. It was the designer or rather, the modern designer backed by certain ideologists, who was the snake that transformed a paradise into a triangle drama fu'll of conflicts, which to many looked insoluble. In the "good old times" the making of a piece of furniture was in most cases the result of a deal between a consumer and a cabinet-maker or his equivalent. For the common man the process was very simple. He offered his products in the village market and the consumer chose what he liked: for the mighty or the rich, the range was wider.

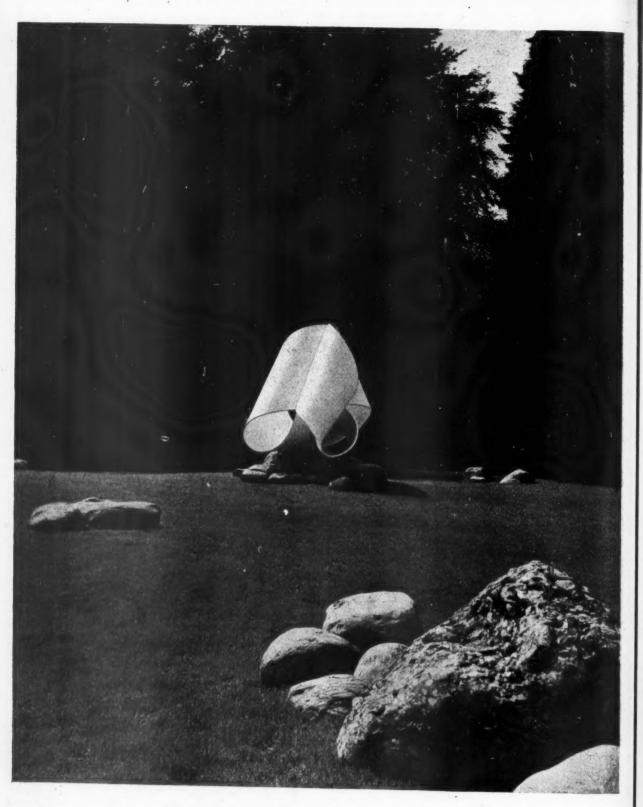
Good furniture could be designed through collaboration between the three parts concerned in the triangle drama—the manufacturer, represented by the technician, the designer and the consumer. This furniture could be reasonably low in price and lend itself to an augmentation of consumption because of its higher

values in use. The "suite" of furniture, a Victorian invention, was bought once in a lifetime by 99 per cent. of all consumers. The furniture which could be combined in a way which corresponded to the dwelling, the family and the purchasing power at a given moment, would be bought through a lifetime, in small units, but repeatedly. Designers who wanted a new structure of the family budget, more spent on and in the home, less in the street, were social workers. Their hearts were with the consumer, they were not counteracting the interests of the producers. There need not be a triangle drama.

The recommended CHANGE OF RESPONSIBILITY in the LCC ARCHITECTS' DEPART-MENT has been approved. The recommendation to transfer the design and erection of LCC houses back to the architects' department, leaving the valuer responsible for advising on housing needs, for fixing rents, and for finance and management, but not for architecture, was submitted by Mr. H. C. Shearman, the vice-chairman of the general purposes committee, and was approved by the LCC last week.



A sketch of a new international centre to be built opposite the UNO headquarters in New York.



Loss of Continuity

Max Bill's abstract sculpture in plaster, entitled "Continuity," which has been widely photographed, was recently the victim of a very direct form of art criticism in its native Switzerland. It aroused considerable scorn

among the more academic of the local sculptors when it was put on temporary exhibition in one of the public parks in Zürich, and one evening they sallied out and smashed it to pieces. (See ASTRAGAL, page 729.)

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Amendments to Regulations for BUILDING OF SCHOOL PREMISES have been made public.

The Minister of Education has reviewed the Building Regulations with three objectives in mind: (i) to effect reductions in requirements in order to lower costs, wherever this would be compatible with the maintenance of proper educational standards; (ii) to make them more flexible in order to leave scope for experiment, and to meet the needs of schools of unusual type or size; (iii) to remove anomalies which have been revealed by the practical application of the Regulations. The resulting changes will be introduced in a completely new set of Regulations which will be issued later.

Meanwhile, the Minister has decided to make at once those changes which affect the provisions of cloakrooms, changing rooms, lavatories and sanitary offices. The revised Regulations (now on sale at HM Stationery Office) include amendments which will enable economies to be made in new school buildings of every kind. It is for this reason that these amending regulations are introduced in advance of the new

The following are excerpts from a circular which has been issued to Local Education Authorities to explain the reasons for certain changes in the Regulations and also to amend and supplement the advice given in the Memorandum on the Building Regulations:—

The main purpose of the amendment to Regulation 6(1) is to make it possible for accommodation for children's outdoor clothing to be provided otherwise than in cloakrooms by designing it as part of the circulation space of a school. The necessary equipment can be provided in shallow alcoves or, if suitably designed so as not to interfere with circulation, the fittings can be placed along the walls of corridors themselves. Fittings should be kept as simple as possible.

Two significant changes have been made in the requirements relating to wash basins. It is no longer necessary for wash basins to be in a room set aside for the purpose. The actual scale of provision has been reduced in the interests of economy, but in the belief that no harm to standards of cleanliness or to social training will be involved.

Regulation 6(4) has the effect of substituting the requirement that running hot water shall always be available in every wash-room for the requirement (in the former Regulation 6(2)(c)) that it shall be available to every basin. The change now made is based on the assumption that it is more important to have hot water available at some of the basins all the time than at all the basins some of the time. This can often best be done, both from the point of view of efficiency and of cost, by the use of local water-heating systems in the individual wash-rooms. It is because some types of local heating cannot conveniently supply all the bas ns that the amendment of this regulation has been made.

The provision of cloakroom, washing and sanitary accommodation for adults in schools has been covered partly by Regulations 8, 10 and 26, and partly by suggestions in the Memorandum on the Building Regulations. The adults to be catered for include, in addition to the teachers, the school doctor, dentist, nurse and other visitors, and the kitchen staff and caretaker.

There has been a tendency in school planning to meet these needs by means of a number of separate lavatories and wc's dispersed over various parts of the building, with consequential duplication and waste. The amending Regulations make it necessary to consider the adult requirements for cloakroom, washing and sanitary accommodation as a whole.

PUBLIC ARCHITECTURE

IT is not known what proportion of British architects are employed by local or central government authorities, or what proportion of building work under the control of architects is carried out by salaried men. It is certain, however, that architects in public offices exercise a considerable control—a control that has been achieved in less than a generation.

The traditional structure of the architectural profession has developed in response to a requirement—the design and construction of a building unit or complex as a thing in itself—which, while still important, is no longer dominant. It is at this point that the relatively new form of architectural unit, the public office, has come into the picture.

In spite of some loudly expressed opinions to the contrary, authorities have not set up architectural departments simply in order to provide safe jobs for dull or timid architects. They have done so because the needs of modern industrial society can only be met by centralized administration and execution. The public office originally developed as a convenient means of improved control and economy in the production of large schemes which were basically assemblies of individual units conceived on traditionally individual lines. It is now faced with the urgent task of evolving technical and administrative methods for creating the most complex architectural concepts in time as well as in space. In this context the structural system must be designed not in terms of one building or group of buildings, but as a flexible instrument of wide and continuous application. The essential requirements are a planned programme; a clear formulation of requirements; controlled experiment: "consumer research" (ugly name); continuous collaboration between architect, engineer, client, teacher, housing manager, surgeon and the rest; and, perhaps, the one entirely new feature, the dovetailing of drawing office with factory.

Clearly the only field in which such development can function is the public authority, but even this is too restricted; the authority itself is too small a unit. The problem is a national one and the solution can be found only in the closest collaboration between authorities. County boundaries have no more meaning here than the parish boundaries of yesterday.

How, then, do the architectural departments of public authorities measure up to this picture. The blunt answer is that with a handful of exceptions, they do not. Isolated from each other they have, nevertheless, developed a common structure which is top-heavy, slow, unadventurous and dull. Designs and ideas are passed up and down a pyramid of "officers," until all that is left is the lowest common denominator of safe, standard "types." These offices are avoided by young energetic intelligent men, with the exception of the few who struggle in frustration against entrenched forces too strong for them.

Nevertheless, the exceptions to this rule show in varying degrees

the way forward. That the rigid pyramid is not inevitable and is, in fact, a passing phase, has been proved by the Miners' Welfare Commission and others. The general pattern of future organization was outlined recently in the memorandum submitted by the ABT to the Working Party, and this has received general agreement in principle. The basic idea is to break down the structure into a series of linked individual groups responsible to, and controlled by, the chief architect. Although this scheme may be subject, at first, to reverses and failures, it is elastic and capable of diverse development. Its fundamental effect would be to release reserves of responsibility, enthusiasm and ability hitherto untouched and to attract the best men and women of each generation of architects. Private architects themselves could not fail to benefit from such a change.

No one looking at the post-war building records as a whole can feel pride or satisfaction, and architects must admit their share of responsibility. A new approach must be made quickly. Unless the architect takes the initiative himself he may one day find his supreme place as co-ordinator and master usurped by others more alive to the spirit of the age.



The Architects' Journal
9, 11, and 13, Queen Anne's Gate, Westminster, S.W.1.
Phone: Whitehall 0611

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A BURNING QUESTION

The last of this year's Architectural Science Board Lectures dealt, appropriately enough, with house heating. It was given by Richard Eve, who provided a fine summary of the work done by BRS, and put forward some thought-provoking ideas on the influence that this research will have on house design. (I understand that this talk will be discussed fully in a later issue of the JOURNAL).

One thing in particular attracted my attention, as BTUs went in and out

of my ears as easily as the little devils go through ventilated cavity walls, and that was the depressingly small size of the audience. Not more than a hundred were there, I should say, which is less than one per cent. of the RIBA membership.

Of course, many architects shy at technics automatically, and absence of the eminent can be put down to the fact that most of them know all about house heating by now anyway. No doubt others had cold feet and feared that their presence at a heating meeting would betray their ignorance. But what about the younger generation? Where were the large numbers of those recently qualified who hope one day to build their first house? What about the heating system for the cosy little nest they have long promised to build, when licences permit, for that stock stand-by of the architect beginner, the maiden-aunt? Doesn't that design lie heavily on their conscience? Perhaps not. But then, of course, that sort of cosy nest never does.

A GREAT DANE

I suppose very few, if any, architects suffered during the war so much mental torture as Odd Nansen, the architect son of Fridtjof Nansen, the Norwegian statesman and explorer. During the German invasion of Nor-

way Odd Nansen was arrested as a hostage and interned, first in Norway, and then in the concentration camp at Sachsenhausen.

All through his imprisonment Nansen kept a diary, and I have just read the English translation of it.* He was asked professionally by his guards to design, and on occasion build, parts of the camp. But the doubtful pleasure of building his own prison was varied with the even more doubtful one of designing timber "love nests" in the woods for his guards.

The most remarkable characteristic of Odd Nansen is his humanity. As each deadly day is succeeded by the next (and the diary format of the book imprisons the reader with the author to the point of monotony), one can sense the gradual hardening of his fellow prisoner's consciences in the face of cruelty. At the start, horror and indignation was felt when an elderly man was struck by a guard. Three years later the same people laughed and talked as their companions jerked out their lives on a gallows. But not Nansen, his love for his fellow men remains to the end. Despite all the sickening horrors he saw, he desires no revenge on anyone. His is a most gentle, perfect, nature.

UNDERGROUND MOVEMENT

London Transport's new move to provide more light and better ventilation in their rolling stock, by turning the windows 18 inches or so up the curve of the roof, seems to be a reasonable idea.

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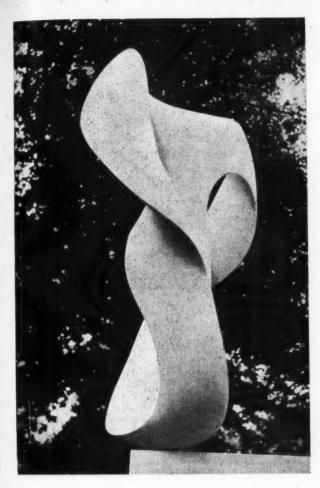
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Tubes, nowadays, spend half their time out in the open, if you will pardon me for putting it that way, and more daylight is essential for reading the balloons in the strip cartoons. The provision of higher windows means, of course, that the passenger can read the names of stations while standing up (as he generally is), and need no longer bend until his nose is in a stranger's shopping basket. This will result in much saving of face as far as Astragal is concerned. And now all that is needed is a loud-

^{*} Day after Day, by Odd Nansen. Putnam and Co-Ltd. 21s.





An example of the work of the Swiss sculptor, Max Bill. See Astragal's note and frontispiece.

speaker so that the guard can announce the name of the next station long before the train reaches it and all interested parties can begin to fight their way to the door.

PUTTING PAID TO A BILL

The outdoor sculpture exhibition in Battersea Park has had successors in other countries, especially Switzerland. The piece by Max Bill, illustrated on this page, was part of an exhibition of this kind in Basel during the summer. Another of his works - to my mind one of his best - was shown out-ofdoors in Zurich a little earlier, and came to a most unhappy end.*

We are apt to think of Switzerland as a country of artistic enlightenment and of Britain-comparatively-as a land where modern art has to fight for its very existence. But even Sir Alfred Munnings never went as far as to march into the Tate Gallery and

poke holes in a Picasso with his ridingcrop. Yet that was the nature of the -to say the least of it-uncompromising form of criticism taken by a body of Zurich sculptors who disapproved of Bill's abstractions. After a good dinner one evening they sallied out to the public park, where it was on exhibition, and broke it up. I suppose strong feelings about art are at least better than apathy, but this is the kind of direct action of which one can hardly approve. I hope Mr. Bill will now produce a bigger and better version-this time in concrete, not in plaster.

CYPRIAN ARCHITECTURE

Only twenty years ago or so Alan Prvce-Jones wrote of the "disembodied bedsteads" of Cyprus, and described the island's hotels as "cheap and rare and bad." Had he seen last week's AJ he would presumably have withdrawn his charge, for the Leda Palace-Nicosia's new luxury hotel, financed by Greek industrialists, staffed by Italian experts and "crockeried

up" by a British firm-will surely live up to its claim to be the Ritz of the Like the castle in "Irene Iddesleigh," it seems to be of "a style of architecture seldom if ever attempted," but its determined vigour of appearance continues the independent building traditions of the island where houses are still built of stone worked by wood-cutting tools, and ceilings consist usually of a split reed mat tacked to the joists and covered with a layer of bracken on which Roman tiles are placed (not fixed); a system with good insulation qualities but so popular with lizards and insects that it is like sleeping under a busy pin-table.

So far as houses are concerned, fireplaces are non-existent; floors are usually of marble, or, if you can afford it, concrete; and sanitation is beyond description. The only other information I can give you about Cyprus is that they call plaster asbestos, and asbestos " amiandos "; that the Director of Antiquities, when I used to know him, shared humble digs in Chelsea with another architectural student colleague. Owen Mason: that Cyprus is alleged to be third on the world's black list for murder; that there are few gardens and fewer good houses, but wonderful castles and convents; and that the island was once so corrupt that a prominent islander, newly insured, was able to arrange for a Government van to remove his favourite belongings before the house was to be burned down at the weekend.

ASTRAGAL

LETTERS

E. A. Barrie, A.R.I.B.A.

Public Architecture

-I am more than sorry that I could not attend the discussions on Public Architecture at the AA on November 23 which were reported in the AJ on December 8, but having had two eye-witness accounts and having read your report I am risking some comments.

Congratulations to Mr. Gibberd for the restraint and good humour with which he put his case for the private architect. It eems that some of the most earnest of Mr. Gibberd's adversaries were callow youths barely qualified in their profession—like

^{*} See frontispiece of this issue.

myself. I am glad Mr. Gibberd felt it unnecessary to come down to their level.

I have been in public service as an archi-

I have been in public service as an architect for 5 months and I have unsuccessfully searched my mind for justification of the enthusiasm engendered by so many architects for this type of career. The pyramid structure of the public office is a fact. I am at the very bottom of that pyramid and

I can feel its weight.
The ABT has spotted this failing and bril-The ABT has spotted this failing and offiliantly announces that the pyramid must be broken up. "Groups" is the battle cry and groups the limit of their imagination. One might say of the ABT that it reiterates one might say of the ABI that it reiterates what has already been said. Most large offices have been group working for a long time now with the result that a job is done and then checked, and then the checker is checked, and then the checked checker is checked. This is group working with a vengeance which reduces efror to a minimum—and production. The ABT has also found this out and says: "The organization of the office is framed primarily to prevent mistakes.

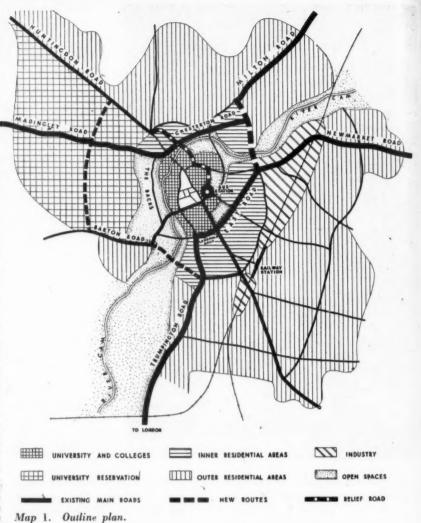
fully responsible for its own jobs. How deliciously naïve in this sophisticated age! Who, we may wonder, is going to allocate the jobs—especially the dull maintenance ones requiring sound technical knowledge and positively no research. The ABT dismisses the point with "no problem will dismisses the point with no problem will usually arise in the allocation of work to groups. ... "They are entitled to their opinion, but I do not agree. In fact, one man will have to be able to instruct groups to take on jobs when agreement cannot be reached and he, I am afraid, whatever democratic term he may be given, will be

But supposing that it might be possible to dispense with the boss, the problem of rela-tions with other Civil Service departments arises. In the Civil Service, broadly speak ing, a man is ranked by his pay packet and, again broadly speaking, paid by the number of persons he controls. The ABT even allows a tacit recognition of this with the phrase "The system tends of itself to grow worse because of the prestige value in the number of staff controlled by any one official."

What, I wonder, does the ABT propose to do about this? Is each little group chief to have his pay raised to equal that of the high ranking officials so that he may sure of his position when encountering other interested civil servants? If so, is this not going to result in an unfair gap between the chief grouper and the other groupers (when after all they are all working on the same job), and members of other departments consulted on the job? Or is the pay rate to be raised for all architects employed in public service to ensure their authority, and if so, is it not a very poor lookout for the taxpayer—especially when all the other pro-fessional and technical civil servants begin to clamour for the same generous treatment.

Incidentally, it should not be assumed that the student who qualifies and goes into a public office necessarily does so because he

You cannot meddle with the Civil Service Everything is linked to every in this way. thing else and if you push it at one end the impact will be transmitted throughout the whole concern like a shunting engine pushing a goods train. The answer surely lies in overhauling the whole administration of the Civil Service by decentralizing, which I think impracticable, or call in the private architect. admires the public office or its architecture.
The public office pays higher salaries for inexperience, and odious as the thought may be, it probably influences some people as it did me. E. A. BARRIE London.



OF CAMBRIDGE THE PLANNING

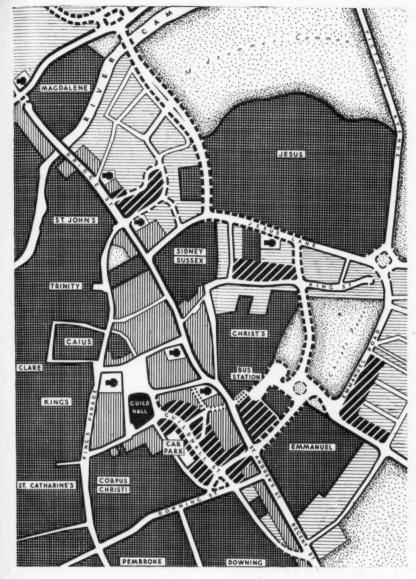
Planning proposals for Cambridge and the surrounding district have been prepared by Professor W. G. Holford and Mr. H. Myles Wright and have been submitted to the Town and Country Planning Committee of the Cambridgeshire County Council. During the months the proposals will be examined by a Committee of members of the County and Borough Councils with the aim of submitting a development plan for the approval of the Minister of Town and Country Planning. The proposals will be published in the first half of next year.

Under the Town and Country Planning Act, 1947, the County Council became the Planning Authority for Cambridgeshire. Because of the importance of Cambridge the development plan for the town and surrounding district is being prepared first. The organization of work on the Cambridge plan has differed from that used elsewhere. At Cambridge, all three parts of planning work control of current development, survey, and preparation of proposals—have been carried out by the County Planning Department, under the direction of the County Planning Officer (Mr. W. L. Waide) or the consultant, as seemed appropriate. It is believed that this arrangement ensures close co-ordination of day to day decisions, planning proposals and preparation for their execution: and as the consultant and his partner (Professor Holford and Mr. Wright) are formally the authors of all the proposals, the County Council remains free to accept or change them after seeing them as a whole.

POPULATION AND LIVELIHOOD

The following is a summary of the main re-commendations. The mid-1948 population of the Borough of Cambridge was estimated at 86,000 and that of the somewhat larger area covered by the plan (Urban Cambridge) at 104,000. Undergraduates are included. The Urban Cambridge population has grown by 16 per cent. since 1937—compared with 5.8 per cent. for Great Britain and under 1 per cent. for London and the Home Countries of the The authors give a number of reasons for thinking that a runaway increase in the population of Cambridge is very probable, unless special measures are taken to prevent

An attempt has been made to compare total employment in and near Cambridge in 1931 and 1948. This comparison shows that Central Government employment has increased tral Government employment has increased by 350 per cent., manufacturing industry by 40 per cent., and that by the University and Colleges by about 30 per cent. The five manufacturing industries that have grown most have increased their workers by 4,000 — a 180 per cent. increase. The Cambridge area has virtually no unemployed and there are about 1,800 jobs on offer.



THE RELIEF ROAD

Map 2. Proposals for the centre.

The authors hold that a further large growth of population will bring no advantage to the ordinary citizen and many disadvantages. Cambridge possesses open spaces, gardens and allotments on a scale that would be thought luxurious in almost every other town. But land is now scarce and a large increase in population would mean the loss of these amenities and much greater distances between homes and work. Moreover, the housing shortage is already so great that the present inhabitants cannot all be tolerably housed in less than ten years; and no appreciable advantage for either employers or employees is to be expected from a further growth of population. It would also seriously hamper the work of the University.

It is recommended that a determined effort should be made to slow down immigration into Cambridge, with the aim of trying to achieve a stable population of round about 100,000 in the Borough, or about 125,000 in the larger area of Urban Cambridge. This could only be achieved with the help and cooperation of Government Departments.

CENTRAL COMMERCIAL AREA

UNIVERSITY AND COLLEGES

HOUSING

In spite of 1,300 new houses having been built since the war, the housing shortage is worse in Cambridge than in many larger towns. The authors have examined housing demand in some detail, and estimate that at present rates of building it will take at least eight years to provide a separate dwelling for every family already living or working in Cambridge. This takes no account of the needs of families whose separate dwellings are really unfit for habitation. There are 1,400 such houses in Cambridge. Applications for houses are still being made at a much faster rate than new houses are being built.

The number of habitable rooms in the Borough have been counted, and some study has been made of family size and household composition. The authors recommend that all new Borough housing estates should contain, when complete, a large proportion of dwellings of less than five rooms, and also some dwellings of every size. They also be-

lieve that there will be a large demand for small dwellings other than those built by the Borough.

It is maintained that building development between the wars sprawled far out from the town in a wasteful and unsightly way. General recommendations on residential development include:—Prohibition of ribbon development; that Grantchester, Cherry Hinton and other villages still outside the built-up area of the town should be kept separate from the town by permanent open spaces; a "provisional boundary" for the town within which new development would be confined; a careful infilling and rounding off of villages around the town, rather than their expansion.

The authors point out that the inner residential areas lying in a half circle around the centre on the east will soon be due for redevelopment (see Map 1). They recommend that these large districts should be redeveloped with new houses. They maintain that the inner districts are admirably placed for this purpose, being near the centre, the river and the commons; and that the alternative would be to let them decay into slums, while building new housing estates two and three miles from the centre of the town.

ROADS

The amounts of traffic and traffic flows on roads in and near Cambridge have been very carefully measured. The authors believe that eventually outer bypass roads around the town will be needed; but they do not think their construction would be justified for a long time if it is to be done at the expense of road improvements nearer the centre. Through motor traffic is only about a tenth of that of motor traffic on roads nearer in, and inner roads also carry 1,000 to 2,000 pedal cycles each hour—a type of traffic which has its own peculiarities. Recommendations are made concerning the best lines for outer bypasses, but proposals for actual construction in the next 20 years are confined to roads which would at once be used by a large amount of traffic, local as well as through.

Two partly new routes are proposed to connect up main roads at some distance from the centre—one on the east and another on the west.

THE BACKS ROAD

The authors propose that when alternative routes have been provided for through traffic, the quietness and beauty of the road along the Backs (Queen's Road) should be safeguarded by a low speed limit and by forming special entrances at either end (somewhat like those to the Royal Parks in London); which would slow down vehicles and would emphasize the special character of the road.

The road which runs right through the centre of Cambridge almost in a straight line, from Huntingdon Road to Hills Road, is variously named in its several parts (Bridge Street, Sidney Street, St. Andrew's Street, etc.). It is the spine of the town and for convenience is so called in the report (see Maps 1 and 2). The spine runs through the shopping and business centre, which is ringed with Colleges (see Map 2), and contains narrow, congested streets.

narrow, congested streets.

The authors reject widening as a solution in the centre on the grounds of the length of time required, the temporary nature of any relief gained and because general widening would destroy the present architectural character of the centre. They propose instead the construction of a relief road, more or less parallel to the spine and 200-300 yards to the east of it (Maps 1 and 2). The aims of this road are:—

(i) To allow local-through traffic from northwest to south-east to run right past the centre, and thus leave more room for shopping and business traffic;

(ii) to form a circulating road around the east side of the centre, so that traffic from the east (where four-fifths of the population



FRENCH RAILWAYS PACKET BOAT

The S.S. "Arromanches" was recently put in service on the cross-channel route by the French Railways. Left, a first-class cabin. Below, the



STATION AT LONGBENTON



A new station has been built by British Railways at Longbenton, near Newcastle-on-Tyne. The buildings were designed by A. N. Thorpe, architect in the Civil Engineer's Department of the NE Region. The station accommodation consists of circulating area, and two platforms, with a ticket office controlling the entrance barrier. Waiting rooms and lavatories are also provided. The buildings are planned to permit future extensions to deal with increased traffic when the surrounding residential area is completely developed.

live) can choose the most convenient points of entry and exit.

When the relief route is complete from Histon Road corner to Drummer Street, it is proposed that Magdalene Street should be closed to vehicles (other than pedal cycles) at its northern end (Map 2).

THE CROSS-TOWN ROUTE

At its southern end the spine relief road just mentioned would connect with an improved cross-town route, running from Emmanuel Street straight through to Downing Street, and thus eliminate the present awkward double turn on a cross-town journey—from Downing Street into St. Andrew's Street and thence into Emmanuel Street. It is proposed that Downing Street and Pembroke Street should later be continued over a new Mill Lane bridge to West Cambridge

(Maps 1 and 2).

Thus in time the old centre of the town would become something of a precinct, with the spine relief route, the cross-town route and the river as its boundaries (Map 2).

FUTURE BUILDING

The central area of Cambridge is small and densely built within a ring of Colleges (Map 2). Its buildings contain over 9 million densely built within a ring of conegoe (Map 2). Its buildings contain over 9 million sq. ft. of floor space, of which 4½ million are in use by the Colleges and University, 1 million by shops and 2½ by commerce of all kinds (including shops). The authors believe that because of difficulties of access the could never make a good shopping lieve that because of difficulties of access the centre could never make a good shopping and business centre for a large town. But assuming a moderate growth of population, they believe that commercial and College needs for additional accommodation can both be met. It is estimated that only a moderate amount of additional commercial accommodation will be needed near the centre in the next 20 years.

At least half of this could be obtained in the proposed new Guildhall Street running from the Guildhall down to Downing Street, on land which at present is partly open and

on land which at present is partly open and partly occupied by delapidated buildings (see Map 2). Guildhall Street would be very near the present main shops and also very near the proposed new bus station. Its con-struction would provide a good number of new shops and offices without any change in the appearance of existing streets. tually traffic coming up the spine would be led into Guildhall Street, through Downing Place, which would be given an entrance to Regent Street just north of Downing College

(Map 2).

THE UNIVERSITY AND COLLEGES

The authors stress the importance of all academic buildings being reasonably near together, and consider the alternatives of siting most new University buildings in the centre, in west Cambridge or in both according to function. Subject to certain reservations, it is recommended that sites west of the river should be favoured for most new buildings. It is proposed that all the land west of the Backs and between the Huntingdon and Barton Roads should be regarded as a reserve for University buildings (see Map 1). It is recommended that future large University be regarded as a reserve for University buildings (see Map 1). It is recommended that future large University buildings should not be placed south of Lensfield Road, so that University expansion will be in one direction, westwards, and not in two. It is also proposed that the Addenbrooke's Hospital site should be made available for science buildings when the hospital moves.

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It is thought probable that one or two It is thought probable that one or two new Colleges may come into existence fairly soon. Five sites are recommended: four on a line running from Huntinedon Road ("The Grove" and "Wychfield") via Storev's Way to Clarkson Road; and one on the site of the present electricity station on the river opposite Magdalene.



NIGHT WORK ON THE THAMES SOUTH BANK

Considerable progress has been made on the new embankment wall on the south side of the river. It is hoped to complete it by December, 1950, so that the reclaimed river frontage, varying in depth from sixty to one hundred and forty feet, can be used for the 1951 Exhibition. The wall will extend from the existing wall in front of County Hall to a point just downstream of Waterloo Bridge, a distance of seventeen hundred feet. The steel cofferdams, behind which the wall is being built in sections, are now being erected almost mid-way between the Hungerford and Waterloo bridges. On this page are two views of work taking place on the site at night. Much of the work can only be done at low tide, and when this occurs at night the work is aided by floodlighting. (Continued overleaf).





Above is shown the line of the steel cofferdam, rammed home into the river bed, near Hungerford Bridge. The work is being done by Richard Costain, Ltd., at a cost of £250,000.

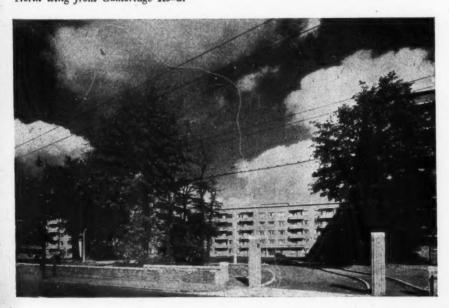


The front elevation of the west wing.

FLATS AT KINGSTON-UPON-THAMES

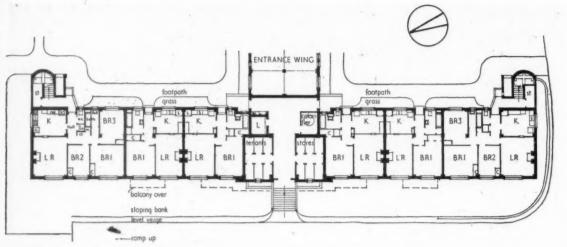
BY SIDNEY CLOUGH, SON & PARTNERS

North wing from Cambridge Road.

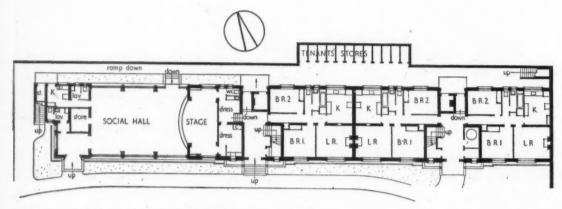


GENERAL.—The site on which these flats were constructed was originally occupied by the Cambridge Homes for aged war widows and accommodates 650 persons in 160 flats on an area of about 5\frac{3}{4} acres. There are 19 four-bedroom flats, 63 three-bedroom, 38 two-bedroom and 40 one-bedroom. A social hall, communal laundry, boiler house and pram stores are provided, and eventually there will be lock-up garages and a chapel of rest. The social hall is equipped with a stage, dressing rooms and kitchen.

CONSTRUCTION.— Because of the unstable nature of the ground it was considered essential to use piling, and 700 reinforced concrete piles were incorporated in the foundations. The small west block was built with load bearing brick-

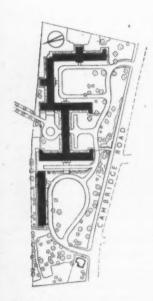


GROUND FLOOR PLAN, WEST WING



GROUND FLOOR PLAN, WEST BLOCK [Scale: 11"=1'0"]

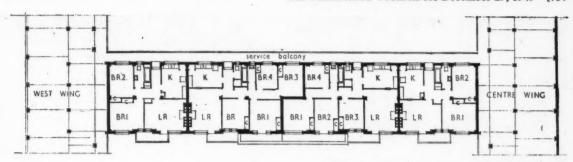
South elevation of the west block.



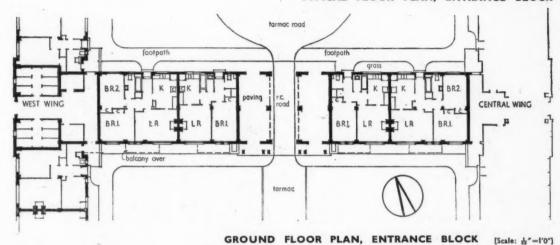
SITE PLAN



FLATS AT KINGSTON-UPON-THAMES



TYPICAL FLOOR PLAN, ENTRANCE BLOCK



walls, hollow tile floors, reinforced concrete staircases, and a tiled, pitched roof. The remainder of the flats are steel framed with 11-in. cavity walls. All flats are divided with cavity walls, and internal partitions are of 3-in. breeze blocks. All elevations are faced

with sand-faced flettons.

FINISHES.—The interiors of all flats are finished with washable distemper and all woodwork is painted with high gloss enamel. The living room and bedroom floors are of Columbian pine or hemlock wood blocks; kitchen, bathroom, w.c. and hall floors are of pitchmastic.

SERVICES.—Every flat has central heating from a central boiler house, which also provides constant hot water. Each living room has a fireplace, gas points and electric power points.

and electric power points.

The general contractors were
Messrs. Spiers, Ltd. For list
of sub-contractors see page 752.

Extreme left, the west block. Left, the entrance block. Below, the flats from the south-east.





BY SIDNEY CLOUGH, SON AND PARTNERS



Main entrance.

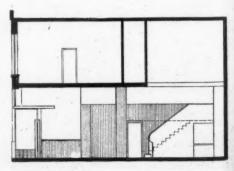
SHOWROOM IN KINGSWAY W.C.2.

BY THE PETER DUNHAM GROUP

GENERAL.-The Skefko Ball Bearing Co., Ltd., which already had offices on the first floor of 50-52, Kingsway, acquired the shop below and needed the following accommodation :- A display window, service counter, stockroom, waiting space and general office. The only restrictive conditions related to the position of the new staircase to the first floor, and the existing staircase to the basement, which has been retained. A new mezzanine floor, above the stockroom, houses filing cabinets which are used by the staff from the ground and first floors.

CONSTRUCTION.—The side wall to the entrance and the stallboard are faced with brown-grey bricks laid straight with deeply raked joints. New partitions are of 4-in. breeze blocks, the new floor is of timber joists and boards and the staircase is of deal. The entrance doors are of hardwood with an Australian walnut veneer and the window frame is of stainless steel.

FINISHES.—The walls of the entrance hall and the new staircase are covered with strip panelling of tollabranca, which is finished in two shades—natural and deep mahogany—and polished. The floor of the show window is of brown asphalte tiles, the ground floor of hardwood blocks and the mezzanine floor of linoleum. The back of the display window is of deal, painted pale grey and glazed, and the fascia is of reeded glass, acid etched, with white lines ½-in. wide painted on the back. The bottom member of the fascia is of



SECTION A-A
[Scale: 1/8"=1"0"]

Right office, count shows

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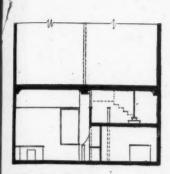
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Right: top, the entrance to the general office, showing, on the left, the enquiry counter; below, the entrance hall and showroom.

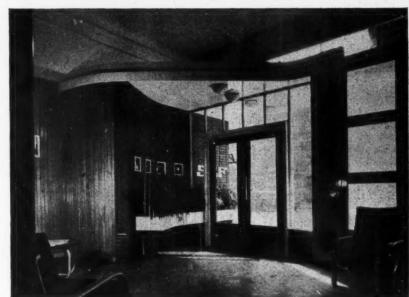


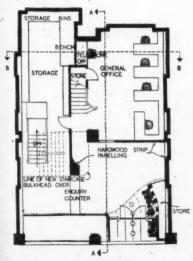
SECTION B-B

deal, painted white. Lettering is built up in sheet metal and wood and is painted white. The flower boxes of deal, lined with zinc, are painted white with yellow stripes. The show window has an egg-crate type ceiling. It is lighted by standard fluorescent fittings at the top of the fascia, which also silhouettes the lettering at night. The door furniture is of stainless steel.

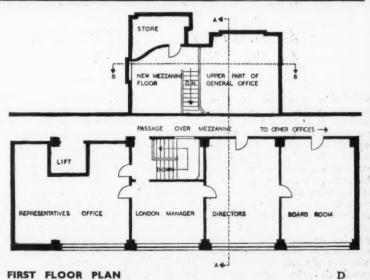
The general contractors were W. H. Gaze & Sons, Ltd. For list of sub-contractors see page 752.



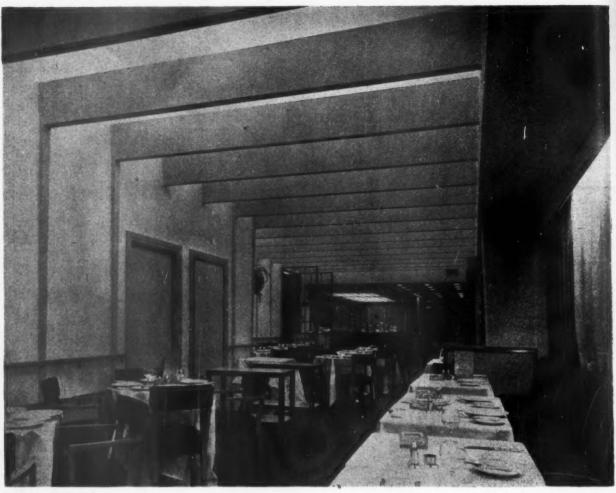




GROUND FLOOR PLAN



FIRST FLOOR PLAN



Dining room and cocktail bar beyond.

RESTAURANT IN THE HAYMARKET

EDMUND WILFORD BY

ASSOCIATE DESIGNERS: JOHN CARTER AND A. W. SKEELS OF HEALS CONTRACTS LIMITED

GENERAL. — These London premises, which are owned by Mitchells & Butlers, Ltd., have been remodelled and were recently reopened as the Hay Wain Restaurant. Adjoining premises have been acquired and the restaurant, which was previously entered from the Haymarket Arcade, now has an entrance in the Haymarket. The restaurant is long and narrow but a tunnel effect has been avoided by the division of the interior into three sections. The entrance fover leads into the cocktail bar and beyond this is the restaurant.

CONSTRUCTION.—The ceiling of walls are flush panelled with the restaurant was higher than those in the foyer and cocktail bar, and deep, narrow beams constructed of fibrous plaster have been built across the room at regular intervals to improve the proportions. There is a space between the existing ceiling and the top of the beams where strip lighting is concealed. Vertical ribs run down the walls on each

FINISHES.—The entrance foyer has a semi-circular recess. Its

weathered sycamore and small moulded cover strips of white birch with an asbestos cement backing. The revolving entrance doors of mahogany are glazed. Above the semi-circular recess in the foyer, which contains a flower trough and climbing rods for plants, is a specially designed circular lighting fitting made from anti-splinter netting of the type used during the war. The plast-ered ceiling is of pastel blue. The easy chairs are covered with Welsh wool tweed, coloured

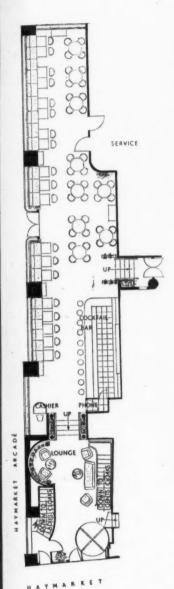
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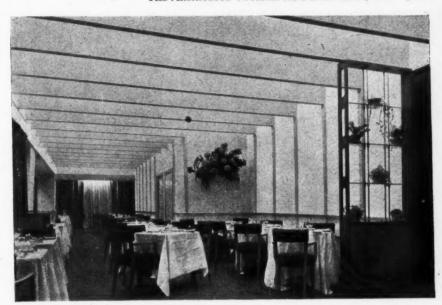
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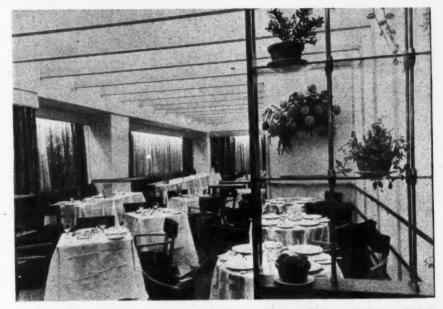
Top and centre, the restaurant seen from the cocktail bar. Bottom, the cocktail bar.

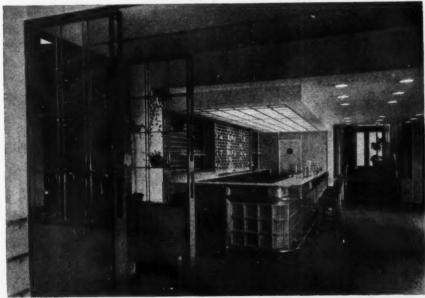


PLAN [Scale: #"=1'0"]

blue and white, and the occasional tables are of weathered sycamore. The steps to the restaurant are flanked by four plain cylindrical columns, mirrors on the walls and flower boxes behind the handrails. The bar is of plastic sheeting and walnut with a glass brick front. Stools are of walnut, upholstered in blue hide. There is an illuminated laylight over the bar. The general lighting is provided by circular kuvred fittings flush with the ceiling. The plastered walls of the restaurant are pale rose and deep ivory. The ceiling is warm white









Left, the main entrance from the Haymarket. Bottom: left, the entrance lounge seen from the bar; right, the entrance lounge.





in colour. Beams and vertical ribs are pale grey. The existing plate glass windows to the Haymarket Arcade have been curtained with oyster coloured silk satin and flanked by brown damask curtains. There is concealed lighting in the pelmets as well as along the tops of the beams. Close carpeting throughout is of rust colour with small white and blue spots. Seating is covered with nigger brown material and off-white piping. The dining and waiters' service tables are of walnut and the metalwork is of satin silver bronze.

The heating is provided by electricity and there is air conditioning throughout.

The general contractors were Messrs. Heal's Contracts, Ltd. For list of sub-contractors, see page 752.

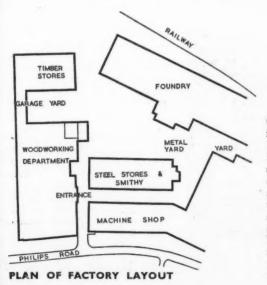
RESTAURANT -IN THE HAYMARKET



The main entrance.

FACTORY AT BLACKBURN

BY HARRY S. FAIRHURST AND SON



GENERAL.—The post-war building programme of the British Northrop Loom Co., Ltd., at Blackburn, has included extensions to the foundry, smithy, steel and timber stores, and machine and woodworking shops. Advantage has been taken of the considerable changes in level on the site. The timber store is built on high ground and the woodworking shop is arranged so that material moves downwards as it is machined. Swarf and shavings are also fed down ducts for gravity delivery to lorries. Dust and shavings are discharged at boiler house floor level as fuel for the boilers.

The foundry has been given as much light as possible to ensure adequate ventilation. Hatchways in the roof can be used to clear the air in a few minutes. These are operated by electric motors controlled by a button on the foundry floor. Because of the amount of dust and grit in the air near the



Top, main entrance to the woodworking shops. Centre, interior of the woodworking shops. Bottom, the canteen kitchen.

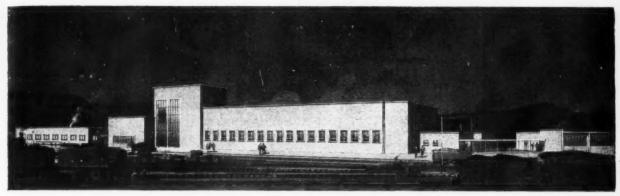




extract cupolas, the foundry gutters have been designed so that there is room for wheelbarrows to be used to aid cleaning. The machine shop, where there is a danger of minor accidents occurring, is equipped with a surgery and X-ray room. Lorries can be driven into the timber store to be unloaded; timber is then handled by a series of travelling and wheeled cranes. The store is lit by protected metal roof lights and floodlights. The production flow is through the large woodworking shop to the drying room and then vertically to delivery on the ground floor. The machines are electrically driven and there is a control room above the trans-former house. The canteen and lavatories are adjacent to the woodworking areas.

CONSTRUCTION. — The construction of all the shops is of steel frame with brick walls and precast floors. The roofs are of protected metal with patent glazing.

The general contractors were Messrs. J. Gerrard and Sons, Ltd. For list of sub-contractors see page 752.



View from the east.

PITHEAD BATHS AT ABERTILLERY

BY C. G. KEMP AND W. M. TRAYLOR,
ARCHITECTS, NATIONAL COAL BOARD

ASSOCIATE ARCHITECTS: NIGHTINGALE
AND AMBROSE AND PAUL NIGHTINGALE.

the pit lockers and clean lockers.

There will also be a water tower,

calorifier room for the storage of hot

washing water, and a plenum room

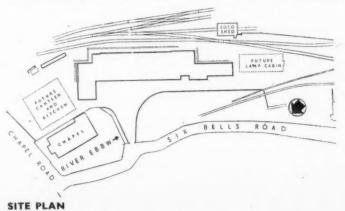
GENERAL.—The requirements are for a pithead bath for 1,848 miners at the Arrael Griffin Colliery, at Six Bells, Abertillery. The plan is governed by the circulation, which starts at the clean entrance, where miners will arrive from their homes, deposit their clothes in clean lockers, put on pit clothes in the pit locker room, pass through the pit entrance, where they will grease their boots, and finally collect Davy Lamps from the lamp cabin.

Showers will be provided between

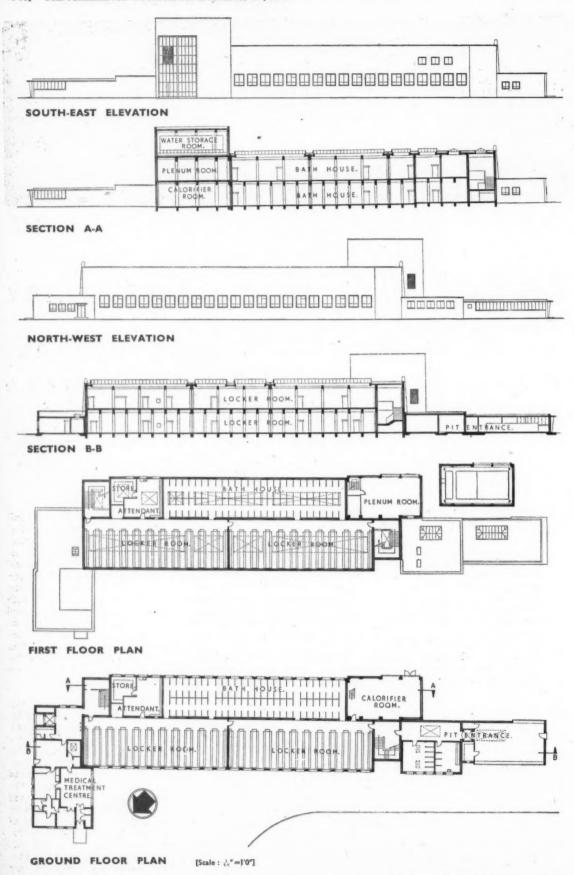
on the first floor for the air conditioning of baths. Factors which had to be considered in the preparation of the plan were the existing train sidings and the River Ebbw, which flows diagonally across the site in a 14-ft. deep brick culvert.

CONSTRUCTION.—A reinforced concrete frame with two 4½-in. brick skins and a 5-in. cavity,

will guard against heat losses. Roofs will be flat reinforced concrete with lantern and roof lights. Floors will be reinforced concrete cast in situ. Internal walls will be 4½-in. and 9-in. brick. Staircases will be of reinforced concrete. The 6-ft. high cubicles in the bath house will be of 9-in. by 3-in. glazed bricks 2½ in. thick. There will be standard steel windows in reconstructed stone surrounds. Piles cannot be driven because of the river, so the building will be on a concrete raft.



FINISHES.—Floors to bootbrushing, greasing and calorifier rooms will be granolithic, as will the stairs. The remaining floors will be tiled. The floor of the water tower will be finished with 1-in. asphalte on 2-in. thermal insulation plus 1-in. screed. Internally, the walls generally will be fair faced brickwork with a tiled dado in the bathhouse. Doors will be of metal faced plywood with revolving doors at the clean and pit entrances. The reinforced concrete consulting engineers are Messrs. Liversedge. For list of sub-contractors see page 752.



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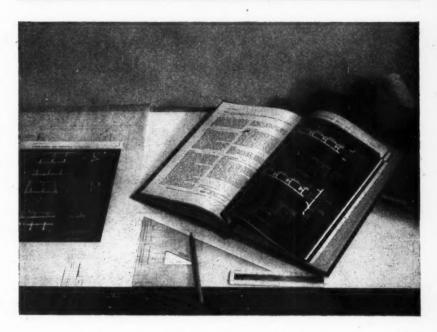
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PITHEAD BATHS AT ABERTILLERY

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QUESTIONS AND ANSWERS · CURRENT TECHNIQUE
THE INDUSTRY · PRICES · TECHNICAL ARTICLES

TECHNICAL SECTION



THE LIBRARY OF INFORMATION SHEETS

This week the Technical Section is devoted to the customary annual review of the Library.

From time to time, and regularly each December, all Sheets are examined and checked, and where a manufacturer's products form the subject of a Sheet the manufacturer in question is asked to certify that the data included are still current. Where a Sheet is found to require considerable modification, it is cancelled and readers should remove such Sheets from their collections. Where only small variations are involved, revision notes enable the Sheet to be corrected.

The two Sheets (46.Z) published in this issue are an up-to-date analytical alphabetical index cancelling Sheet 46.Z, 1948, published this time last year.

On subsequent pages will be found a note on the principles adopted in preparing the index, a list of the revisions and cancellations which have become necessary during the year, and a statement showing the correct contents and sequence of all Sheets current at this date. For the benefit of new subscribers, we also reprint our Instructions to Secretaries and the Classification of the Library under its subject headings.

REPRINTS

To enable new subscribers to complete their Library all Sheets published since the inception of the new series in October, 1947, have been checked and reprinted. Readers requiring sets or individual Sheets should fill in the form printed in the adjoining column. Sets are available as follows:

Oct.,	1947-March, 1949,	inclusive						£I	135.	00
Oct.,	1947-June, 1949	22							16s.	
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REVISIONS

During the last few weeks all published Sheets have been carefully examined to bring the information up to date, and, with the exceptions noted below, are certified as current and correct. The following list sets out revisions to the Library for the year ended December 29, 1949. A record of the revisions for 1948 was published in the JOURNAL for December 23, 1948, and revisions for both years are indicated on the current index thus: Revised 1948 (R. '48). Revised 1949 (R. '49). The suffix (C.R.) after a Sheet indicates that it has been cancelled, revised and republished. Cancelled Sheets are excluded from the index.

2.A1.—Reverse of Sheet—Conversion factor millimetres to inches should read 0.03937 not 0.3937.

8.E1.—Face of Sheet—Certain stock sizes and quantities revised: 27 yd. rolls now 15 yd.; 9 ft. rolls now 18 ft.; 30/40 lb. bales now 36/40 lb.; sizes of resin-bonded and sem rigid mats now within the limits 72 in. by 42 in. Reverse of Sheet—Telephone number of Head Office, St. Helens 4224; address of Glasgow Office now 136, Renfield Street, Telephone Douglas 2687. There is now a Newcastle Office c/o Pilkington Brothers, Westgate Road, Telephone—Newcastle 20938, Telegrams—Pilkington Brothers, Newcastle.

8.E1. and 28.E1.—Reverse of both Sheets—Add footnote, "Fibreglass" is a registered trade mark. Revise address: London Office, 63/65, Piccadilly, W.1. Telephone— Regent 2115/6.

14.M1.—Reverse of Sheet—Weights of blocks revised: P.B.2 3\frac{3}{4} lb., P.B.32 6\frac{3}{4} lb., P.B.3 6\frac{3}{4} lb., P.B.2 corner block 4\frac{1}{4} lb.,

P.B.32 corner block $8\frac{3}{4}$ lb., P.B.3 corner block $8\frac{3}{4}$ lb.

Add note to section "Standard Types": All the above standard types are manufactured with a modified internal pattern, specially designed to reduce glare and known as P.B.2 light diffusing, P.B.2 light diffusing corner block, P.B.32 light diffusing, P.B.32 light diffusing corner block, P.B.3 light diffusing and P.B.3 light diffusing corner block.

14.M1, 14.N1, 2, 3, 5, 6, 7, 8 and 9.—Reverse of all Sheets-Delete last sentence in sub-section "Reinforcement" and substitute: Any non-rusting type of open mesh brick reinforcement in strips not more than $2\frac{1}{2}$ in. side is suitable. Add "Insulight" is a registered trade mark. The London Office is now: Selwyn House, Cleveland Row, St. James's, S.W.1, Telephone-Whitehall 5672-5676.

14.N1.—Face of Sheet—Delete lower right and left-hand notes on plan referring to reinforcement and substitute in both cases: 2½ in. wide, non-rusting type of open mesh reinforcement turned up in recess and secured to structure. Left hand drawing of reinforcement is now incorrect.

15.R1 and 36.D1.—Reverse of both Sheets—Telegraphic address should read Endurafire, Wesphone, London.

18.G1.—Reverse of Sheet—Delete second sentence under "Sizes": "Special sizes can be cut to order in any size that can be cut without waste from 18 in. by 24 in. tiles. Revise address:

Address: Imperial Buildings, 56, Kingsway, London, W.C.2.

Telephone: Chancery 6281. Telegrams: Accotile, London.

19.G1.—Reverse of Sheet—Revise address: 273-287, Regent

23.B1.—Reverse of Sheet—In section "Framed Ledged and Braced Doors (Not to B.S.)" middle and bottom rails now

26.E1.—Reverse of Sheet—Revise address:

Head Office: Columbia House, Aldwych, London, W.C.2. Telephone: Holborn 4108.

Plant Depôt: Bath Road, Harmondsworth, Middlesex. Telephone: West Drayton 2288.

Midland Office: 83, Edmund Street, Birmingham, 3.

Telephone: Central 1416.

Northern Office: Albion Ironworks, Manchester, 10.

Telephone: Collyhurst 3049.

Scottish Office: 169, Hamilton Road, Glasgow, E.2.

Telephone: Shettleston 2927.

29.C1.—Face of Sheet—Delete word "tee-headed," in lower right hand drawing, from note referring to fixing screw. Reverse of Sheet-Delete letters A, B, C or D in sub-section "Burner" and substitute J, K, L or M.

29.C1 and 29.C2.—Reverse of both Sheets—Add note to subsection "Recess": A distance of 1 ft. 3 in. to 1 ft. 6 in. from the floor to the bottom of the fire opening is normally most convenient.

29.C2.—Face of Sheet—Delete note lower right hand drawing referring to fixing screw and substitute:

No. 10 countersunk wood screw 14 in. long in suitable wall plug, or ½ in. grouted-in bolt.

30 C1.—Face of Sheet—Upper right dimension of 2 ft. 0 in. in right hand drawing should extend to full depth of chimney

32.D9.—Face of Sheet—Diagram 5—Owing to faulty reproduction, the hot water outlet pipe from the heater to the lavatory basin, bath and sink shows a break immediately adjacent to the appliance. This is incorrect. The pipe should, of course, connect to the heater.

Diagrams 5 and 6-The flow and return connections to the

heater should be reversed.

Diagram 6—The return circuit from the radiators has been omitted. A return leg should be shown from the lower radiator to the return pipe connected to the solid fuel heater on the left-hand side of the stopcock.

32.D10.—Face of Sheet—The distance from the bottom of the heater to the centre of the fixing bracket for the 30 gallon heaters (dimension C in the table) should now be 5½ in. instead of 6 in.

33.C1, 2 and 3.—Reverse of all Sheets—B.S. 602: 1939 should now read B.S. 602: 1949.

33.Q1.—The pump-flush model is no longer manufactured.

36.D1.—Reverse of Sheet—Revise addendum dated 23.12.48: Standard "Sliding Fireman" Door: Composed of 3 in. single thickness 3DF2 sheets bolted to steel framing members. Maximum overall dimensions to comply with F.O.C. requirements approximately 8 ft. 6 in. high by 7 ft. 6 in. wide to cover permitted opening of 8 ft. 0 in. high by 7 ft. 0 in. wide. Various methods of suspension to suit individual conditions.

Fire test: The "Sliding Fireman" door was tested by the

F.O.C. in November, 1948, and officially approved to comply with Grade "C" of B.S. 476 (2 hours).

40.B1.—Reverse of Sheet—Revise address:

Midland Works: Shakespeare Street, Wolverhampton. Telephone: Wolverhampton 20647/8/9.

Northern Works: Crawford Street, Rochdale, Lancs.

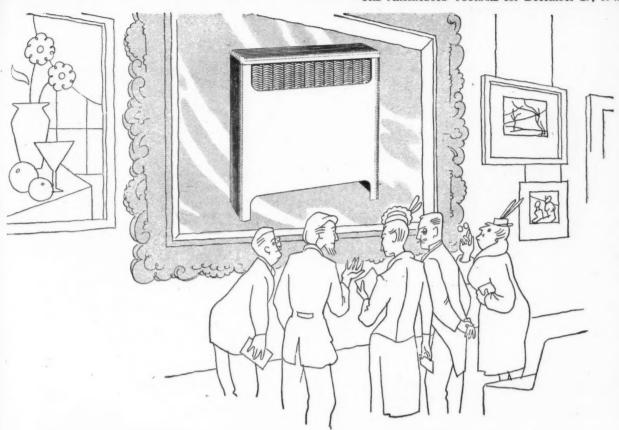
Telephone: Rochdale 3880.

Southern Works: Zinc Alloy Company (London Ltd.).
Address: Minerva Road, Park Royal, N.W.10. Telephone: Elgar 6611/2/3.

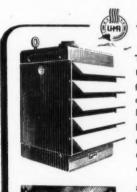
43.E1.—Reverse of Sheet—Delete sub-section "Divisions."

CANCELLATIONS

Sheets 14.L10, 29.D1 and 37.C10 have been cancelled for revision; they will be republished. Sheet 43.Z2 has been cancelled. It was republished on 15.9.49 as 43.Z2 revised 15.9.49.



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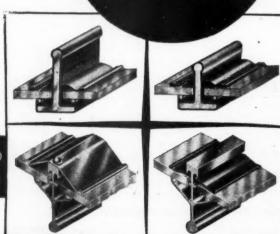


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GLAZING

Top illustrations show section of Hills Lead Clothed Glazing Bars. Bottom illustrations are of Hillmilux Roof Glazing System, (a) with Alumini m Capping, (b) with Lead Wings.

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10.J3 14.L2 14.N5* 14.L10,

*These

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INDEX

The alphabetical index has been prepared bearing in mind the fact that it will be cumulative from year to year.

Manufacturers, Trade Associations, etc., appear as main headings once only, followed by their range of products in alphabetical sequence. The word "The" has been omitted throughout. The word "Company" is always abbreviated as "Co." Christian names where forming part of a manufacturer's name follow immediately after the surname.

Trade Names appear as a main heading once only, and are cross referenced to the relevant manufacturer's name. Where trade name and manufacturer's name are identical no separate trade name main entry appears.

Basic Materials. These appear only as a main heading where general data are given, e.g., aluminium.

Products. Where a Sheet provides general data only the index entry gives accordingly "general data" only. If constructional methods are covered in addition, the word "details" is added.

Constructional Methods, Parts of Structures, Services, Equipment, etc. The main aspect being sufficiently covered by the terminology of the main headings, generally, no annotation other than the item referred to on the Sheet is given unless a specialized aspect makes further annotation necessary.

INSTRUCTIONS TO SECRETARIES

Every Information Sheet, when it reaches you in the ARCHI-TECTS' JOURNAL, has a classification symbol printed on the top right-hand corner of one side and the top left-hand corner of the other. All Sheets are perforated so that they may be easily torn from the JOURNAL, and all you have to do in order to keep the Library properly erganized is to file every Sheet as it comes into the office in accordance with its symbol.

The symbols (e.g., 32.C17) when understood are quite simple, being based on the principle of splitting the Library up into 46 subjects, numbered 1 to 46. The subject number appears first in the classification symbol, e.g., 32 means subject 32 (water heating). Then each of these subjects is in turn split up into a number of sections indicated by the letter in the middle of the classification symbol, e.g., C. (following subject 32) means section C (units gas) in that subject. The last number of the symbol is used to indicate the Sheet number.

Thus, the 17 means the 17th Sheet within the appropriate section (C) and within subject 32. When filed, the Sheet will, of course, be put in subject 32, section C, and after Sheet No. 16.

From time to time you will receive a check list which will show you the correct order and contents of the Library at any particular date. This list will consist of groups of symbols correctly arranged, and will enable any mistakes to be rectified. Sometimes Sheets will become out of date, or otherwise in-accurate, and will be cancelled; such cancellations will be

notified in the JOURNAL. It is your responsibility to remove such Sheets from the Library and replace them by the revised copies when issued. Cancellation of Sheets will also be clearly noted on all contents lists. If you find any difficulty in keeping your Library in order, the Editor will always be pleased to assist you. These instructions may be removed and kept for reference with the list of 46 subjects below.

SUBJECTS THE 46 GENERAL:

- 1. General practice.
- Building science.
- 3. Professional procedure.
 4. Planning and design.

CONSTRUCTION (BY MATERIALS):

- 5. Stone (natural and artificial).
- Concrete.
- Cements, mortars and plasters.
- Glass.
- Iron and steel.
- 10. Non-ferrous metals and alloys.
- 11. Timber (natural, laminated and ply).
 12. Materials, miscellaneous.

CONSTRUCTION (BY PRODUCTS):

- 13. Bricks (9 in. by 4½ in. and the like).
 14. Building blocks and slabs (thick materials and generally of limited
- area). 15. Sheet materials (thin materials and generally of large area).

- 16. Roof sheets, roof sheet materials and special roofings.
 oof tiles, slates, shingles, etc.
- 17. Roof tiles, 18. Wall and floor tiles, faience and terra
- cotta. 19. Floor and wall finishes (excluding
- tiles, papers, etc.).

 20. Floors and roofs, and floor and roof
- structural elements.
 21. Partitions and walls, and partition and wall structural elements.
- Ceilings.
- 23 Doors, frames, fanlights, etc.
- 24. Windows, frames, rooflights, etc. Complete structures.
- Products, miscellaneous.

SERVICES AND EQUIPMENT:

- 27. Sound control and acoustics.
- 28. Thermal insulation and isolation, and refrigeration. Space heating.
- entilation, and combined heating and ventilation.
- 31. Cooking.

- 32. Water heating.
- Water supply and sanitation.
- Illumination.
- 35. Lifts, escalators, transport generally.
- Fire prevention and protection.
- 37. Services and equipment, miscellaneous.

FINISHES AND MENTS:

- 38. Paints, stains, varnishes and polishes.
- Fire-resisting treatments.
- Anti-rot, anti-corrode, anti-water penetration, and anti-dust treatments.
 41. Applied finishes and treatments, miscel-
- laneous.

FURNITURE AND FITTINGS:

- 42. Furniture general (fixed and freestanding).
- 43. Specialized furniture and fittings.
- Fittings.
- 45. Furniture and fittings, miscellaneous.

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46.Z(M-Z) 14.N5* 14.N6* 14.N7* 14.N8* 14.N9* 15.B1 14.L10, 29.D1 and 37.C10 have been cancelled for revision and should be removed from collections. They will be republished.

These Sheets have been revised.

†43.Z2 has been cancelled. It was republished as 43.Z2 Revised 15.9.49.

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INDUSTRY THE

By Brian Grant

ROOFING IN ALUMINIUM

On the elementary principle that one's om product ought to be good enough to use oneself, British Alum.nium have just replaced an old bitumen and felt roof 280 ft. by 40 ft. with a light alloy construction. struction.

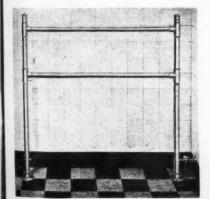
The condition of the existing roof called for something more than mere re-covering; its reconstruction was necessary in view of the poor conditions of the existing struc-ture whose timber purlins, laid on steel trusses of a very flimsy construction, had badly warped and decayed, and in some cases were sagging dangerously.

It was decided that a covering of Rigidal corrugated aluminium sheeting, lined to prevent heat loss and condensation troubles, should take the place of the old roof cover-ing of felt on board and the opportunity

ing of felt on board and the opportunity was taken to replace the glazing with a newly patented sheet light also built in aluminium alioy, which provides dispersed lighting over the full length and width of the building.

In view of the height of the roof above ground floor, and partly because it was necessary to carry the reconstruction through with as little interference to the factory's normal production routine as possible, it was planned to incorporate aluminium alloy trusses and aluminium alloy purlins intermediate between existing trusses, which were spaced at 20 ft. centres. trusses, which were spaced at 20 ft. centres. The original trusses were therefore retained

The original trusses were therefore retained but the old timber purlins, roof boarding and felt were stripped out and scrapped. Another factor in adopting light alloy construction was the elimination of maintenance and from an appearance point of view aluminium alloy trusses and purlins were more suitable with the corrugated aluminium alloy sheeting. Fourteen new aluminium alloy trusses each weighing approximately 186 lb. were erected and the weight of each 10 ft. bay of purlins was kept down to 140 lb. It might also be mentioned here that alu-



The Millitherm towel rail.



Re-roofing a factory with aluminium trusses and patent sheet roof-lighting.

minium hook bolts and nuts were used throughout in fixing sheeting and lining.

Each new truss reached the site in two pieces and the two sections were taken up separately to the roof, where the assembly of the two halves took place on the temporary decking. The light weight of the aluminium alloy trusses made such practice possible, though had steel been used the trusses would have had to be assembled on the floor and taken up by pole from ground level, with all the attendant dislocation and delay in the normal working of the factory. The main contractors were SMD Ltd. of Slough, with the site works by Wembley Contractors Ltd. (British Aluminium Co. Ltd., Warrington, Lancs.). Each new truss reached the site in two

WATER SOFTENING

* HM Stationery Office, 1s. 6d?

A recent report* to the Minister of

A recent report* to the Minister of Health on water softening provides some surprising figures. Roughly 45 per cent. of the inhabitants of the country suffer a supply with a hardness of 200 parts per million or over.

The costs of hard water to the householder are difficult to assess, and the figures put forward are no more than tentative, but the cost, to the householder, of softening the usual 25 to 30 gallons per head per day, is put at between £3 and £4 10s, a year, for a family of four, including depreciation of the softener. If the supply companies were to instal central the supply companies were to instal central softening plants the report suggests a figure of no more than 13s. a year for a similar

household. The fact that the few com-panies compelled to soften water by statute receive instant complaints if the plant breaks down suggests that the public would demand soft water if they appre-ciated its advantages. Although there is obviously nothing much to be done about central softening plants in these days of capital cuts, it looks as though they should certainly be considered as part of a long term policy. term policy.

HEATED TOWEL RAILS

Now that there is barely enough coal to keep any sort of central heating system going continuously, an independently heated towel rail is a useful fitting, and is, of course, the only solution when the bath supply is via a geyser. The one illustrated here is known as the Millitherm, and contains a small quantity of water in the tubes, so that it works like a miniature central heating system but burns only I cub ft of gas an system, but burns only 1 cub. ft. of gas an system, but burns only 1 cub. ft. of gas an hour, while the water only requires topping up very occasionally. Cost of running, with gas at 1s. a therm, works out at about 10d. a week. Two models are produced, both 3 ft. high. The larger one, 3 ft. wide, costs £6 16s. plus £3 10s. 3d. purchase tax; the smaller, 2 ft. 6 in. wide, being £6 13s. plus £3 8s. 9d., this being one of the occasions where purchase tax seems absurdly high on fittings using such a small amount of gas. The prices, incidentally, include a gas The prices, incidentally, include a gas governor. (Radiant Heating Ltd., 9, Barnsbury Park, N.1. Sales through Ascot Gas Water Heaters Ltd., 42, Park Street. London, W.1.)

Announcements

Mr. R. H. Bulmer has entered into partnership with Mr. J. Ricardo Pearce. They will practise as Harold Bulmer and J. Ricardo Pearce, A./A.R.I.B.A., 93, Cheyne Walk, Chelsea, S.W.10 (Flaxman 4966), and will be pleased to receive trade catalogues, etc.

In our issue for December 8 we published an illustration from the first of a series of Building Bulletins to be issued by the MOE. The caption to this diagram, showing a school unit, stated that the unit is planned on a 5 ft. 9 in. grid. It is, in fact, planned on a grid of 3 ft. 4 in.

Buildings Illustrated

Cambridge Gardens, Cambridge Road, Kingston-upon-Thames. (Pages 734-731.) Architects: Sydney Clough, Son & Partners. General Contractors: Speirs Ltd. Sub-contractors: Demolition, Gorst & Co. Ltd.; excavation, foundations, dampcourses, partitions, glass, Spiers Ltd.; asphalt, patent flooring, The Excel Asphalte Co.; reinforced concrete, designed by the Indented Bar Ltd., executed by Caxton Floors Ltd.; bricks, The Marston Brick Co.; stone, artificial stone, The Enfield Stone Co. Ltd.; structural steel, Bannister, Walton & Co. Ltd.; tiles, Wiggins Sankey & Copes (wall tiles), Robert Adlard & Co. (roof tiles, special roofings); woodblock floorings, Horsley Smith & Co., Bennetts Flooring (Tungit) Co. Ltd.; waterproofing materials, The RWI Protective Products Co. Ltd.; central heating, ventilation, Matthew Hall & Co. Ltd.; grates,

General Light Castings; gas fixtures, The South Eastern Gas Board; boilers, The Ideal Boiler Co.; electric wiring, Holliday Hall & Stinson; electric light fixtures, Holophane Ltd.; plumbing, W. C. Deane Ltd.; sanitary fittings, Dent & Hellyer; door furniture, Parker, Winder & Achurch; casements, Brunswick Metal Casement Co.; telephones, GPO; fireproof doors, joinery, Thorogood Ltd.; decorative plaster, Emalux Ltd., John Ellis & Sons Ltd.; stonework, foundation and opening stones carved by George Mansell; liffs, Express Lift Co.; water supply, Metropolitan Water Board; kitchen cabinets, Built-in Fixtures Ltd.; paint, Docker Bros.; ash hoist, Gardiner Sons & Co. Ltd.; road and paths, Gazes & Sons Ltd.; dust shoots and cellar flaps, Haywards Ltd.; washing machines, The Hotpoint Electric Appliance Co. Ltd.; Glascrete windows, J. A. King & Co.; drying machines in laundry, Lister Bros.

Showroom in Kingsway. (Pages 738-739.) Architects: The Peter Dunham Group. General Contractors: W. H. Gaze & Sons Ltd. Sub-contractors: Special facing bricks, Proctor & Lavender: patent flooring, asphalte tiles, Marley Tile Co. Ltd.; electric wiring, W. H. Gaze & Sons Ltd.; stairtreads, Ferodo, Ltd.; door furniture, Yannedis & Co.; metalwork, window frames and door handles, Johnson Bros.; shop front and joinery, W. H. Hudson; signs, Bryant Signs.

Restaurant in the Haymarket. (Pages 740-742.) Architect: C. Edmund Wilford, A.R.I.B.A. General Contractor: Heal's Contracts Ltd. Sub-contractors: Decorative specialists and furnishers, Heal's Contracts Ltd.: shopfitters, A. Hawkes & Co. Ltd.; builders' work, J. A. Tyler & Sons, Ltd.; electrical work, H. V. Stone & Co.; internal telephones, Troughton & Young Ltd.; refrigeration, Essex Refrigeration Co. Ltd.; sanitary fittings, John Bolding & Sons Ltd.; kitchen equipment, Regional Manufacturing Co. Ltd. and G. F. E. Bartlett & Son Ltd.

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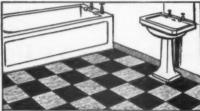


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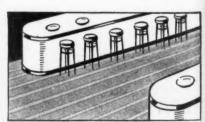
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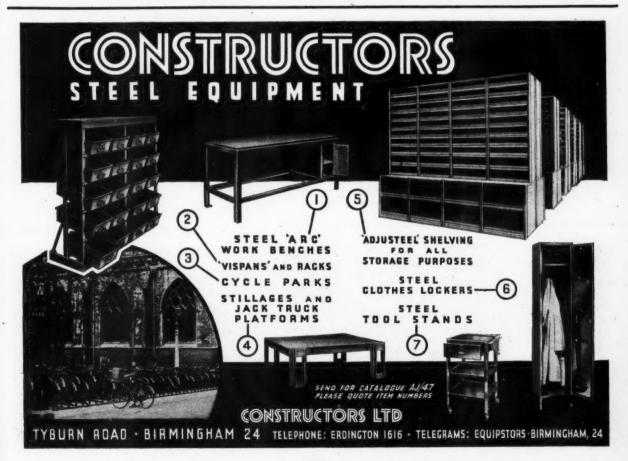
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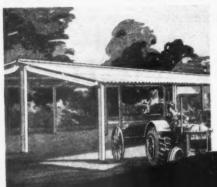
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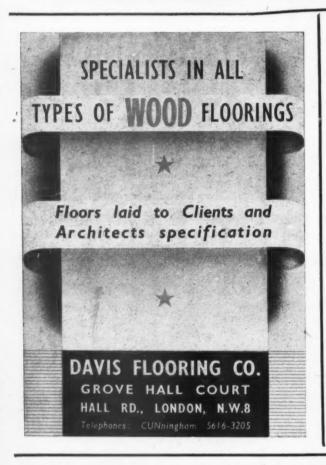
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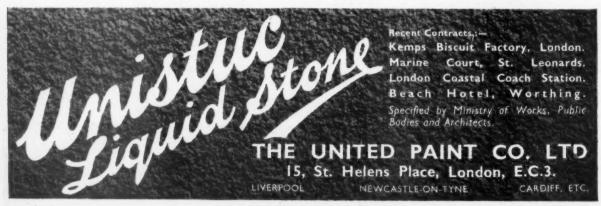
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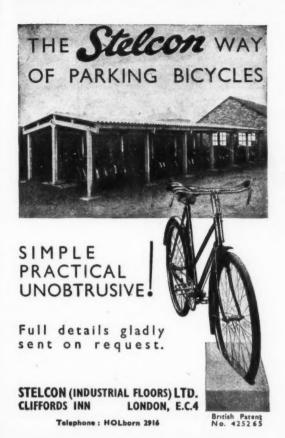
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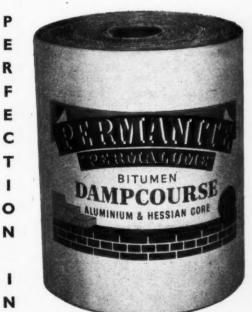








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Applications, on forms to be obtained from the Borough Engineer. Town Hall, South Shields, should be returned to the undersigned not later than Wednesday, the 11th Jannary, 1950.

HAROLD AYREY.

Town Hall, South Shields.

Town Hall, South Shields. 14th December, 1949.

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District Council Offices. The Walk,
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RICHARD DE Z. HALL, Town Clerk. Town Hall, Halifax. 9th December, 1949.

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Government Superannuation Act, 1937.
Applications, giving full details of experience
and qualifications, age, etc., together with three
recent testimonials, should be delivered to the
County Architect, Martin Street, Stafford, within
two weeks of the appearance of this advertisement.

renent.

Applications must disclose whether or not they are related to any member or senior officer of the Council. Canvassing will be a disqualification.

T. H. EVANS,
Clerk of the County Council.

County Buildings, Stafford.

OF YORKSHITEL.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHITEL.

Applications are invited for the following appointments on the permanent establishment:

CHIEF ARCHITECTS, £760-£910 and £685-£760.

£760. SENIOR ARCHITECTS. £635-£710 and £596-ASSISTANT ARCHITECTS. £550-£610, £520-

ASSISTANT ARCHITECTS. £550-£501,
£570, £480-£525, £450-£495,
JUNIOR ARCHITECTS. £420-£465, £390-£435.
The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, as amended by the West Riding County Council (General Powers) Act, 1948, and to a medical examination.
Applications, on forms obtainable at this office, must be submitted by 9th January, 1950.
HUBERT BENNETT, F.R.I.B.A.,
County Architect.
2949

County Hall, Wakefield.

County Hall. Wakefield.

County Architect.
2949

LITTLEHAMPTON URBAN DISTRICT
COUNCIL.

APPOINTMENT OF ARCHITECTURAL
ASSISTANT (GRADE V).

Applications are invited for the above appointment on the permanent staff of the Engineer and Surveyor. The Council may provide housing accommodation. Applicants must be Associate of the Royal Institute of British Architects, and preference will be given to those who have had experience with a local authority. They must also have had good experience in the preparation of Bills of Quantities for housing schemes, the supervision of works in progress, the preparation of interim and final accounts, and negotiations with Government Departments. The appointment will be subject to the National Scheme of Conditions of Service. Applications, stating age, qualifications and previous experience, and accompanied by copies of three recent testimonials, and endorsed "Architectural Assistant," should reach the undersigned not later than Saturday, 7th January, 1950.

D. WILLOUGHBY, Clerk of the Council.
Council Offices, Littlehampton. 2953

Council Offices, Littlehampton.

SOUTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD.
Applications are invited for the following appointments on the Board's Architectural Staff:—

Staff:—
PRINCIPAL ASSISTANT ARCHITECT. £800 ×
£25—£900 p.a. Applicants must be Fellows or
Associates of the Royal Institute of British Architects, and have good experience in hospital design
and construction, good administrative ability,
and be capable of supervising the work of a draw-

iects, and have good experience in hospital design and construction, good administrative ability, and be capable of supervising the work of a drawing office.

ASSISTANT ARCHITECTS. A.P.T., Grade VI, 2595 × 290-2635 × 255-2660 p.a. Applicants must be Pellows or Associates of the Royal Institute of British Architects, and be capable of preparing working and detailed drawings and specifications, and supervising the work on individual projects. Experience in hospital planning and construction will understood the second of the construction will the construction will the construction of the construction of the construction will the construction of the construction will the construction of the construction of the construction of the construction of the construction will the construction of variations, and dealing with questions concerning controlled materials.

In addition to the above-mentioned salary scales a London weighting allowance is also rayable. The above appointments are subject to the National Health Service (Superannuation) Regulations, 1947/1949, and to satisfactorily passing a medical examination.

Applications, stating age, qualifications and experience, together with the names and addresses of three referees, should be forwarded to the undersigned, to be received by the first post on Saturday, 7th January, 1950.

E. G. BRAITHWAITE, Secretary, South-West Metronolitan Regulations and contenting the construction of t

Amended Advertisement.
BOROUGH OF SOUTHALL.
Applications are invited for the following permanent appointment:—
ARCHITECTURAL ASSISTANT (Male or Female). Salary in accordance with Grade A.P.T., IV, of the National Scheme (£480-£525), plus appropriate London weighting.
Candidates should have had previous Local Government experience. The post is subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination. Applications, on forms to be obtained from the Borough Engineer, Town Hall, Southall, must be returned to him not later than 2nd January, 1950.
J. S. SYRETT.

December, 1949.

THE URBAN DISTRICT COUNCIL OF CWMBRAN.
Applications are invited for the appointment of ARCHITECT to the Council, at a salary within Grade VI, A.P.T. Division of the Scales (£595 p.a., rising to a maximum of £660).
Candidates should be Members of the Royal Institute of British Architects, or otherwise suitably qualified by examination.
The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, the National Scheme of Conditions of Service, and the passing of a medical examination.
Housing accommodation is available for the successful applicant It is believed that the successful applicant It is believed that the successful applicant will gain valuable experience by working in close

gain valuable experience by working in close liaison with the Cwmbran New Town Development Corporation.

liaison with the Cwmbran New Town Development Corporation.

Applications, stating age, education, qualifications, and experience, together with copies of two recent testimonials, and the names of two persons to whom reference may be made, must be received by me not later than 31st December, 1949.

KENNETH G. S. GUNN, Clerk of the Council.

Council Offices, Cwmbran, Mon. 2950

Council Offices, Cwmbran, Mon. 2950

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the anpointment of an ARCHITECTURAL ASSITANT, Grade IV, at a commencing salary of £480 per annum, rising by annual increments of £15 to a maximum of £525 per annum, blus London allowance of up to £30 per annum, blus London allowance of up to £30 per annum, according to age.

Preference will be given to applicants who, having passed the Intermediate Examination of the Royal Institute of British Architects, or its equivalent at one of the recognised Schools of Architecture, have worked in an architectural office for a period of two years.

Support of the applications should be accompanied by a small sample of the applicant's Work.

The applications will be subject to the recognised of the properties of the applicant's Work.

accompanied by a small sample of the applicants work.

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

Applications stating age qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect. Surrey County Council, County Hall, Kingston-on-Thames, not later than the 7th January, 1950.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND,
Clerk of the Council.

County Hall, Kingston-on-Thames.

DUDLEY AUKLAND,
Clerk of the Council.
County Hall, Kingston-on-Thames. 2962
COUNTY BOROVIGH OF BARROW-INFURNESS.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
Applications are invited for the following permanent appointments:—
(1) SENIOR ASSISTANT ARCHITECT, at maximum of Grade VII, i.e., £710 n.a. Candidates must be Associates of the R.I.B.A.
(2) BUILDING SURVEYOR, Grade V(a), £550-£510 p.a., for duties in connection with the maintenance of Corporation properties.
The Council has accepted the principle of providing housing accommodation.
Further details of the posts, conditions of appointment and forms of application, may be obtained from the Borough Engineer and Surveyor, to whom completed applications must be returned, not later than Monday, 9th January, 1950.
Canvassing in any form will disqualify.

60.
Canvassing in any form will disqualify.
W. L. ALLEN.
Town Clerk

COUNTY BOROUGH OF SOUTH SHIELDS.
APPOINTMENT OF ARCHITECTURAL
ASSISTANTS.
Applications are invited for permanent appointments as Architectural Assistants in the Borough Engineer's Department.
The appointments will be superannuated and salary will be paid up to A.P.T., Grade V, according to qualifications and experience, in accordance with the N.J.C. Grading decisions.
Applications, in forms to be obtained from the Borough Engineer, Town Hall, South Shields, should be returned not later than Wednesday, the 11th January, 1960.

HAROLD AYREY

HAROLD AYREY.
Town Clerk.

Town Hall, South Shields. 14th December, 1949.

COUNTY BOROUGH OF SOUTH SHIELDS.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the position of
Quantity Surveyor in the office of the Borough
Engineer.

Engineer.
The position is superannuated and will carry a salary in accordance with A.P.T., Grade VIII (£685 to £760 per annum). Housing accommodation will be made available to the successful

tion will be made available to applicant.
Applications, on forms to be obtained from the Borough Engineer, Town Hall, South Shields, should be returned not later than Wednesday, the 11th January, 1950.

HAROLD AYREY, Market

HAROLD AYREY, Town Clerk.

Town Harl, South Shields.

14th December, 1949.

GLOUCESTERSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of
ASSISTANT ARCHITECT (Section Leader) on
A.P. and T., Grade VIII (5685-2760), in the above
Department.
The successful applicant will be in charge of a

ASSISTANT ARCHITECT (Section Leader) on A.P. and T., Grade VIII (£688-£760), in the above Department.

The successful applicant will be in charge of a section of the County and will be responsible for all work carried out in that section.

Applicants should be Associate Members of the R.I.B.A., and have wide experience in projects usually dealt with by a County Council, i.e., Education, Police, etc.

Appointment will be subject to the Local Government Superannuation Act, 1937, and candidates before appointment will be required to pass a medical examination.

The appointment will be terminable by one month's notice on either side.

Applications, stating (a) name and address, (b) married or single, (c) age, (d) qualifications, (e) present position, salary and date of appointment, (f) previous positions with dates and salaries, (p) particulars of experience, and accompanied by copies of two recequit estimonials, together with names and addresses of two persons to whom reference may be made, should be sent to S. E. Urwin, F.R.I.B.A., County Architect, Shire Hall, Gleucester, not later than Thursday, 5th January, 1950.

GUY H. DAVIS.

GUY H. DAVIS.

Clerk of the County Council. 16th December, 1949.

BRITISH FLECTRICITY AUTHORITY.

EASTERN DIVISION.

Applications are invited for the following osts in the Generation Construction Department Divisional Headquarters in North London:—

(a) DESIGNER DRAUGHTSMAN (STRUC-

TURAL).
Commencing salary between £636 and £734 per annum, with an ultimate maximum salary of £767 per annum. N.J.B. Schedule, Class J. Grades 5. GRADE I DRAUGHTSMEN (STRUC-

(b) GRADE I DRAUGHTSMEN (STRUCTURAL).
Commencing salary range 2518-2656 per annum N.J.B. Schedule. Class J. Grades 8s to 7.
The above salary ranges are inclusive of 5 per cent. I onden allowance.
Applicants should have had experience in the design of structural steel work and reinforced concrete structures.
Initial salaries will be in accordance with the previous experience and qualifications
The salaries are in accordance with the scales at present operating; but may be subject to negotiation through the medium of the Joint Board.
The appointments will be superannuable in accordance with the British Electricity Authority and Area Boards Superannuation Scheme.
Applications stating age, experience, and present position, and endorsed with the appointment sought. should be submitted to arrive not later than 6th January, 1950, to the Divisional Controller, British Electricity Authority, Easter Division, Northmet House, Southgate. N.14. W. N. C. CLINCH.

Northmet House, Southgate, N.14.

BURGH OF CLYDEBANK.

BURGH ENGINEER'S DEPARTMENT.

CHIEF CLERK OF WORKS.

Applications are invited for the appointment of Chief Clerk of Works in the Burgh Engineer's Department. to supervise the Town Council's extensive Housing Programme.

Applicants must have a sound and practical know'edge of the Building Trades and experience in the supervision and erection of all types of houses and blocks of flats, including setting out, levelling, measuring up, and keeping records; also preparation of progress reports. Candidates should have the Ordinary National Certificate in Building Construction, or evidence of an equivalent standard of technical education.

The salary will be in accordance with A.P.T., Grade V. commencing £520 to £570 per annum. Placing on scale will be according to experience and ability.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to one month's notice on either side. The successful examination.

Applications, stating age, qualifications, experience, past and present appointments, and accompanied by the names and addresses of three referees, should be sent to the undersigned not later than 7th January, 1960.

E. CORNOCK, M.I.Struct.E.,

B. CORNOCK, M.I.Struct.E., Burgh Engineer. Municipal Buildings, Clydebank.

ASSIS

Applicappoints ment:

(1) As ence (page 1)

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GOVERNMENT OF NORTHERN IRELAND.

MINISTRY OF FINANCE.

Applications are invited for unestablished appointments in the Ministry of Finance as QUANTIYY SURVEYING ASSISTANTS, Grade A. on the salary range £400-£600 per annum. The commencing salaries of selected candidates will be fixed according to experience within the range quoted.

Qualifications:—

Candidates must possess either:—

(i) The National Building Certificate; or (ii) the Licentiate Diploma of the Institute of Builders; or proof of professional study to an equivalent standard. In addition they must have a wide experience of quantity surveying in a Quantity Surveyor's or Contractor's office, Government Department, or Local Authority.

Experience in the preparation of Bills of Quantities will be an advantage.

Preference will be given to suitably qualified persons who have served with H.M. Forces during the 1914-1918 or 1939-45 wars, provided the Ministry is satisfied that such candidates can or within a reasonable time will be able to discharge the duties efficiently.

Closing date:—

Applications, containing full particulars of education, qualifications and experience, and accompanied by copies of two recent testimonials, should be sent to the Director of Establishments, Ministry of Finance, Stormont, so as to reach him not later than 9th January, 1950.

2978

PORTHCAWL URBAN DISTRICT COUNCIL.

Applications.

Ministry of Finance. Stormont, so as to reach him not later than 9th January, 1950.

PORTHCAWL URBAN DISTRICT COUNCIL. Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, in the Department of the Engineer and Surveyor. Salary Grade A.P.T., Vor VI, of the National Scale of Salaries, according to qualifications.

Candidates must have had extensive experience in Municipal Architectural Housing work.

The Council agree to make available housing accommodation to the successful applicant, and the appointment will be subject to the National Conditions of Service, the provisions of the Local Government Superannuation Act, 1947, the passing satisfactorily of a medical examination, and to one calendar menth's notice on either side.

Forms of Application can be obtained from the Engineer and Surveyor, Council Offices, Portheawl, and applications endorsed "Architectural Assistant," together with copies of two recent testimonials, must reach the undersigned not later than Tuesday, 10th January, 1950.

Canvassing in any form will be deemed a disqualification, and applicants must disclose any known relationship to any member or senior official of the Council.

M. GWYN JENKINS.

Council Offices, Porthcawl.

Council Offices, Porthcawl. 15th December, 1949.

15th December, 1949.

COUNTY BOROUGH OF DERBY.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment on the permanent staff, in accordance with the National Scale of Salaries:—

ONE SENIOR ASSISTANT ARCHITECT, Grade VII. Salary £635.£710.

Applicants must be Associate R.I.B.A., with a good knowledge of work undertaken by a Local Authority.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act. 1937, and the successful applicant will be required to pass a medical examination.

Form of application may be obtained from Thos. W. East, F.R.I.B.A., Borouch Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with a copy of one testimonial and the names of two persons to whom reference may be made, to arrive not later than Monday, 9th January, 1950.

Canyassing directly or indirectly will be a discontinuation of the control of the contro

Canvassing directly or indirectly will be a dis-qualification.

E. H. NICHOLS, Town Clerk.

HEREFORDSHIRE COUNTY COUNCIL.
Applications are invited from Corporate Members of the Town Planning Institute for the post of ASSISTANT COUNTY PLANNING OFFICER in the County Planning Department A.P.T., Grade VIII, salary £685-£760 per annum. The person appointed will be responsible to the County Planning Officer for the work of the Development Plan Division, and experience in the preparation of County Development Plans is essential.

essential.

The successful applicant will be required to provide and maintain a motor car, for which travelling and subsistence allowance will be paid in accordance with the Council's scale.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1947, and to the passing of a medical examination.

tion.

Applications, stating age, qualifications, present position and previous appointments held, together with the names of two referees, should be forwarded to the undersigned not later than fourteen days of the appearance of this notice.

A. B. DUNCAN, County Planning Officer. Portfield House, Hereford. 15th December, 1949.

lviii

COUNTY BOROUGH OF CROYDON.
ASSISTANT ARCHITECT AND QUANTITY
SURVEYING ASSISTANTS.
Applications are invited for the following
ppointments in the Borough Engineer's Depart-

appointments in the Boundary appointment:

(1) ASSISTANT ARCHITECT, having experience (particularly housing) with a local authority. Salary A.P.T., V. £520, rising to £570 per annum (plus London weighting).

(2) QUANTITY SURVEYING ASSISTANT, experienced in preparing Bills of Quantities and measuring variations on Contracts. Salary A.P.T., IV. £480 per annum, rising to £525 (plus London weighting).

IV. £480 per annum, rising to £525 (plus London weighting).

(3) QUANTITY SURVEYING ASSISTANT, experienced in working up Bills of Quantities and measuring works in progress. Salary A.P.T., II, £420 per annum, rising to £465 (plus London The appointments are persistent to £455).

weighting).
The appointments are pensionable, subject to medical examination.
The Council do not offer housing accommoda-

The Council do not oner houses

tion.

Forms of application may be obtained from
the Borough Engineer, and should be returned to
him not later than 14 days after the publication
of this advertisement.

Canvassing will disqualify.

E. TABERNER,

Town C. 2996

15th December, 1949.

BOROUGH OF WALTHAMSTOW.
BOROUGH ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECTS.
Applications are invited for TWO SENIOR
ARCHITECTS (Grades VI-VII. £625-2740).
Applications, with names of two persons for references, to be sent to the undersigned not later than 14th January. 1950.

Town Clerk.

Town Hall, Walthamstow, E.17. 16th December, 1949.

NORPOLK COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the nermanent apprintment of ASSISTANT ARCHITECT, at a salary in accordance with National Grade VI (£595-£660 per annum). Candidates must be registered architects, and must hold a recognised architectural qualification; they must have had a good general architectural experience and have a sound knowledge of design, construction and specifications. The appointment will be subject to the Local Government Officer's Superannuation Acts, to a satisfactory medical certificate, and to one month's notice on either side. National Scheme of Conditions of Service will apply.

National Scheme of Conditions of Service will apply.

Applications must state clearly age, qualifications, full details of training, experience and previous appointments with dates, salaries, and designations; the names and addresses of three persons to whom reference may be made must be stated. Applications must be delivered to C. H. Thurston, LR.I.B.A., F.R.I.C.S., County Architect, 25, Therpe Road, Norwich, by not later than Monday, 16th January, 1960.

H. OSWALD BROWN.

Clerk of the Council.

County Offices, Thorpe Road, Norwich.

17th December, 1949.

SOUTH-EASTERN ELECTRICITY BOARD.
TRACER (Architectural). Surrey Sub-Area.
Provisional salary £135-2385 p.a., according to age. Anolicants must be experienced in tracing and colouring architectural drawings. Working knowledge of building construction an advantage.
Applications, giving two referees, must reach C. W. Hughes, Esq., B.Sc., M.I.E.B. South-Eastern Electricity Board, Surrey Sub-Area, Rough Rew, Hersham Road, Dorking, Surrey, by 9th January, 1950.

A. L. BURNELL.

A. L. BURNELL. Secretary December, 1949.

NEWCASTLE HPON-TYNE REGIONAL HOSPITAL BOARD. Applications are invited for the follow

Applications are invited for the following appointment on the permanent staff of the Architect to the board:

ARCHITECTURAL ASSISTANT.

Salary will be in accordance with Grade IV of the A.P.T. Division of the National Scale. i.e., £480 per annum, rising by annual increments of £15 to £525 per annum, consolidated.

Candidates should have passed the Intermediate Examination of the Royal Institute of British Architects: have had a good general experience of preparing working, detail drawings, of making surveys of buildings, and should be quick, neat draughts men.

draughtsmen.

The appointment will be subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. The successful candidate will be required to pass a medical examination.

Applicants should state: (1) Name and full address: (2) are and whether married; (3) qualifications: (4) experience: (6) present appointment and salary; (6) war service; (7) date available if appointed, and (8) name and address of three referees.

Applications are to be received not later than the 7th January, 1950, and to be addressed to The Secretary to the Board, "Dunirs," shorne Road. Novastle-non-Tyne, 2.

Tenders for Contracts

HOUSING COMMISSION, VICTORIA.
1,000 PREFABRICATED HOUSES.
The Housing Commission of Victoria, Australia, is seeking Tenders for the supply, erection and completion on sites in Victoria of 1,000 prefabricated houses.

Tenderers who wish to submit prices are invited to register their names and addresses with the Secretary to the Victorian Housing Cemmission, c/o Agent-General for Victoria, Victoria House, Melbourne Place, Strand, London, W.C.2, as soon as possible.

Melbourne Piace, Strand, London, W. Co., as Social as possible.

Tender forms, conditions of tender, plans and specification, will be available not later than the 31st January, 1950, and copies will be sent to all firms or persons desiring to tender.

2955

CITY AND COUNTY OF BRISTOL.
TO BUILDING CONTRACTORS.
The Fire Brigade Committee invite Tenders for
the erection of a Fire Station at Speedwell Road,
Bristol.

The erection of a Fire Station at spectwell Road, Bristol.

Contractors desirous of tendering and who have had experience on similar work must make application to tender to the undersigned by Friday, 6th January, enclosing cheque for two guineas, payable to the Corporation of Bristol, which will be returned on receipt of a bona fide Tender and return of decuments. Plans, etc., available for inspection at City Architect's Department, New Council House, College Green, Bristol, 1. The Corporation of Bristol does not bind itself to accept the lowest or any tender.

J. NELSON MEREDITH, F.R.I.B.A.,

City Architect.

Eagle House, Colston Avenue, Bristol, 1.

16th December, 1949.

Architectural Appointments Vacant

4 lines or under, 5s.; each additional line, 1s. 6d.

EAST MIDLANDS.—ASSISTANT, Inter. Final standard, required at once for private Architect's office; work mainly domestic. Box 2453.

WANTED, for South Wales Brewery Company, an ARCHITECT to take charge of repairs and maintenance of properties, including improvements of Licensed Houses; state age, salary required, and qualifications. Box 2817.

A RCHITECTURAL ASSISTANTS required immediately for varied practice; experience in factory work an advantage; salaries from £400.£450, graded according to experience and ability. Box 2904.

A RCHITECTURAL ASSISTANT required, with at least 5 years' office experience and R.I.B.A. Intermediate standard. Welch & Lander, FF.R.I.B.A., 38, Gloucester Place, Portman Square, W.1. Telephone: WELbeck 6551/2. 2880

Squate, w.L. Telephone: we how to keep the a vacancy in their Southampton office for an ARCHITECTURAL ASSISTANT, capable of taking some responsibility; the post is fermanent and progressive, and the work in the office is interesting and varied, including commercial and industrial buildings, schools, flats, etc. Applications, giving full particulars and salary required, to 1, Carlton Crescent, Southampton.

to 1, Carlton Crescent, Southampton. 2972

NORTH THAMES GAS BOARD.—ARCHITECTURAL ASSISTANTS required preferably experienced in the design, alteration and
maintenance of Industrial buildings, and capable
of preparing surveys, working drawings, details
and specifications; salary range £480-£650 per
annum, according to age and qualifications; the
appointment is of a permanent nature, and pension
arrangements will be discussed with short list
candidates. Applications, stating age 2nd full
particulars of training and experience, should be
sent to the Staff Controller, North Thames Gas
Board, 30, Kensington Church Street. 1 10ndon,
W.8, quoting reference 9646.

A RCHITECTS require SENIOR ASSISTANT: Aslary £450-£550, according to experience.
Also JUNIOR ASSISTANT, £250-£350, Permanent
positions and good prospects. Stephenson &
Gillis, 2, Saville Chambers, Newcastle-upon-

A RCHITECTURAL ASSISTANT required for General Practice; factories, warehouses, hospital work. etc. Kindly write, stating age, experience and salary required, A. Neville Holt. F.R.I.B.A., 20, Exchange Street East, Liver-

A RCHITECTURAL ASSISTANT required A General Practice; surveys, working drawings and soccifications.—Write, stating age, previous experience and salary required, Henry C. Smart & Partners, L.R.I.B.A., 120, Moorgate, E.C.2.

YOUNG ARCHITECT/SURVEYOR required for country town office, chiefly for measured surveys; car driver; single.—Reply, with details of experience and salary required, to Box 2988.

EXPERIENCED ARCHITECTURAL ASSISTANT required for Country Town office; cardriver; salary \$450, plus rent free flat (if married); \$250 (if single). Reply with full details to Box 2974.

A RCHITECTURAL ASSISTANT required; good draughtsman, and able to take charge of jobs and supervise work inside and outside office; ability in design an advantage. Welch & Lander, FF.R.I.B.A., 38, Gloucester Place, Portman Square, W.1. WELbeck 6551/2. 2986

A T their offices at 81, Piccadilly, Arcon, Chartered Architects have vacancies for TWO ARCHITECTURAL ASSISTANTS, at a salary of up to 2500 per annum.

A SSISTANT required by London Architect to take charge of branch office in Tenterden, Kent; varied work; good prospects for keen man. Apply, stating age, experience, salary required, and whether holder of driving licence, to Box

Other Appointments Vacant

4 lines or under. 5s.; each additional line. 1s. 6d.

RSTIMATORS wanted; used to Brakepress work. Apply personally or by letter to Morris Singer Co., Ferry Lane Works, Forest Road, Walthamstow, E.17.

I NTELLIGENT and enthusiastic young man, with some knowledge of building construction and materials, wanted for unusually interesting selling job, mainly in Londen (full-time), write, with full particulars of age, training, experience, salary required to Box 366

ESTIMATORS required; used to Architectural Metalwork Apply personally or by letter to Morris Singer Co., Perry Lane Works, Forest Road, Waithamstow, E.17.

DRAUGHTSMEN wanted; used to Metak Windows and Brakepress work. Apply Morris Singer Co.. Ferry Lane Works, Forest Road, Walthamstow, E.17.

CONTRACTS MANAGER required by well-known Specialist Building Firm to organise and build up Contract Department; "xperience estimating and control essential; excellent opportunity for man of technical and administrative ability. Apply in first instance to Box 2775.

PIRST-CLASS ASSISTANTS and DRAUGHTSMEN required for working to large industrial buildings and varied architectural practice. Write, stating salary required, experience, otc... to Nightingale & Ambrose, 27, John Adam Street, Adelphi.

EXPERIENCED Reinforced Concrete DESIGNER, preferably B.Sc. and/or A.M.I.C.E., A.M.I.Struct.E., required for Manchester office of a London Firm of Reinforced Concrete Engineers and Contractors. Write, giving full details of experience and age, to the Managing Director, Box A.J.599, at 191, Gresham House, E.C.2.

FULLY qualified CHARTERED SURVEYOR and two interim qualified ASSISTANTS, for preparation of estimates and final measuring in connection with modern Schools programme; previous experience with Constructional or Reinforced Concrete Engineering an advantage; long term programme. Reply to Personnel Manager, Hills (West Bromwich), Ltd., Albion Road, West Bromwich, stating age, experience, and salary required.

Architectural Appointments Wanted

A RCHITECTURAL ASSISTANT, A.R.I.B.A., A requires responsible position in progressive office (Lendon area); 4 years' office experience, including housing, light industrial and school work, specifications; keen; salary by arrangement. Box 437.

WOMAN ASSISTANT, qualified, with 2 years' OMAN ASSISTANT, qualified, with 2 years' office experience, requires position in London or Croydon area, with opportunity for working on jobs through all stages: surveys, designing, working drawings, etc.—and gaining some experience of site supervision.

A R.I.B.A. (40) desires senior position; London. provinces or abroad, with prospects; please state approximate salary. prospects; Box 438.

Services Offered

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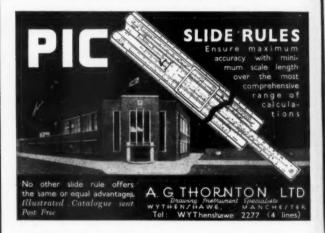
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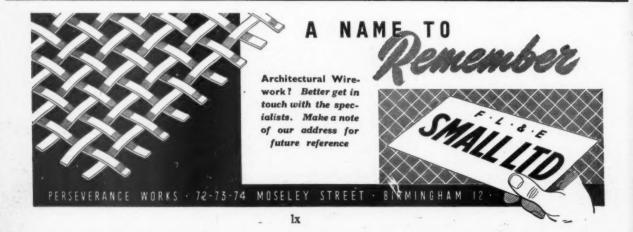
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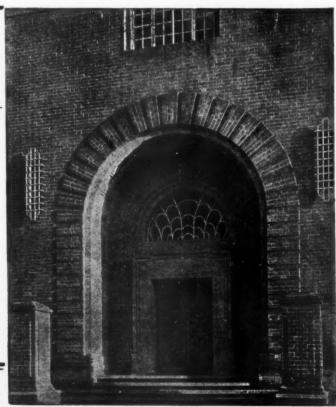
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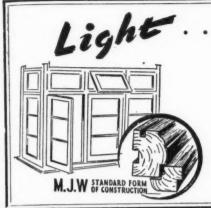
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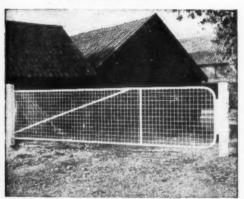
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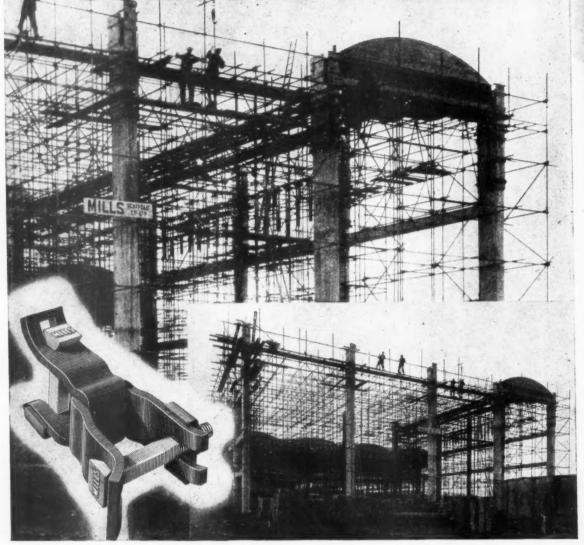
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